Specifications Form

Passenger Car

1983

METRIC (U.S. Customary)

Manufacturer	Car Line	
PONTIAC MOTOR DIVISION GENERAL MOTORS CORPORATION	PHOENIX	
Mailing Address ONE PONTIAC PLAZA PONTIAC, MICHIGAN 48053	**Model Year** 1983	**Issued:** 10-15-82 **Revised (•)**

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

Table of Contents

NOTE:

1. This form uses both SI metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary unit follows in parentheses.
2. UNLESS OTHERWISE INDICATED:
   a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
   b. Nominal design dimensions are used throughout these specifications.
   c. All linear dimensions are in millimeters (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of completion and are subject to change without notice by the manufacturer.
4. Additional Car and Body Dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Car Models

Model Description	Introduction Date	Make, Car Line, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Truck/Cargo Load—Kilograms (Pounds)
PHOENIX				
2-DOOR NOTCHBACK COUPE	9/23/82	2XY37	5 (2/3)	
4-DOOR HATCHBACK SEDAN	9/23/82	2XY68	5 (2/3)	
PHOENIX LJ				
2-DOOR NOTCHBACK COUPE	9/23/82	2XZ37	5 (2/3)	
4-DOOR HATCHBACK SEDAN	9/23/82	2XZ68	5 (2/3)	
PHOENIX SJ				
2-DOOR NOTCHBACK COUPE	9/23/82	2XT37	5 (2/3)	
4-DOOR HATCHBACK SEDAN	9/23/82	2XT68	5 (2/3)	

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Power Teams (Indicate whether standard or optional)

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

SERIES AVAILABILITY	ENGINE						TRANSMISSION	AXLE RATIO (std. first) (indicate A/C ratio)
	Displ. Liters (in^3)	Carb. (Barrels, FI, etc.)	Compr. Ratio	SAE Net at RPM kW (bhp)	SAE Net at RPM Torque N - m (lb. ft.)	Exhaust System*		
STANDARD								
PHOENIX COUPE SEDAN LJ COUPE SEDAN	LR8 2.5 L4 (151 CID)	EFI	8.2	68@ 4000 (94@ 4000)	179@ 2800 (135@ 2800)		4M 3A-125C Opt.	3.32 3.65 ALT 2.39 2.84 Alt.
SJ COUPE SJ SEDAN	LH7 2.8 V6 HO (171 CID)	2	8.9	101 @ 5400 (135@ 5400)	197 @ 2400 (145@ 2400)		4M 3A-125C Opt.	3.65 3.06
OPTIONAL								
PHOENIX COUPE SEDAN LJ COUPE SEDAN	LE2 2.8 V6 (171 CID)	2	8.5	84@ 4800 (112@ 4800)	197@ 2400 (145@ 2400)		4M 3A-125C-Opt.	3.32 2.53 (1) 2.84 (2)

(1) Not Available in California
(2) Only Ratio Available in California

* S—Single D—Dual

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC F.I. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	2.8L V6 H.O. 2-BBL. CARBURETOR RPO LH7 - SJ

ENGINE — GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, etc.)		In Line Front	60° V	
		Transverse, Front of Engine Faces Right Side of Vehicle		
No. of cylinders		4	6	
Bore		101.6 (4.0)	89 (3.50)	
Stroke		76.2 (3.0)	76 (2.99)	
Bore spacing (c/l to c/l)		111.8 (4.40)		
Cylinder block material		Cast Alloy Iron		
Cylinder block deck height		232.8 (9.2)	224 (8.819)	
Deck clearance (minimum) (above or below block)		.63 (.025) Below	0.64 (0.25) Below	
Cylinder head material		Cast Alloy Iron		
Cylinder head volume (cm^3)		--	--	
Head gasket thickness (compressed)		0.97 (.038)	0.838 (0.033)	
Minimum combustion chamber volume (cm^3)		81.79 (4.99)	51.5 (3.14)	51.346 (3.133)
Cyl. no. system (front to rear)*	L. Bank	1-2-3-4	2-4-6	
	R. Bank	--	1-3-5	
Firing order		1-3-4-2	1-2-3-4-5-6	
Recommended fuel (leaded, unleaded, diesel)		Unleaded		
Fuel antiknock index $\frac{(R+M)}{2}$		87		
Total dressed engine mass (wt) dry**		156.8 (346)	176.5 (389)	

Engine — Pistons

Material		Cast Aluminum Alloy	
Mass, g (weight, oz.) — Piston Only		650 (22.96)	467 (16.47)

Engine — Camshaft

Location		Right Side of Block	In Block	
Material (kg., weight, lbs.)		Cast Iron		
Mass (kg., weight, lbs.)		3.546 (7.82)	3.098 (6.83)	
Type of drive (chain or belt)	Width	--	19.0 (.748) Chain	
	Pitch	--	9.53 (.375)	

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

** Dressed engine mass (weight) includes the following: All those items necessary to make the engine a complete ready-to-run unit.

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 H.O. -SJ

Engine — Valve System

Lifters (std., opt., n.a.)	Hydraulic	Standard
	Solid	—

Engine — Connecting Rods

Material & mass (kg., weight, lbs.)	Cast Arma Steel	1038 Steel

Engine — Crankshaft

Material (kg., weight, lbs.)	Nodular Cast Iron	
Mass (kg., weight, lbs.)	13.660 (30.11)	14.170 (31.24)
End thrust taken by bearing (no.)	5	3

Engine — Lubrication System

Normal oil pressure (kPa (psi) at engine rpm)	259 (37.5)	345-450(50-65)@2000 345-450(50-65)@1200
Type oil intake (floating, stationary)	Stationary	
Oil filter system (full flow, part, other)	Full Flow	
Capacity of c/case, less filter-refill-L (qt.)	2.8 (3.0)	3.8 (4.0)

Engine — Diesel Information

Glow plug, current drain at 0°F		
Injector nozzle	Type	Not
	Opening pressure (kPa (psi))	
Pre-chamber design		Applicable
Fuel injection pump	Manufacturer	
	Type	
Supplementary vacuum source (type)		

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O.) - SJ

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

Induction type: carburetor, fuel injection system, etc.			Fuel Injection	Carburetor
Carburetor	Mfgr.			Rochester
	Choke (type)		Not Available	Electric
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual		
		Automatic		
Idle A/F mix.			Preset	
Fuel injection	Point of injection (no.)			
	Constant, pulse, flow			
	Control (electronic, mech.)			
	System pressure [kPa (psi)]			
Intake manifold heat control (exhaust or water) thermostatic or fixed			Water	Exhaust
Air cleaner type	Standard		Replaceable Paper Element, Single Snorkel	
	Optional		—	
Fuel pump	Type (elec. or mech.)		Electric	Mechanical
	Location (eng., tank)		In Fuel Tank	On Engine Left Front
	Pressure range [kPa (psi)]		83 (12.0)	41-52 (6.0-7.5)

Fuel Tank

Capacity [refill L (gallons)]		55.3 (14.6) Approx.	57.2 (15.1) Approx.
Location (describe)			
Attachment			
Material			
Filler pipe	Location & material	Left Rear Quarter	
	Connection to tank		
Fuel line (material)			
Fuel hose (material)			
Return line (material)			
Vapor line (material)			
Extended range tank	Opt., n.a.		
	Capacity [L (gallons)]		
	Location & material		
	Attachment		
Auxiliary tank	Opt., n.a.		
	Capacity [L (gallons)]		
	Location & material		
	Attachment		
	Selector switch or valve		
	Separate fill		

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O)-SJ

Engine — Cooling System

Coolant recovery system (std., opt., n.a.)		Standard		
Coolant fill location (rad., bottle)		Bottle		
Radiator cap relief valve pressure (kPa (psi))		103.4 (15.0)		
Circulation thermostat	Type (choke, bypass)	Choke		
	Starts to open at °C (°F)	90 (195)		
Water pump	Type (centrifugal, other)	Centrifugal		
	GPM 1000 pump rpm	6	--	
	Number of pumps	One		
	Drive (V-belt, other)	V-Belt		
	Bearing (type)	Sealed Double Row Ball		
By-pass recirculation (type (inter., ext.))		External	Internal	
Radiator core (type (cross-flow vertical cellular tube and fin, other) and material)		Cross-Flow		
Cooling system capacity	With heater—L(qt.)		10.04(10.61)AT, 10.14 (10.72) MT	
	With air cond.—L(qt.)	8.53(9.02)AT, 8.63(9.12) MT	10.39(10.98)AT, 10.49 (11.09) MT	
	Opt. equipment (specify—L(qt.))	8.59(9.08) MT	10.55(11.15) AT&MT H.D. Radiator	
Water jackets full length of cyl. (yes, no)		Yes		
Water all around cylinder (yes, no)		Yes		
Radiator core	Standard — Width	430.0 (16.93)		600.0 (23.62)
	Standard — Height	387.5 (15.26)		
	Standard — Thickness	25.0 (1.0)		
	Standard — Fins per inch	4.23(MT), 5.52 (AT)	4.23(MT), 6.35 (AT)	5.08(MT),6.35(AT)
	A/C — Width	600.0 (23.62)		
	A/C — Height	387.5 (15.26)		
	A/C — Thickness	25.0 (1.0)	40.2 (1.58)	
	A/C — Fins per inch	2.13 (MT), 6.35 (AT)	7.26 (MT and AT)	
	Heavy duty — Width	600.0 (23.62)		
	Heavy duty — Height	387.5 (15.26)		
	Heavy duty — Thickness	40.2 (1.58)		
	Heavy duty — Fins per inch	7.26 (MT & AT)		
Fan (standard)	Number of blades & type (flex, solid, material)	7, Unequally Spaced, Radiator Mounted		
	Diameter & projected width	385 (15.2)	381 (15.0)	
	Ratio (fan to crankshaft rev.)	--		
	Fan cutout type	(+)	Electronic Controlled Module	
	Drive (type (direct, remote))			
	Fan shroud (material)			
Fan (electric)	Diameter & projected width			
	RPM at idle			
	Motor rating (wattage)	Electric-One, With Roating Reinforcement Ring		
	Motor switch (type & location)			
	Switch point (temp., pressure)			
	Fan shroud (material)			
Fan (optional)	No. of blades and spacing	7, Unequally Spaced, Radiator Mounted		
	Diameter & projected width	368.3 (14.5)		
	Ratio (fan to crankshaft rev.)	--		
	Fan cut-out (type)	Electronic Controlled Module		
	Drive (type, direct, remote)	Electric-One, Shrouded		

(+) - Thermostatically Controlled Electric Fan.

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

Car Line Phoenix

Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5 LTR L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8 LITER V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	LH7 (H.O.)-SJ

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Computer Command Control	Air Injection W/Computer Command Control	
	Air Injection	Pump (type)	Not	Vane	
		Driven by	Available	V-Belt	
		Air distribution (head, manifold, etc.)	--	Exh. manif., conv. & air cleaner	
		Point of entry	--	Exh. manif. ports	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled flow		
		Exhaust source	Exhaust manif.	R.H. bank	
		Point of exhaust injection (spacer, carburetor, manifold, other)	Inlet Manifold		
	Catalytic Converter	Type	Single bed, Oxidizing/Reducing	Dual Bed, Oxidizing/Reduc.	
		Number of	one		
		Location(s)	Mounted to underbody at #2 body bar		
		Volume [L (in^3)]	2.6 (160)	2.8 (170)	
		Substrate type	Pellets	Monolith	
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction system		
	Energy source (manifold vacuum, carburetor, other)		Manifold vacuum		
	Discharges (to intake manifold, other)		Inlet Manifold		
	Air inlet (breather cap, other)		Carburetor air cleaner		
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister		
		Carburetor		Canister	
	Vapor Storage provision (crankcase, canister, other)		Canister		

Engine — Exhaust System

Type (single, single with cross-over, dual, other)		Single	Single W/crossover	Single W/crossover@
Muffler no. & type (reverse flow, straight thru, separate resonator)		One, reverse flow		
Resonator no. & type		None		
Exhaust pipe	Branch o.d., wall thickness		50.8x0.81(2.0x.032)(2)	57.2x.81(2.25x.032)(2)
	Main o.d., wall thickness	44.45x1.12(1.75x.044)	47.8x1.42(1.875x.056)	
	Material	Stainless Steel (1)		
Inter-mediate pipe	o.d. & wall thickness	50.8x1.4(2.0x.06)	50.8x1.09(2.00x.043)	57.15x1.4(2.25x.055)
	Material	Alum. Ctd. Steel	Alum. Ctd. Steel	
Tail pipe	o.d. & wall thickness	50.8x1.4(2.0x.06)	44.45x1.4(1.75x.055)	50.8x1.4(2.00x.055)
	Material	Alum. Ctd. Steel	Alum. Ctd. Steel	

@ - With dual tailpipes.

(1) Stainless steel pipe w/alum. ctd. steel heat shield

(2) Laminated tubing, steel inner, stainless steel outer.

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O)

Electrical — Supply System

Battery	Voltage rtg. (V & total plates)	12V	
	Minimum reserve cranking	70 min.(a), 90 min.(b)	75 min.(a), 90 min.(b)
	SAE capacity (amps)	355 (a), 500 (b)	315 (a), 500 (b)
	Location	L.H. Side of Engine Compartment	
Generator or alternator	Type and rating	(c,d,e)	
	Ratio (alt. crank/rev.)	2.73:1 (c,d); 2.51:1 (e)	--
	Optional (type & rating)		
Regulator	Type	Integral With Alternator	

Electrical — Starting System

Start. motor	Current drain at 0°F		
Motor drive	Engagement type	Overrunning Clutch	Positive Shift Solenoid
	Pinion engages from (front, rear)	Front	Rear

(a) - Standard
(b) - Optional
(c) - 42 AMP. With Heater, 10 SI (22 AMP @ Idle)
(d) - 63 AMP. With Heater and Heated Backlight, 10 SI (23 AMP @ Idle)
(e) - 78 AMP. With A/C, 15 SI (40 AMP @ Idle)

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O.)-SJ

Electrical — Ignition System

Type	Conventional (std., opt., n.a.)	None		
	Transistorized (std., opt., n.a.)	None		
	Other (specify)	High Energy Ignition (Integral With Distributor)		
Coil	Make	Delco Remy		
	Model		1115463	
	Current — Engine stopped — A			
	Current — Engine idling — A	--		
Spark plug	Make	AC		
	Model	R44TSX	R43CTS	R42CTS
	Thread (mm)	M14 x 1.25		
	Tightening torque (N-m (lb., ft.))	20-34 (15-25)	9-20 (7-15)	
	Gap	1.524 (.060)	1.143 (.045)	
Distributor	Make	Delco Remy		
	Model		1103519	

Electrical — Suppression

Locations & type	Internal alternator capacitor, non-metallic high-tension cables, resistor spark plugs, ignition coil by-pass capacitor, internal AC blower motor by-pass capacitor & A/C compression diode, with radio provisions; hood grounding clip, engine to dash panel ground strap, fuse block capacitor and on "heater only" glower motors and coax capacitor.

Electrical — Instruments and Equipment

Speed-ometer	Type	In-Line With Pointer
	Trip odometer (std., opt., n.a.)	Not Available
EGR maintenance indicator		None
Charge indicator	Type	Tell-Tale Warning Light (Gauge Optional)
	Warning device	None
Temperature indicator	Type	Tell-Tale Warning Light (Gauge Optional)
	Warning device	None
Oil pressure indicator	Type	Tell-Tale Warning Light (Gauge Optional)
	Warning device	None
Fuel indicator	Type	Electric Gauge
	Warning device	None
Wind-shield wiper	Type (standard)	Electric 2-Speed
	Type (optional)	Intermittent
	Blade length	454 (18")
	Swept area (cm^2 ($in.^2$))	5514 (854.9)
Wind-shield washer	Type (standard)	Electric Push-Button
	Type (optional)	None
	Fluid level indicator	None
Horn	Type	Electric Vibrator
	Number used	One
Other		Parking brake warning light & brake failure warning light, restraint system warning light and buzzer, odometer flag for converter service, "choke" malfunction tell-tale warning light - (California only)

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

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR	
		RPO LE2	RPO LH7 (H.O.)-SJ

Transmissions

Manual 3-speed (std., opt., n.a.)	Not Available
Manual 4-speed (std., opt., n.a.)	Standard
Manual 5-speed (std., opt., n.a.)	Not Available
Manual overdrive (std., opt., n.a.)	Not Available
Automatic (std., opt., n.a.)	Optional
Automatic overdrive (std., opt., n.a.)	Not Available

Manual Transmission

Number of forward speeds		4		
Transmission ratios	In first	3.53	3.53	3.31
	In second	1.95	1.95	1.95
	In third	1.24	1.24	1.24
	In fourth	0.73	0.81	0.81
	In fifth	—	—	—
	In overdrive	—	—	—
	In reverse	3.42	3.42	3.42
Synchronous meshing (specify gears)		All Forward Gears		
Shift lever location		Floor Mounted		
Lubricant	Capacity [L (pt.)]	2.8 (5.9) (a)		
	Type recommended	Dexron II		
	SAE viscosity number — Summer	—		
	SAE viscosity number — Winter	—		
	SAE viscosity number — Extreme cold	—		

Clutch (Manual Transmission)

Make & type		Bellville Spring Type, Self-Adjusting
Type pressure plate springs		Diaphragm
Total spring load [N (lb.)]		5538 (1245)
No. of clutch driven discs		One
Clutch facing	Material	Woven Molded Asbestos
	Manufacturer	Borg and Beck
	Part number	476600
	Rivets/plate	36
	Rivet size	3.6 x 5.4 (.143 x .213)
	Outside & inside dia.	232 x 155 (9.12 x 6.12)
	Total eff. area [cm^2($in.^2$)]	232 (35.9)
	Thickness	7.37-7.87 (.290 - .310)
	Engagement cushion method	Driven Plate Wave Spoke Springs
Release bearing	Type & method of lubrication	Ball Thrust - Prepacked and Sealed
Torsional damping	Method: springs, friction material	Coil Springs and Metal to Metal Friction

(a) Also Lubricant for Differential

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O.)-AJ

Automatic Transmission

Trade name		3-Speed Automatic
Type (describe)		3-Speed With Torque Converter
Selector	Location	Floor Mounted on Console
	Ltr./No. designation	P-R-N-D-2-1
Gear ratios	R	2.07
	D	1.00
	L_3	1.60
	L_2	2.84
	L_1	--
Max. upshift speed - drive range [km/h (mph)]		77
Max. kickdown speed - drive range [km/h (mph)]		73
Min. overdrive speed [km/h (mph)]		Not Applicable
Torque converter	Number of elements	3
	Max. ratio at stall	1.9
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 (9.65)
Lubricant	Capacity [refill L (pt.)]	4.6 (10.0)
	Type recommended	Dexron II
Special transmission features		Single Axis Type With Variable Displacement Pump. Transverse Mounted. Chain Driven.

Axle or Front Wheel Drive Unit

Type (front, rear)			Front
Description			Front Differential With Helical Gears
Limited slip differential (type)			None
Drive pinion offset			Not Applicable
Drive pinion (type)			Not Applicable
No. of differential pinions			2
Pinion adjustment (shim, other)			Not Applicable
Pinion bearing adj. (shim, other)			Not Applicable
Driving wheel bearing (type)			Sealed Ball Bearings (Integral Part of Bolt-in Hub Units)
Lubricant	Capacity [L (pt.)]		See Note on Manual Transmission - Page 14
	Type recommended		
	SAE viscosity number	Summer	
		Winter	
		Extreme cold	

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

Axle ratio or overall ratio		2.84	2.84	3.32	2.84	3.65	3.06
No. of teeth	Pinion	38	37	25	35	23	35
	Ring gear or gear	32	33	83	35	84	35
Ring gear o.d.		198.9(7.83)					
Transaxle	Transfer gear ratio	1.0	1.0	.73	1.0	0.81	1.0
	Final drive ratio	2.39	2.53	2.42	2.84	2.96	3.06

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Engine Description/Carb. Engine Code	2.5L L5 (151 CID) ELECTRONIC FUEL INJECTION LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O.)-SJ

Axle Shafts — Front Wheel Drive

Number used				Two
Type (straight, solid bar, tubular, etc.)			Left	Straight Solid Bar
			Right	Straight Solid Bar
Outer diam. x length * x wall thick-ness	Manual transmission		Left	23.81 x 320.8 (0.9375 x 12.63)
			Right	23.81 x 729.4 (0.9375 x 28.72)
	Automatic transmission		Left	23.81 x 320.8 (0.9375 x 12.63)
			Right	23.81 x 421.8 (0.9375 x 16.61)
	Optional transmission		Left	—
			Right	—
Slip yoke	Type			None
	Number of teeth			None
	Spline o.d.			None
Universal joints	Make and mfg. no.		Inner	Saginaw Steering Gear
			Outer	Saginaw Steering Gear
	Number used			4
	Type, size, plunge		Inner	Double Offset Design
			Outer	Rzeppa
	Attach (u-bolt, clamp, etc.)			—
	Bearing	Type (plain, anti-friction)		—
		Lubric. (fitting, prepack)		Prepack
Drive taken through (torque tube, arms or springs)				Wishbone Lower Control Arm; Upper MacPherson Strut
Torque taken through (torque tube, arms or springs)				Engine Mounting System

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

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (•)

Engine Description/Carb. Engine Code	2-DOOR NOTCHBACK 2XY37, 2XZ37	4-DOOR HATCHBACK 2XY68, 2XZ68	2-DOOR NOTCHBACK 4-DOOR HATCHBACK 2XT37, 2XT68 (SJ)

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P185/80R-13 (BW,WS)	P195/70R14
	Type (bias, radial, etc.)		Glass Belted Radial	Steel Belted Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	240 (35)	
		Rear [kPa (psi)]	240 (35)	
	Rev./mile—at 70 km/h (45 mph)		526 (846)	
Wheels	Type & material		Ventilated, Semi-Styled Disc	Aluminum
	Rim (size & flange type)		13 x 5.5	14 x 6
	Wheel offset		42 mm	
	Attachment	Type (bolt or stud)	Stud	
		Circle diameter	100 mm	
		Number & size	5-M12 x 1.5	
Spare	Tire and wheel (same, if other describe)		14 x 4 Wheel; Compact Spare Tire - T125.70D14-415 (60)	
	Storage position & location (describe)		Flat Under Rear Load Floor	

Tires And Wheels (Optional)

Size (load range, ply)	P185/80R-13 (BW,WS)*
Type (bias, radial, etc.)	Steel Belted Radial
Wheel (type & material)	Aluminum
Rim (size, flange type and offset)	13 x 5.5
Size (load range, ply)	P205/70R-13 (WL)**
Type (bias, radial, etc.)	Steel Belted Radial
Wheel (type & material)	
Rim (size, flange type and offset)	
Size (load range, ply)	
Type (bias, radial, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Size (load range, ply)	
Type (bias, radial, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Spare tire and wheel (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	

* Phoenix/Phoenix LJ Only ** Requires RPO Y99 Rally Suspension

Brakes — Parking

Type of control		Application - Foot Operated; Release - "T" Handle
Location of control		Under Instrument Panel, 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
METRIC (U.S. Customary)

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Body Type And/Or Engine Displacement	2.5L L4 (151 CID) ELECTRONIC FUEL INJECTION LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O.)-SJ

Brakes — Service

Description				
Brake type (std., opt., n.a.)	Front (disc or drum)			Disc
	Rear (disc or drum)			Drum
Self-adjusting (std., opt., n.a.)				Standard
Special valving	Type (proportion, delay, metering, other)			Proportioning. Diagonal Split Circuit.
Power brake (std., opt., n.a.)				Optional (a) | Required Option
Booster type (remote, integral, vac., hyd., etc.)				Tandem
Anti-skid device type (std., opt., n.a.)				Not Available
Effective area [cm^2($in.^2$)]*				530.6 (82.26)
Gross lining area [cm^2($in.^2$)]**				620.3 (96.17)
Swept area [cm^2($in.^2$)]***				1687.2 (261.58)
Rotor	Outer working diameter		F	247 (9.73)
			R	--
	Inner working diameter		F	--
			R	--
	Thickness		F	22 (0.87)
			R	--
	Material & type (vented/solid)		F	Cast Iron, Vented
			R	--
Drum	Diameter (nominal)		F	--
			R	200 x 45 (7.87 x 1.77)
	Type and material			Cast Iron
Wheel cylinder bore	Front			74.6 (2.9375)
	Rear			17 (0.67)
Master cylinder	Bore			22 (0.87)
	Stroke			35.52 (1.40)
Pedal arc ratio				Manual - 6.6:1
Line pressure at 445 N (100 lb.) pedal load [kPa (psi)]				--
Lining clearance per shoe	Front			Self-Adjusting
	Rear			Self-Adjusting
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Riveted, 6
		Rivet size		7.37 x 3.63 (.290 x .143)
		Manufacturer		Delco Moraine
		Lining code		--
		Material		Semi-Metallic
		Size****	Primary or out-board	125 x 59 x 10.85 (4.92 x 2.32 x 0.430)
			Secondary or in-board	125 x 59 x 10.85 (4.92 x 2.32 x 0.430)
		Shoe thickness (no lining)		Inboard - 4.72 (0.186); Outboard - 3.14 (0.124)
	Rear wheel	Bonded or riveted (rivets/seg.)		Riveted, 8
		Manufacturer		Delco Moraine
		Lining code		--
		Material		Organic
		Size****	Primary or out-board	167.7 x 43.9 x 3.8 (6.60 x 1.73 x 0.15)
			Secondary or in-board	203.3 x 43.9 x 4.8 (8.0 x 1.73 x 0.19)
		Shoe thickness (no lining)		2.75 (.106)

(a) Required With RPO C60 Air Conditioning

* Excludes rivet holes, grooves, chamfers, etc.

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

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

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

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

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (*)

Body Type And/Or Engine Displacement	2.5L L4 (151 CID) ELECTRONIC FUEL INJ. LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2 | RPO LH7 (H.O.)-SJ

Steering

Manual (std., opt., n.a.)				Standard
Power (std., opt., n.a.)				Optional
Adjustable steering wheel (tilt, swing, other)		Type and description		Tilt
		(Std., opt., n.a.)		Optional
Wheel diameter		Manual		387 (15.2)
		Power		387 (15.2)
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)		12.5 (41.0)
		Curb to curb (l. & r.)		11.7 (36.1)
	Inside rear	Wall to wall (l. & r.)		--
		Curb to curb (l. & r.)		--
				--
Manual	Gear	Type		Rack and Pinion
		Make		Saginaw Steering Gear
		Ratios	Gear	--
			Overall	26.0:1
	No. wheel turns (stop to stop)			3.5
Power	Type (coaxial, linkage, etc.)			Rack & Pinion W/End Take-Off Tie Rods - Integral
	Make			Saginaw Steering Gear
	Gear	Type		Rack & Pinion With Integral Power Unit
		Ratios	Gear	--
			Overall	17.5:1
	Pump (drive)			V-Belt
	No. wheel turns (stop to stop)			3.13
Linkage	Type			End Take-Off Tie Rods
	Location (front or rear of wheels, other)			Rear
	Drag links (trans. or longit.)			--
	Tie rods (one or two)			Two
Steering axis	Inclination at camber (deg.)			14.5
	Bearings (type)	Upper		Ball Stud
		Lower		Ball Stud
		Thrust		--
Steering spindle & joint type				--
Wheel spindle	Diameter	Inner bearing		28.95 (1.1398)
		Outer bearing		28.95 (1.1398)
	Thread (size)			M20 x 2.5
	Bearing (type)			Integral Double Row Ball, Permanently Lubricated

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Body Type And/Or Engine Displacement	2-DOOR NOTCHBACK 2XY37,2XZ37,2XT37	4-DOOR HATCHBACK 2XY68,2XZ68,2XT68

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	2.0° +/- 2° Left & Right Side Should Be Equal Wirhin 2°
		Camber (deg.)	0.0° +/- 1.0°
		Toe-in [outside track-mm (in.)]	0.0° +/- 0.4° Total
	Service reset*	Caster	Not Adjustable
		Camber	0.0° +/- 0.5°
		Toe-in	0.0° +/- 0.2° Total
	Periodic M.V. inspection	Caster	Not Adjustable
		Camber	0.0° +/- 1.0°
		Toe-in	0.0° +/- 0.4° Total
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	
		Toe-in [outside track-mm (in.)]	
	Service reset*	Camber	
		Toe-in	
	Periodic M.V. inspection	Camber	
		Toe-in	

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

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Body Type And/Or Engine Displacement	2.5L L4 (151 CID) ELECTRONIC FUEL INJECTION LR8	2.8L V6 (171 CID) 2-BBL. CARBURETOR RPO LE2	RPO LH7 (H.O.)-SJ

Suspension — General

Car leveling	Std./opt./n.a.	Not Available
	Type (air, hyd., etc.)	--
	Manual/auto. controlled	--
Provision for brake dip control		Front Suspension Geometry
Provision for accl. squat control		Front Suspension Geometry
Special provisions for car jacking		Position Jack in Opening in Bumper Lower Face of Front and Rear Bumpers.
Shock absorber (front & rear)	Type	Front-MacPherson Strut; Rear-Direct, Double Acting
	Make	Delco Hydraulic
	Piston diameter	Front-32 (1.26); Rear-25 (1.0)
Other special features		--

Suspension — Front

Type and description		MacPherson With Coil Springs, Stamped Lower Control Arms and Nodular Iron Steering Knuckles
Travel	Full jounce	88 (3.46)
	Full rebound	94 (3.70)
Spring	Type (coil, leaf, other)	Coil
	Material	Steel
	Size (coil design height & i.d., bar length x dia.)	500.4 x 44.4 x 3082 x 13.4 (19.7 x 1.75 x 121.3 x 0.528)
	Spring rate [N/mm (lb./in.)]	13.0 (74)
	Rate at wheel [N/mm (lb./in.)]	14.1 (80)
Stabilizer	Type (link, linkless, frameless)	Link
	Material & bar diameter	Steel - 22 (0.866)

Suspension — Rear

Type and description			Trailing Arm With Stamped Control Arms and Open Section Transverse Beam
Drive and torque taken through			--
Travel	Full jounce		92 (3.62)
	Full rebound		108 (4.25)
Spring	Type (coil, leaf, other)		Coil
	Material		Steel
	Size (length x width, coil design height & i.d., bar length & dia.)		364 x 108 x 2550 x 12.2 (14.3 x 4.25 x 100.4 x 0.480)
	Spring rate [N/mm (lb./in.)]		22 (125)
	Rate at wheel [N/mm (lb./in.)]		11.8 (67)
	Mounting insulation (type)		Rubber - Top Only
	If leaf	No. of leaves	--
		Shackle (comp. or tens.)	--
Stabilizer	Type (link, linkless, frameless)		Integral (Standard)
	Material & bar diameter		Seamless Steel Tubing: 20 (0.79)
Track bar (type)			Transverse Beam Design: 30 (1.18)

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (•)

Body Type	2-DOOR NOTCHBACK COUPE 2XY37,2XZ37,2XT37	4-DOOR HATCHBACK SEDAN 2XY68,2XZ68,2XT68

Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)		Acrylic Lacquer or Water Base Acrylic Enamel	
Hood	Hinge location (front, rear)	Rear	
	Type (counterbalance, prop)	No	
	Release control (internal, external)	Internal	
Trunk lid	Type (counterbalance, other)	Torsion Rods	2-Telescoping Gas Strut Rods
	Internal release control (elec., mech., n.a.)	Not Available	
Bumper front	Bar material & mass (wt.)	Steel 12.054 (26.6)	
	Reinforcement material & mass (wt.)	None	
Bumper rear	Bar material & mass (wt.)	Steel 12.984 (28.6)	
	Reinforcement material & mass (wt.)	None	
Vent window control (crank, friction, pivot, power)	Front	None	
	Rear	None	
Seat cushion type	Front	Polyurethane Padding	
	Rear	Polyurethane Padding	
	3rd seat	None	
Seat back type	Front	Polyurethane Padding	
	Rear	Polyurethane Padding	
	3rd seat	None	
Vehicle ident. no. location		Top Left-Hand in Instrument Panel Pad	

Passive Restraint System

Inflatable restraint system	Standard/ optional	Not Available
	Type of charging system	—
	Location (stg. whl., instru. panel, other)	—
Passive seat belts	Standard/ optional	Not Available
	Power/ manual	—
	2 or 3 point	—
	Knee bar/ lap belt	—

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Unitized frame. Bolt-on power train cradle (2-piece design) with mounting provisions for suspension lower control arms and engine mounts.

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Body Type			
		2-DOOR NOTCHBACK COUPE 4-DOOR HATCHBACK SEDAN 2XY37,2XZ37,2XY68,2XZ68	2-DOOR NOTCHBACK COUPE 4-DOOR HATCHBACK SEDAN 2XT37,2XT68

Convenience Equipment

Power windows	Side windows	Optional
	Vent windows	Not Available
	Backlight or tailgate	Not Available
Power seats (specify type as well as availability)		6-Way Optional
Reclining front seat back (r-l or both)		Front Seat Back - Both Passenger and Driver
Radio (specify type as well as availability)		Optional: AM/FM Radio With Dual Front Speakers AM/FM Stereo Radio With Dual Front and Rear Speakers AM/FM Stereo Radio W/Cassette & Dual Front & Rear Speakers
Premium sound system (specify)		Not Available
Rear seat speaker		Optional
Power antenna		Not Available
Clock		Optional
Air conditioner (specify type)		Optional, Manual Control
Speed warning device		Optional
Speed control device		Optional (Requires Power Brakes)
Ignition lock lamp		Not Available
Dome lamp		Standard
Glove compartment lamp		*
Luggage compartment lamp		*
Underhood lamp		Not Available
Courtesy lamp		*
Map lamp		*
Cornering lamp		Not Available
Rear window defroster electrically heated		Optional
Rear window defogger		Not Available
T-bar roof (describe)		Not Available
Sun roof (describe)		Optional
Theft protection—type		Lock Mounted on Steering Column, Locks Steering Wheels, Transmission Shift Levers and Ignition.
		* Lamp Group Option Consists of Following: - Luggage Compartment Lamp - Ashtray Lamp - Glove Box Lamp - I/P Courtesy Lamp - Headlamp-On Warning System - Chime Tone Generator

MVMA Specifications Form
Passenger Car

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (•) _____

FEATURE HIGHLIGHTS

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

BODY:

CHASSIS:

ENGINE:

ELECTRICAL:

OTHER:

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Vehicle Mass (weight)

Model	CURB MASS, kg. (weight, lb.)*			% PASS. MASS DISTRIBUTION				SHIPPING MASS, kg. (weight, lb.)**
				Pass In Front		Pass In Rear		
	Front	Rear	Total	Front	Rear	Front	Rear	
2-DOOR NOTCHBACK								
COUPE 2XY37	710.9	417.8	1128.7					1084.8
	(1564)	(919.2)						(2408.6)
4-DOOR HATCHBACK	721.9	428.8	1150.5					1116.6
SEDAN 2XY68	(1587.7)	(943.3)	(2531)					(2456.5)

Curb Weight - The calculated weight of a vehicle with standard equipment, only as designed with the additional load of oils, lubes, coolants, and fuel all filled to capacity.

Shipping Weight - Same as base curb weight except 3 gallons of gasoline.

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

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

Car Line PHOENIX
Model Year 1983 Issued 10-15-82 Revised (*)

Optional Equipment Differential Mass (weight)*

Equipment	MASS, kg. (weight, lb.) Front	Rear	Total	Remarks
2.8L 2-Bbl. V6 (LE2)	27.4	-2.5	29.9	
	(60.4)	(-5.5)	(54.9)	
Transmission-AT (MX1)	21.0	0.0	21.0	With LR8 Engine
	(46.3)	(0.0)	(46.3)	
Air Conditioning (C60)	25.8	2.9	28.7	With LR8 Engine
	(56.9)	(6.4)	(63.3)	
Battery H.D. (UA1)	6.5	-1.0	5.5	
	(14.3)	(-2.2)	(12.1)	
Cooling System H.D. (V08)	1.2	- .2	1.0	
	(2.6)	(- .4)	(2.2)	
Cruise Control (K35)	2.5	0.0	2.5	
	(5.5)	(0.0)	(5.5)	
Engine Block Heater (K05)	.5	0.0	.5	
	(1.1)	(0.0)	(1.1)	
Gauges Rally (U22)	.9	.5	1.4	
	(1.9)	(1.1)	(3.0)	
Generators				
- 78 AMP	.5	0.0	.5	
- 85 AMP	(1.1)	(0.0)	(1.1)	
Insulation - Additional	2.2	3.1	5.3	2-Door Without A/C
Acoustical (BS1)	(4.8)	(6.8)	(11.6)	
Floor Mats				
Front & Rear	1.2	1.2	2.4	
	(2.6)	(2.6)	(5.2)	
Power Brakes (J50)	3.7	.7	4.4	
	(8.2)	(1.5)	(9.7)	
Power Door Locks (AU2)	.6	1.0	1.6	2-Door Model
	(1.3)	(2.2)	(3.5)	
	1.0	1.7	2.7	4-Door Model
	(2.2)	(3.7)	(5.9)	

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

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

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (*)

Equipment	Optional Equipment Differential Mass (weight)* MASS, kg. (weight, lb.) Front	Rear	Total	Remarks
Power Seat (A42)	2.9	2.8	5.7	
	(6.4)	(6.2)	(12.6)	
Power Steering (N41)	9.4	.3	9.7	LR8 Engine
	20.7	.7	21.4	
Power Windows (A31)	1.2	1.2	2.4	2-Door Coupe
	(2.6)	(2.6)	(5.2)	
	2.6	2.6	5.2	4-Door Sedan
	(5.7)	(5.7)	(11.4)	
Radio AM/FM Stereo (U58)	.2	.1	.3	
	(.4)	(.2)	(.6)	
Radio Speakers Dual Rear (UP8)	- .2	2.0	1.0	2-Door Coupe
	(.4)	(4.4)	(4.8)	
	- .2	2.1	1.9	4-Door Sedan
	.4	4.6	(5.0)	
Bucket Seats W/Recliner (AR9)	.3	.2	.5	2-Door Coupe
	(.7)	(.4)	(1.1)	
Sun Roof (AD3)	3.6	3.6	7.2	
	(7.9)	(7.9)	(15.8)	
Wheels Cast Alum. (N90)	-3.5	-3.5	-7.0	
	(-7.7)	(-7.7)	(-15.4)	

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

MVMA Specifications Form
Passenger Car

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (•)

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

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

Body Type	SAE Ref. No.	2-Door Notchback 2XY37	4-Door Hatchback 2XY68
Width			
Tread (front)	W101	1492	1492
Tread (rear)	W102	1447	1447
Vehicle width	W103	1754	1754
Body width at Sg RP (front)	W117	1729	1727
Vehicle width (front doors open)	W120	3680	3219
Vehicle width (rear doors open)	W121	—	2857
Length			
Wheelbase	L101	2664	2664
Vehicle length	L103	4625	4651
Overhang (front)	L104		
Overhang (rear)	L105		
Upper structure length	L123	2372	2752
Rear wheel C/L "X" coordinate	L127	215	215
Cowl point "X" coordinate	L125		
Height*			
Passenger distribution (frt./rear)	PD1.2.3	2-0	2-0
Trunk/cargo load			
Vehicle height	H101	1355	1353
Cowl point to ground	H114	928	
Deck point to ground	H138	966	988
Rocker panel-front to ground	H112	199	
Bottom of door closed-front to grd.	H133	472	
Rocker panel-rear to ground	H111	204	
Bottom of door closed-rear to grd.	H135		478
Ground Clearance*			
Front bumper to ground	H102	263	
Rear bumper to ground	H104	325	
Bumper to ground (front at curb mass (wt.))	H103	299	
Bumper to ground (rear at curb mass (wt.))	H105	353	
Angle of approach (GVW)	H106	17.7	
Angle of departure (GVW)	H107	9.3	
Ramp breakover angle (GVW)	H147	7.4	
Rear axle differential to ground	H153		
Min. running ground clearance	H156	137	
Location of min. run. grd. clear.		Front Suspension	

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

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

MVMA Specifications Form
Passenger Car

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (•)

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	2-Door Notchback 2XY37	4-Door Hatchback 2XY68
Front Compartment			
Sg RP front, "X" coordinate	L31	1138	1138
Effective head room	H61	970	968
Max. eff. leg room (accelerator)	L34	1073	1073
Sg RP (front to heel)	H30	257	257
Design H-point front travel	L17	192	192
Shoulder room	W3	1428	1422
Hip room	W5	1385	1388
Upper body opening to ground	H50	1229**	1229**
Steering wheel angle	H18	22.0	22.0
Back angle	L40	25.0	25.0
Rear Compartment			
Sg RP Point couple distance	L50	786	786
Effective head room	H63	951	957
Min. effective leg room	L51	876	902
Sg RP (second to heel)	H31	261	261
Knee clearance	L48	24	22
Compartment room	L3	691	691
Shoulder room	W4	1430	1424
Hip room	W6	1360	1406
Upper body opening to ground	H51	--	1231
Luggage Compartment			
Usable luggage capacity [L (cu. ft.)]	V1	392.8	416.5
Liftover height	H195	751	748

All linear dimensions are in millimeters (inches).

** EPA Loaded Vehicle Weight Loading Conditions

All Internal Dimensions Are Measured With The Seating Reference Point (SqRP) 21 mm (1 Seat Adjustment Notch) Forward Of Rearmost Seat Position.

MVMA Specifications Form
Passenger Car

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (*)

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	
		----------NOT APPLICABLE----------

Station Wagon — Third Seat

Shoulder room	W85	
Hip room	W86	
Effective leg room	L86	----------NOT APPLICABLE----------
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	----------NOT APPLICABLE----------
Cargo length at belt (front)	L204	
Cargo length at belt (second)	L205	
Cargo width (wheelhouse)	W201	
Rear opening width at floor	W203	
Opening width at belt	W204	
Max. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
Tailgate to ground height	H250	
Front seat back to load floor height	H197	
Cargo volume index [m^3($ft.^3$)]	V2	
Hidden cargo volume [m^3($ft.^3$)]	V4	

Hatchback — Cargo Space

Front seat back to load floor height	H197	590 (23.3)
Cargo length at front seat back height	L208	1178 (46.4)
Cargo length at floor (front)	L209	1606 (63.2)
Cargo volume index [m^3($ft.^3$)]	V3	1170 (41.3)
Hidden cargo volume [m^3($ft.^3$)]	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.

All dimensions are in millimeters (inches).

MVMA Specifications Form
Passenger Car

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (*)

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	2-Door Notchback 2XY37	4-Door Hatchback 2XY68

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
(1)	Front	X - Fiducial mark to vertical base grid line - front, measured horizontally from base grid line to the front fiducial mark located on top of front seat adjuster mounting bolt.
		Y - Fiducial mark to center line of car - front, width measurement made from center line of car to the fiducial mark located on top of the front seat adjuster mounting bolt.
(2)		Z - Fiducial mark to horizontal base grid line - front, measured vertically from base grid line to front fiducial mark located on top of the front seat adjuster mounting bolt.
(1)	Rear	X - Fiducial mark to vertical base grid line - rear, measured horizontally from the base grid line to rear fiducial mark located on rear underbody crossbar.
		Y - Fiducial mark to center line of car - rear, width measurement made from center line of car to fiducial mark located on rear underbody crossbar.
(2)		Z - Fiducial mark to horizontal base grid line - rear, measured vertically from base grid line to rear fiducial mark located on rear underbody crossbar.

	Fiducial Mark Number	
Front	W21	563
	L54	770 (Rear of Base Grid)
	H81	59 (Above Base Grid)
	H161	301
	H163	268
Rear	W22	489
	L55	3016 (Rear of Base Grid)
	H82	186.1 (Above Base Grid)
**	H162	432
	H164	403

(1) Base Grid is 2000 mm Line
(2) Base Grid is 200 mm Line
** EPA Loaded Vehicle Weight Loading Conditions

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

MVMA Specifications Form
Passenger Car

Car Line PHOENIX

Model Year 1983 Issued 10-15-82 Revised (*)

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	2-Door Notchback 2XY37	4-Door Hatchback 2XY68
Glass			
Backlight slope angle (deg.)	H121	40.5	65.0
Windshield slope angle (deg.)	H122	57.0	57.0
Tumble-Home (deg.)	W122	22.0	22.0
Windshield glass exposed surface area [cm^2($in.^2$)]	S1	8362	8362
Side glass exposed surface area [cm^2($in.^2$)]	S2	10,330	12,762
Backlight glass exposed surface area [cm^2($in.^2$)]	S3	4925	7216
Total glass exposed surface area [cm^2($in.^2$)]	S4	23,617	28,340
Windshield glass (type)		Curved Laminated Plate	
Side glass (type)		Curved Tempered Plate	
Backlight glass (type)		Curved Tempered Plate	

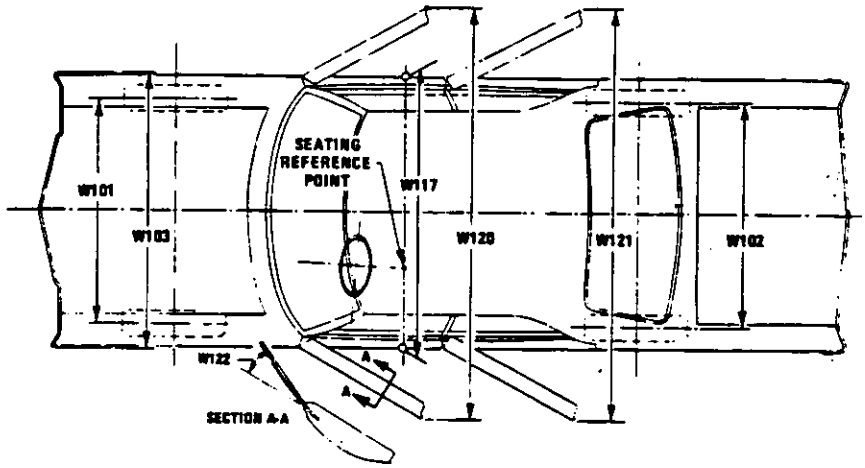
Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (H127)	Highest**	657	
		Lowest	—	
	Taillamp (H128)	Highest**	547	
		Lowest	—	
	Sidemarker	Front	497	
		Rear	508	504
Distance from C/L of car to center of bulb	Headlamp	Inside	—	
		Outside**	643	
	Taillamp	Inside	400	
		Outside**		
	Directional	Front	478	
		Rear	668	
Headlamp shape			Rectangular	

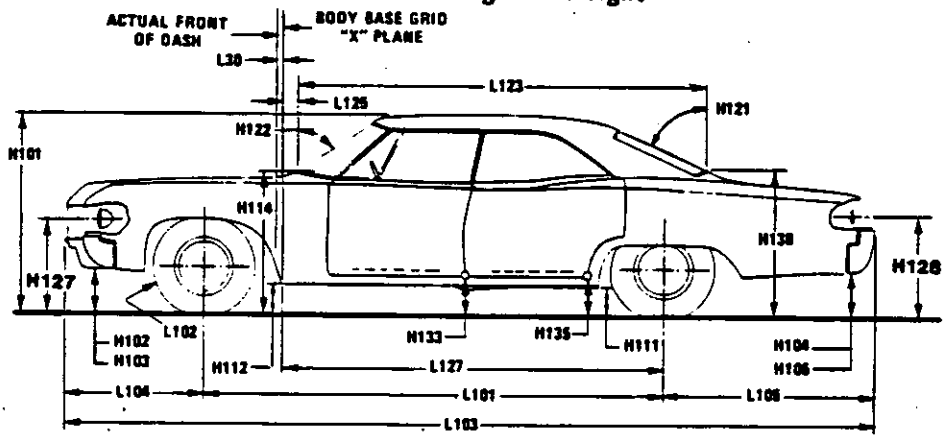
* Measured at curb mass (weight).
** If single lamps are used enter here.

Exterior Car And Body Dimensions — Key Sheet

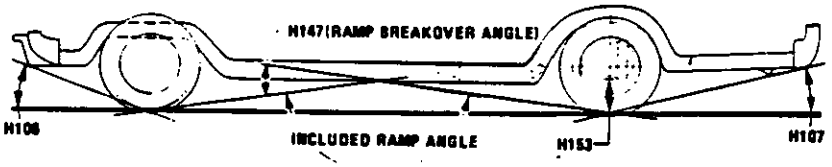
Exterior Width



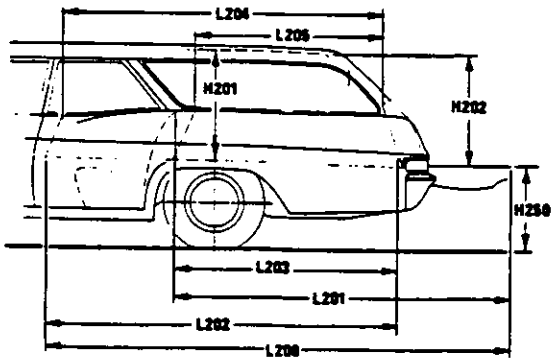
Exterior Length & Height



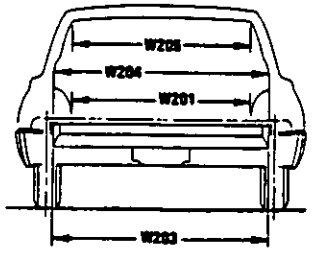
Exterior Ground Clearance

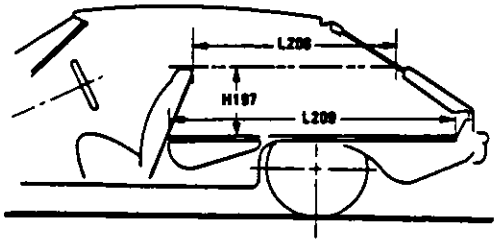


Cargo Space



Station Wagon





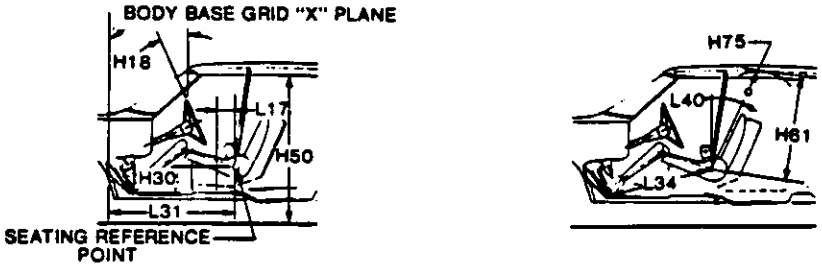
Hatchback

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

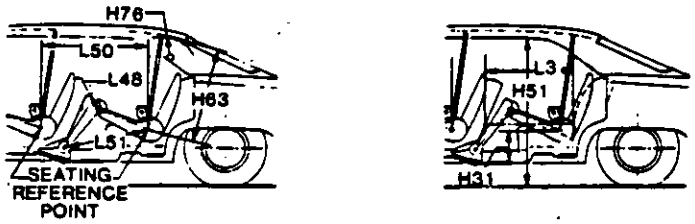
1983 PHOENIX

Interior Car And Body Dimensions – Key Sheet

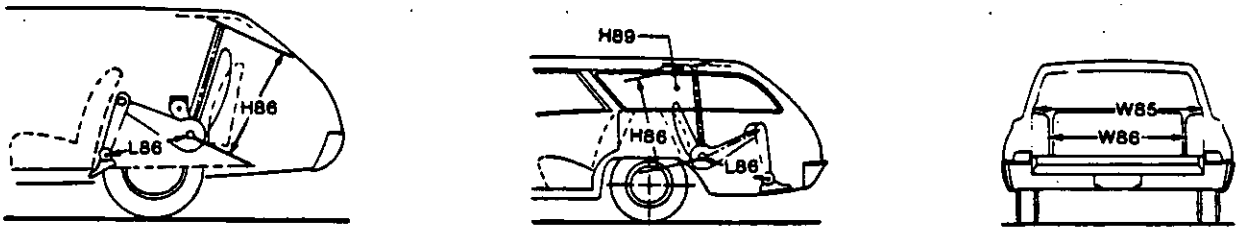
Front Compartment



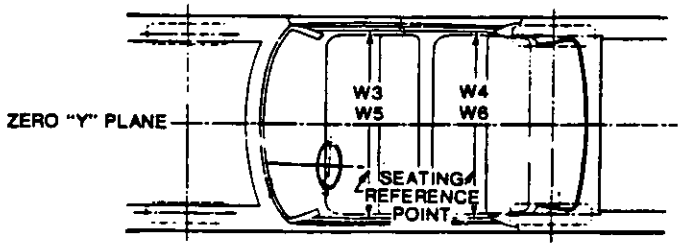
Rear Compartment



Third Seat



Interior Width



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

Exterior Car And Body Dimensions — Key Sheet
Dimensions Definitions

Seating Reference Point

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

Width Dimensions

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

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

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

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

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

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

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

Length Dimensions

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

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

L102 TIRE SIZE. As specified by the manufacturer.

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

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

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

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

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

L125 COWL POINT "X" COORDINATE.

Height Dimensions

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

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

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

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

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

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

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

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

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

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

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

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

Ground Clearance Dimensions

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

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

1983 PHOENIX

Interior Car And Body Dimensions — Key Sheet
Dimensions Definitions

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

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

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

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

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

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

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

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

Front Compartment Dimensions

PD1 PASSENGER DISTRIBUTION—FRONT.

L31 SgRP—FRONT "X" COORDINATED.

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

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

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

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

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

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

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

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

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

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

Rear Compartment Dimensions

PD2 PASSENGER DISTRIBUTION—SECOND.

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

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

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

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

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

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

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

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

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

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

Luggage Compartment Dimensions

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

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

Station Wagon — Third Seat Dimensions

PD3 PASSENGER DIRECTION—THIRD.

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

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

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

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

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

Interior Car And Body Dimensions — Key Sheet
Dimensions Definitions

Station Wagon — Cargo Space Dimensions

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

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

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

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

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

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

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

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

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

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

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

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

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

V2 STATION WAGON

Measured in inches:

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

Measured in mm:

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

V4 HIDDEN CARGO VOLUME. As specified by the manufacturer.

Hatchback — Cargo Space Dimensions

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

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

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

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

V3 HATCHBACK.

Measured in inches:

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

Measured in mm:

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

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

1983 PHOENIX

Index