MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC(U.S. Customary)

Passenger Car

1986

Manufacturer	Car Line
Oldsmobile Division	Cutlass Ciera Cutlass Ciera Brougham Cutlass Cruiser Wagon
Mailing Address	Issued / Revised
920 Townsend Street Lansing, Michigan 48921	

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

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

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

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MVMA

Motor Vehicle Manufacturers Association of the United States, Inc.

MVMA-C-86

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 (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Car Models

Model Description & Drive (FWD/RWD)	Introduction Date	Make, Car Line, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load–Kilograms (Pounds)
Cutlass Ciera LS				
3AJ19		4-door Sedan	6 (3/3)	72.5 (160)
3AJ27		2-door Coupe	6 (3/3)	72.5 (160)
Cutlass Ciera Brougham				
3AM19		4-door Sedan	6 (3/3)	72.5 (160)
3AM27		2-door Coupe	6 (3/3)	72.5 (160)
Cutlass Cruiser Wagon				
3AJ35		4-door Wagon	6 (3/3)	136 (300)

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Power Teams (Indicate whether standard or optional)
SAE J1349 Net bhp (brake horsepower) and net torque corrected to 77°F/25° C and 29.61 in. Hg/100 kPa atmospheric pressure.

SERIES AVAILABILITY	ENGINE					Exhaust S/D	TRANSMISSION TRANSAXLE	AXLE RATIO (std. first)
	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.)			
								Base
3AJ19 (Std.) 3AJ27 3AJ35	2.5L (151 CID) LR8 L4	EFI	9.0:1			S	Auto '125c' (MD9)-Opt.	2.39 Coupe/Sedan 2.84 Wagon
3AJ19 (Opt.) 3AJ27 3AJ35	2.8L (173 CID) LE2 V6	2-Bbl	8.5:1			S	Auto '125c' (MD9)-Base Auto '440-T4' (ME9)-Opt.	2.84 3.06
3AJ19 (Opt.) 3AJ27 3AJ35	2.8L (173 CID) LB6 V6	MFI	8.5:1			S	Auto '125c' (MD9)-Base Auto '440-T4' (ME9)-Opt.	2.84 3.18 (Opt.) 3.06
3AJ19 (Opt.) 3AJ27 3AJ35	3.8L (231 CID) LG3 V6	SFI	8.5:1			S	Auto '440-T4' (ME9)-Base	2.84

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.5L L-4 (151 CID) Electronic Fuel Injection RPO LR8	2.8 L V-6 (173 CID) 2-Bbl Carburetor RPO LE2

ENGINE – GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)		In-line Front Transverse, front of engine faces right side of vehicle	60^{o} V-6
Manufacturer		Pontiac	Chevrolet
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)	111.8 (4.40)
Cylinder block material & mass kg (lbs.)		Cast Alloy Iron 42.554 (93.8)	Cast Alloy Iron 41.731 (91.9)
Cylinder block deck height		236.1 (9.3)	224 (8.819)
Deck clearance (minimum) (above or below block)		.64 (.025)-Below	0.62 (.024)-Below
Cylinder head material & mass kg (lbs.)		Cast Alloy Iron 19.140 (42.2)	Cast Alloy Iron 11.200 (24.7)
Cylinder head volume (cm^3)		45.62 (2.78)	
Head gasket thickness (compressed)		0.97 (.038)	0.838 (0.033)
Minimum combustion chamber total volume (cm^3)		70.82 (4.32)	63.41734 (3.86927)@
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
Intake manifold material & mass [kg (weight, lbs.)]		Aluminum Cast 6.580 (14.5)	Aluminum Cast 4.600 (10.1)
Exhaust manifold material & mass [kg (weight, lbs.)]		Stainless Steel 1.980 (4.4)	LH & RH Cast Iron 2.948 (6.5)
Recommended fuel (leaded, unleaded, diesel)		Unleaded	
Fuel antiknock index (R + M) / 2		98	
Total dressed engine mass (wt) dry**		154.9 (341.7) Auto 165.5 (364.9) Man.	141.8 (312.7) Auto

Engine – Pistons

Material & mass, g (weight, oz.) - piston only	Cast Aluminum Alloy .660 (1.455)	.467 (1.029)

Engine – Camshaft

Location		Right Side of Block	In Block Above Crank
Material & mass kg (weight, lbs.)		Cast Iron 3.411 (7.519)	Cast Iron 3.098 (6.83)
Drive type	Chain / belt	Gear	Chain
	Width / pitch	-	19.4 (.748)/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 complete @ Piston at TDC, spark plug and valves in place, and cylinder head torqued to specifications.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.8L - V6 H.O. (2.8 Multi-Port Fuel Injection) RPO LB6

ENGINE – GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-camber, etc.)		60° V Transverse, front of engine faces right side of vehicle
Manufacturer		Chevrolet
No. of cylinders		6
Bore		89 (3.50)
Stroke		76 (2.99)
Bore spacing (C/L to C/L)		111.8 (4.40)
Cylinder block material & mass kg (lbs.)		Cast Alloy Iron 41.731 (91.9)
Cylinder block deck height		224 (8.819)
Deck clearance (minimum) (above or below block)		0.12 (.005) Below
Cylinder head material & mass kg (lbs.)		Cast Alloy Iron 11.227 (24.8)
Cylinder head volume (cm^3)		–
Head gasket thickness (compressed)		0.838 (0.033)
Minimum combustion chamber total volume (cm^3)		59.8481 (3.6515)@
Cyl. no. system (front to rear)*	L. Bank	2-4-6
	R. Bank	1-3-5
Firing order		1-2-3-4-5-6
Intake manifold material & mass [kg (weight, lbs.)]		Cast Aluminum 3.810 (8.4)
Exhaust manifold material & mass [kg (weight, lbs.)]		Cast Iron LH 2.200 (4.9), RH 2.600 (5.7)
Recommended fuel (leaded, unleaded, diesel)		Unleaded
Fuel antiknock index (R + M) / 2		87
Total dressed engine mass (wt) dry**		184.8 (407.3) Auto

Engine – Pistons

Material & mass, g (weight, oz.) - piston only	Cast Aluminum Alloy, .467 (1.029), Flat Head

Engine – Camshaft

Location		In Block Above Crankshaft
Material & mass kg (weight, lbs.)		Cast Iron, 3.098 (6.83)
Drive type	Chain / belt	Chain
	Width / pitch	19.4 (.764)/9.53 (3.75)

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

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

@ Piston at TDC, spark plug and valves in place, and cylinder head torqued to specifications.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. **Engine Code**	2.5L L4 (151 CID) Electronic Fuel Injection RPO LR8	2.8L V6 (173 CID) 2-Bbl. Carburetor RPO LE2

Engine – Valve System

Hydraulic lifters (std., opt., NA)		Std.	
Valves	Number intake / exhaust	4/4	6/6
	Head O.D. intake / exhaust	43.69 (1.72)/38.10 (1.50)	40.64 (1.60)/33.20 (1.31)

Engine – Connecting Rods

Material & mass [kg., (weight, lbs.)]	Cast Arma Steel/.555 (1.224)	1038 Steel/.399 (.879)

Engine – Crankshaft

Material & mass [kg., (weight, lbs.)]		Nodular Cast Iron/12.519 (27.59)	Nodular Cast Iron/14.170(31.24)
End thrust taken by bearing (no.)		5	3
Number of main bearings		5	4
Seal (material, one, two piece design, etc.)	Front		
	Rear		

Engine – Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	2.59 (37.5)	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

NA

Diesel engine manufacturer		
Glow plug, current drain at 0°F		
Injector nozzle	Type	
	Opening pressure [kPa (psi)]	
Pre-chamber design		
Fuel injection pump	Manufacturer	
	Type	
Fuel injection pump drive (belt, chain, gear)		
Supplementary vacuum source (type)		
Fuel heater (yes/no)		
Water separator, description (std., opt.)		
Turbo manufacturer		
Oil cooler-type (oil to engine coolant; oil to ambient air)		
Oil filter		

Engine – Intake System

NA

Turbo charger - manufacturer
Super charger - manufacturer
Charge cooler

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.8L V6 (173 CID) Multi-Port Fuel Injection RPO LB6

Engine – Valve System

Hydraulic lifters (std., opt., NA)		
Valves	Number intake / exhaust	
	Head O.D. intake / exhaust	43.64 (1.72)/36.20 (1.43)

Engine – Connecting Rods

Material & mass [kg., (weight, lbs.)]	1038 Steel/.399 (0.879)

Engine – Crankshaft

Material & mass [kg., (weight, lbs.)]		Nodular Cast Iron/14.170 (31.24)
End thrust taken by bearing (no.)		3
Number of main bearings		4
Seal (material, one, two piece design, etc.)	Front	
	Rear	

Engine – Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	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.)	3.8 (4.0)

Engine – Diesel Information

NA

Diesel engine manufacturer		
Glow plug, current drain at 0°F		
Injector nozzle	Type	
	Opening pressure [kPa (psi)]	
Pre-chamber design		
Fuel injection pump	Manufacturer	
	Type	
Fuel injection pump drive (belt, chain, gear)		
Supplementary vacuum source (type)		
Fuel heater (yes/no)		
Water separator, description (std., opt.)		
Turbo manufacturer		
Oil cooler-type (oil to engine coolant; oil to ambient air)		
Oil filter		

Engine – Intake System

NA

Turbo charger - manufacturer
Super charger - manufacturer
Charge cooler

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb.	2.5L L4 (151 CID)	2.8L V6 (173 CID)
Engine Code	Electronic Fuel Injection	2-Bbl. Carburetor
	RPO LR8	RPO LE2

Engine – Cooling System

Coolant recovery system (std., opt., n.a.)		Std.				
Coolant fill location (rad., bottle)		Bottle, Coolant Recovery				
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	-	22.7 @ 3000 RPM			
	Number of pumps	One				
	Drive (V-belt, other)	V-Belt				
	Bearing type	Sealed Double Row Ball	Ball-Roller			
	Impeller material					
	Housing material					
By-pass recirculation [type (inter,. ext.)]		Internal				
Cooling system capacity	With heater–L(qt.)	9.24 (9.8) Auto, 9.34 (9.9) Man.	11.82 (12.5)			
	With air cond.–L(qt.)	9.48 (10.0) Auto, 9.58 (10.1) Man.	11.96 (12.6)			
	Opt. equipment [specify–L(qt.)]	9.30 (9.8) Auto, 9.40 (9.9) Man.	12.16 (12.8)			
Water jackets full length of cyl. (yes, no)		Yes				
Water all around cylinder (yes, no)		Yes				
Water jackets open at head face (yes, no)						
Radiator core	Std., A/C, HD	Std. A/C H.D.	Std. A/C H.D.			
	Type (cross-flow, etc.)	Cross-flow				
	Construction (fin & tube mechanical, braze, etc.)					
	Material, mass [kg (wgt, lbs.)]	Copper-brass, High Efficiency Radiator (b)				
	Width	430.0 668.0 668.0	430.0 668.0 668.0			
	Height	345.3 345.3 429.7	429.7 429.7 429.0			
	Thickness	25.0 25.0 40.2	25.0 ** 40.2			
	Fins per inch @	3.5 4.5 4.0	3.5 3.5 4.0			
Radiator end tank material						
Fan	Std., elec., opt.	Std./Opt.				
	Number of blades & type (flex, solid, material)	Std. 4-Blade, A/C 7-Blade, A/C & HD 5-Blade (Plastic)				
	Diameter & projected width	Std. 291.0 (11.5), A/C 352.5 (13.9), A/C & HD 390.5 (15.4)				
	Ratio (fan to crankshaft rev.)	-				
	Fan cutout type	ECM Controlled	*			
	Drive type (direct, remote)	Electric, Std./Opt. (a)				
	RPM at idle (elec.)	1900 (2700 with A/C and Heavy Duty Cooling)				
	Motor rating (wattage) (elec.)	97 (150 with A/C and Heavy Duty Cooling)				
	Motor switch (type & location) (elec.)	Engine Temperature Switch, Engine Cylinder Head				
	Switch point (temp., pressure) (elec.)	110°C				
	Fan shroud (material)	None				

@ - Distance between top of fins
* - Fan is in continuous operation when A/C is on
** - 25.0 w/ Auto. 3-speed trans.
23.5 w/ Auto. 4-speed trans.
(a) - With rotating reinforcement ring, shrouded
(b) - Except LE2 with A/C and Auto. 4-speed is aluminum

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb.
Engine Code

2.8L V6 (173 CID)
(2.8 Multi-Port Fuel Injection)
RPO LB6

Engine – Cooling System

Coolant recovery system (std., opt., n.a.)		Std.
Coolant fill location (rad., bottle)		Bottle, Coolant Recovery
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	22.7 @ 3000 Pump RPM
	Number of pumps	One
	Drive (V-belt, other)	V-Belt
	Bearing type	Ball-Roller
	Impeller material	
	Housing material	
By-pass recirculation [type (inter,. ext.)]		Internal
Cooling system capacity	With heater–L(qt.)	11.82 (12.5) Auto
	With air cond.–L(qt.)	11.96 (12.6) Auto
	Opt. equipment [specify–L(qt.)]	12.16 (12.8) Auto
Water jackets full length of cyl. (yes, no)		Yes
Water all around cylinder (yes, no)		Yes
Water jackets open at head face (yes, no)		
Radiator core	Std., A/C, HD	Std. A/C & H.D.
	Type (cross-flow, etc.)	Cross Flow
	Construction (fin & tube mechanical, braze, etc.)	
	Material, mass [kg (wgt, lbs.)]	Copper/Brass High Efficiency Radiator
	Width	668.0 668.0
	Height	345.3 429.7
	Thickness	25.0 40.2
	Fins per inch *	4.5 3.0
Radiator end tank material		Copper
Fan	Std., elec., opt.	Std., Electric
	Number of blades & type (flex, solid, material)	Std. 7-Blades, A/C 7-Blades, A/C & HD 5-Blades (Plastic)
	Diameter & projected width	Std. 352.5 (13.9), A/C 352.5 (13.91), A/C & HD 390.5 (15.4)
	Ratio (fan to crankshaft rev.)	–
	Fan cutout type	–*
	Drive type (direct, remote)	Electric, Std./Opt. (a)
	RPM at idle (elec.)	1800
	Motor rating (wattage) (elec.)	150-W
	Motor switch (type & location) (elec.)	Engine Temperature Switch, Engine Cylinder Head
	Switch point (temp., pressure) (elec.)	110°C
	Fan shroud (material)	None

\# – Distance between top of fins
* – Fan is in continuous operation when A/C is on
(a) – With rotating reinforcement ring, shrouded

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) Electronic Fuel Injection RPO LR8	2.8L V6 (173 CID) 2-Bbl Carburetor RPO LE2

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.		None	Rochester
	Choke (type)		"	Electric
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	"	None
			"	None
		Automatic	"	600 (Drive)
			"	-
Idle A/F mix.			Preset - No Adjustment Provided	
Fuel injection	Point of injection (no.)		Throttle Body	-
	Constant, pulse, flow		Pulse	-
	Control (electronic, mech.)		Electronic	-
	System pressure [kPa (psi)]		83.0 (12.0)	-
Intake manifold heat control (exhaust or water thermostatic or fixed)			Water	Exhaust
Air cleaner type	Standard		(*)	
	Optional		-	
Fuel pump	Type (elec. or mech.)		Electrical	Mechanical
	Location (eng., tank)		Fuel Tank	On Engine LF
	Pressure range [kPa (psi)]		83.0 (12.0)	41-52 (6.0-7.5)

Fuel Tank

Capacity [refill L (gallons)]		59.4 (15.7) Approx.	62.1 (16.4) Approx.
Location (describe)		Underside - Rear Center	
Attachment		Underbody Strap	
Material & Mass [kg (weight lbs)]		Steel	
Filler pipe	Location & material	Driver Side Rear Quarter	
	Connection to tank	Solid Solder	
Fuel line (material)		Steel	
Fuel hose (material)		Rubber	
Return line (material)		Steel	
Vapor line (material)		Steel	
Extended range tank	Opt., n.a.	NA	
	Capacity [L (gallons)]	"	
	Location & material	"	
	Attachment	"	
Auxiliary tank	Opt., n.a.	"	
	Capacity [L (gallons)]	"	
	Location & material	"	
	Attachment	"	
	Selector switch or valve	"	
	Separate fill	"	

(*) - Replaceable paper element, single snorkel

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.8L V6 Multi-Port Fuel Injection RPO LB6

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	Mfgr.		NA
	Choke (type)		None
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	"
			"
		Automatic	"
			"
Idle A/F mix.			Preset - No Adjustment Provided
Fuel injection	Point of injection (no.)		Fuel Injectors at Inlet Ports
	Constant, pulse, flow		Pulse
	Control (electronic, mech.)		Electronic
	System pressure [kPa (psi)]		-
Intake manifold heat control (exhaust or water thermostatic or fixed)			
Air cleaner type	Standard		(*)
	Optional		NA
Fuel pump	Type (elec. or mech.)		Electrical
	Location (eng., tank)		Fuel Tank
	Pressure range [kPa (psi)]		160.0 - 250.0 (24.0 - 37.0)

Fuel Tank

Capacity [refill L (gallons)]		59.4 (15.7) Approx.
Location (describe)		Underside - Rear Center
Attachment		Underbody Strap
Material & Mass [kg (weight lbs)]		Steel #1008 or 1010 GM-124-M
Filler pipe	Location & material	Driver Side Rear Quarter
	Connection to tank	Solid Solder
Fuel line (material)		Steel #1008 or 1010 GM-124-M
Fuel hose (material)		Rubber
Return line (material)		Steel #1008 or 1010 GM-124-M
Vapor line (material)		Steel #1008 or 1010 GM-124-M
Extended range tank	Opt., n.a.	NA
	Capacity [L (gallons)]	"
	Location & material	"
	Attachment	"
Auxiliary tank	Opt., n.a.	"
	Capacity [L (gallons)]	"
	Location & material	"
	Attachment	"
	Selector switch or valve	"
	Separate fill	"

(*) - Replaceable paper element, single snorkel

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.5L L-4 (151 CID) Electronic Fuel Injection RPO LR8	2.8L V6 (173 CID) 2-Bbl. Carburetor RPO LE2

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		CCC control	CCC control with Air Injection
	Air Injection	Pump or pulse	None	Vane type pump
		Driven by	None	V-belt
		Air distribution (head, manifold, etc.)	None	Exhaust Manifold, Convrt,
		Point of entry	None	Exhaust Manifold & Conv.
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled Flow	
		Exhaust source	Manifold	R.H. Bank
		Point of exhaust injection (spacer, carburetor, manifold, other)	Inlet manifold	
	Catalytic Converter	Type	Oxid-Red, Sng bed	Oxid-Red, D bed
		Number of	One	
		Location(s)	Mounted to Underbody	
		Volume [L (in³)]	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)		Air cleaner	
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister	
		Carburetor	--	Canister
	Vapor storage provision		Canister	
Electronic system	Closed loop (yes/no)		Yes	
	Open loop (yes/no)		No	

Engine – Exhaust System

Type (single, single with cross-over, dual, other)		Single	Single with crossover
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs)]		One-reverse flow	
Resonator no. & type		None	
Exhaust pipe	Branch o.d., wall thickness	--	50.8x0.81(2.0x.032) 2)
	Main o.d., wall thickness	50.8x1.12(2.0x.044)	47.8x1.42(1.9x.056) 1)
	Material & Mass [kg (weight lbs)]	Stainless steel	See below 1-2)
Intermediate pipe	o.d. & wall thickness	50.8x1.12(2.0x.044)	50.8x1.09(2.0x.043)
	Material & Mass [kg (weight lbs)]	Aluminum coated steel	
Tail pipe	o.d. & wall thickness	50.8x1.4(2.0x.055)	44.5x1.09(1.75x.043)
	Material & Mass [kg (weight lbs)]	Aluminum coated steel	

1) Laminated tubing - steel inner, stainless steel outer.

2) Stainless steel pipe with aluminum coated heat stove.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb.
Engine Code

2.8 LITER-V6 (173 CID)
2.8 MULTI-PORT FUEL INJECTION
RPO - LB6

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		CCC Control
	Air Injection	Pump or pulse	None
		Driven by	None
		Air distribution (head, manifold, etc.)	None
		Point of entry	None
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Not available
		Exhaust source	Not available
		Point of exhaust injection (spacer, carburetor, manifold, other)	Not available
	Catalytic Converter	Type	Single bed, oxidizing & reducing
		Number of	One
		Location(s)	Mounted to underbody
		Volume [L (in^3)]	2.78 (170)
		Substrate type	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)		Intake manifold
	Air inlet (breather cap, other)		Air cleaner
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister
		Carburetor	--
	Vapor storage provision		Canister
Electronic system	Closed loop (yes/no)		Yes
	Open loop (yes/no)		No

Engine – Exhaust System

Type (single, single with cross-over, dual, other)		Single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs)]		One reverse flow
Resonator no. & type		None
Exhaust pipe	Branch o.d., wall thickness	--
	Main o.d., wall thickness	50.8 x 0.81 (2.0 x 0.03)
	Material & Mass [kg (weight lbs)]	Laminated tubing-stainless steel outer, steel inner
Intermediate pipe	o.d. & wall thickness	57.15 x 0.81 (2.25 x 0.03)
	Material & Mass [kg (weight lbs)]	Aluminum coated steel
Tail pipe	o.d. & wall thickness	57.15 x 1.10 (2.25 x 0.04)
	Material & Mass [kg (weight lbs)]	Aluminum coated steel

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code				
	2.5L 151 L4 LR8	2.8L 173 CID LE2	2.8L 173 CID LB6	3.8L 231 CID LG3
Transmissions/Transaxle				
Manual 3-speed (std., opt., n.a.) (mfr.)	NA	NA	NA	NA
Manual 4-speed (std., opt., n.a.) (mfr.)	NA	NA	NA	NA
Manual 5-speed (std., opt., n.a.) (mfr.)	NA	NA	NA	NA
Manual overdrive (std., opt., n.a.) (mfr.)	NA	NA	NA	NA
Automatic (std., opt., n.a.) (mfr.)	Std.	Std.	Std.	NA
Automatic overdrive (std., opt., n.a.) (mfr.)	NA	Opt.	Opt.	Std
Manual Transmission/Transaxle	NA			
Number of forward speeds				
Transmission ratios: In first				
Transmission ratios: In second				
Transmission ratios: In third				
Transmission ratios: In fourth				
Transmission ratios: In fifth				
Transmission ratios: In overdrive				
Transmission ratios: In reverse				
Synchronous meshing (specify gears)				
Shift lever location				
Lubricant: Capacity [L (pt.)]				
Lubricant: Type recommended				
Lubricant: SAE viscosity number: Summer				
Lubricant: SAE viscosity number: Winter				
Lubricant: SAE viscosity number: Extreme cold				
Clutch (Manual Transmission)	NA			
Make, type, engagement (describe) – (hydraulic, cable, rod)				
Assist (yes, no / percent)				
Type pressure plate springs				
Total spring load [N (lb.)]				
No. of clutch driven discs				
Clutch facing: Material				
Clutch facing: Manufacturer				
Clutch facing: Part number				
Clutch facing: Rivets/plate				
Clutch facing: Rivet size				
Clutch facing: Outside & inside dia.				
Clutch facing: Total eff. area [cm^2($in.^2$)]				
Clutch facing: Thickness				
Clutch facing: Engagement cushion method				
Release bearing: Type & method of lubrication				
Torsional damping: Method: springs, friction material				

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	ALL	Available 2.8L 2 Bbl. LE2	2.8L LB6-MFI	Std. 3.8L LG3

Automatic Transmission/Transaxle		THM 125C	THM 440
Trade name		Hydramatic	
Type and special features (describe)		3-speed with Torque Converter Clutch	4-speed with TCC
Selector	Location	Column or Console	
	Ltr./No. designation	PRND21	PRD (O) D21
Gear ratios	R	2.07	2.38
	D	2.84, 1.60, 1.00	.70
	L_3	-	1.00
	L_2	2.84, 1.60	1.57
	L_1	2.84	2.92
Max. upshift speed - drive range [km/h (mph)]		104 (65)	82 (51)
Max. kickdown speed - drive range [km/h (mph)]		98 (61)	69 (43)
Min. overdrive speed [km/h (mph)]		NA	69 (43)
Torque converter	Number of elements	Three	
	Max. ratio at stall	1.85	1.63
	Type of cooling (air, liquid)	Liquid	
	Nominal diameter	245	
Lubricant	Capacity [refill L (pt.)]	5	6.0 (12.5 pints) 6.25 Qts.
	Type Recommended	GM Dextron II	
Oil cooler (std., opt., NA, internal, external, air, liquid)		Std. - External Oil to Engine Coolant	

Axle or Front Wheel Drive Unit			
Type (front, rear)			Front
Description			Integral with Transmission
Limited slip differential (type)			None
Drive pinion offset			NA
Drive pinion (type)			NA
No. of differential pinions			2
Pinion / differential adjustment (shim, other)			NA
Pinion / differential bearing adjustment (shim, other)			NA
Driving wheel bearing (type)			Integral Double Row Ball Bearing
Lubricant	Capacity [L (pt.)]		NA - Part of Automatic
	Type recommended		
	SAE viscosity number	Summer	GM Dextron II
		Winter	
		Extreme cold	

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

Axle ratio (or overall top gear ratio)		2.84
No. of teeth	Pinion	38
	Ring gear or gear	32
Ring gear o.d.		NA
Transaxle	Transfer gear ratio	1.0
	Final drive ratio	2.39

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb.
Engine Code

ALL

Axle Shafts – Front Wheel Drive

Number used				Two
Type (straight, solid bar, tubular, etc.)			Left	Solid Shaft
			Right	Solid Shaft
Outer diam. x length* x wall thick-ness	Manual transmission		Left	–
			Right	–
	Automatic transmission		Left	Gas 23.8 x 306.5 (.92 x 12.07)
			Right	Gas 23.8 x 418.5 (.92 x 16.48)
	Optional transmission		Left	Gas 23.8 x 306.5 (.92 x 12.07)
			Right	Gas 23.8 x 383.0 (.92 x 15.09)
Slip yoke	Type			NA
	Number of teeth			NA
	Spline o.d.			NA
Universal joints	Make and mfg. no.		Inner	Saginaw Steering Gear
			Outer	Saginaw Steering Gear
	Number used			Two
	Type, size, plunge		Inner	Tripot
			Outer	RZEPPA
	Attach (u-bolt, clamp, etc.)			Spring Clip
	Bearing	Type (plain, anti-friction)		Balls
		Lubrication (fitting, prepack)		Prepack
Drive taken through (torque tube, arms or springs)				Shaft and Joints
Torque taken through (torque tube, arms or springs)				Engine Mounts

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type And/Or Engine Displacement	ALL

Suspension – General

Car leveling	Std./opt./n.a.	Optional - Rear Only
	Type (air, hyd., etc.)	Air
	Manual/auto. controlled	Electronically Controlled
Provision for brake dip control		Front Suspension Geometry
Provision for accl. squat control		Rear Suspension Geometry
Provisions for car jacking		
Shock absorber (front & rear)	Type	Front: McPherson Strut Rear: Telescopic (Double-Acting)
	Make	Delco Products
	Piston diameter	Front: 32mm Rear: 25mm
	Rod diameter	Front: 20mm Rear: 13mm

Suspension – Front

Type and description		McPherson Strut with Coil Spring
Drive and torque taken through		Strut & Lower Control Arm
Travel	Full jounce	96mm
	Full rebound	73mm
Spring	Type (coil, leaf, other) & material	Coil - Steel
	Insulators (type & material)	Top Only - Rubber
	Size (coil design height & i.d., bar length x dia.)	Spring Computer Selected - Varies with Option Content
	Spring rate [N/mm (lb./in.)]	14.5 N/mm (Base Car)
	Rate at wheel [N/mm (lb./in.)]	12.2 N/mm (Base Car)
Stabilizer	Type (link, linkless, frameless)	Linkless
	Material & bar diameter	Steel: 22mm (Base Car)

Suspension – Rear

Type and description			Trailing Arm, Twist Axle with Track Bar
Drive and torque taken through			NA
Travel	Full jounce		114mm
	Full rebound		63mm
Spring	Type (coil, leaf, other) & material		Coil - Steel
	Size (length x width, coil design height & i.d., bar length & dia.)		Spring Computer Selected - Varies with Option Content
	Spring rate [N/mm (lb./in.)]		32 N/mm (Base Car)
	Rate at wheel [N/mm (lb./in.)]		15.8 N/mm (Base Car)
	Insulators (type & material)		Top Only - Rubber
	If leaf	No. of leaves	NA
		Shackle (comp. or tens.)	NA
Stabilizer	Type (link, linkless, frameless)		Linkless
	Material & bar diameter		Steel - 20mm (Base Car)
Track bar (type)			Open Channel

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type And/Or Engine Displacement

Gas (ALL)

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.)				Std.
Special valving	Type (proportion, delay, metering, other)			Proporting, Failure Warning
Power brake (std., opt., n.a.)				Std.
Booster type (remote, integral, vac., hyd., etc.)				Vacuum Suspended
Vacuum source (inline, pump, etc.)				Inline
Vacuum reservoir (volume in.^{3})				None
Vacuum pump-type (elec, gear driven, belt driven, if other so state)				NA
Anti-skid device type (std., opt., n.a..) (F/R)				NA
Effective area [cm^2(in.^{2})]*				502
Gross lining area [cm^2(in.^{2})]**(F/R)				217/338
Swept area [cm^2(in.^{2})]***(F/R)				1173/622
Rotor	Outerworking diameter		F/R	256
	Inner working diameter		F/R	168
	Thickness		F/R	26
	Material & type (vented/solid)		F/R	Cast Iron Vented
Drum	Diameter & width		F/R	225 mm
	Type and material		F/R	Composite Cast Iron (Comp. Alum. Opt.)
Wheel cylinder bore				64 mm/20.6 mm
Master cylinder	Bore/stroke		F/R	24 mm x 31.8 mm/35.21mm
Pedal arc ratio				3.5:1
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]				(1560)
Lining clearance			F/R	Self Adjusting 0/.381
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Integrally Molded
		Rivet size		NA
		Manufacturer		Delco Moraine
		Lining code*****		117 FE
		Material		Semi Metallic
		**** Primary or out-board		144 x 40.4 x 9.9
		Size Secondary or in-board		122 x 49.5 x 16.8
		Shoe thickness (no lining)		Inboard 5
	Rear wheel	Bonded or riveted (rivets/seg.)		Riveted
		Manufacturer		Inland
		Lining Code*****		235 FE
		Material		Organic - 4050
		**** Primary or out-board		176 x 44 x 6
		Size Secondary or in-board		208 x 44 x 7.6
		Shoe thickness (no lining)		2

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type And/Or Engine Displacement	
	ALL including Wagon

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P185/75R14
	Type (bias, radial, etc.)		Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	240 (35 PSI)
		Rear [kPa (psi)]	240 (35 PSI)
	Rev./mile–at 70 km/h (45 mph)		519 (835)
Wheels	Type & material		Pressed Steel
	Rim (size & flange type)		14 x 5.5 JJ
	Wheel offset		42 mm
	Attachment	Type (bolt or stud)	Stud
		Circle diameter	100 mm & 115 mm
		Number & size	5–12 mm
Spare	Tire and wheel (same, if other describe)		Compact Spare
	Storage position & location (describe)		Under Deck of Luggage Compartment

Tires And Wheels (Optional)

Size (load range, ply)	P195/75R14
Type (bias, radial, etc.)	Radial
Wheel (type & material)	Styled Wheel
Rim (size, flange type and offset)	14 x 5.5 JJ 42 mm Offset
Size (load range, ply)	P195/70R14
Type (bias, radial, etc.)	Radial
Wheel (type & material)	Cast Aluminum
Rim (size, flange type and offset)	14 x 6.0 JJ 42 mm Offset
Size (load range, ply)	P215/60R14
Type (bias, radial, etc.)	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)	
Spare tire and wheel (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	

Brakes – Parking

Type of control		Front-Hand Release
Location of control		Left of Driver Under Dash
Operates on		Rear Service Brakes
If separate from service brakes	Type (internal or external)	NA
	Drum diameter	NA
	Lining size (length x width x thickness)	NA

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type And/Or Engine Displacement

ALL

Steering

Manual (std., opt., n.a.)				NA
Power (std., opt., n.a.)				Std.
Adjustable steering wheel (tilt, swing, other)		Type and description		Tilt
		(Std., opt., n.a.)		Opt.
Wheel diameter (W9) SAE J1100		Manual		–
		Power		375 (14.8)
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)		12.5 (41.0)
		Curb to curb (l. & r.)		11.6 (38.1)
	Inside rear	Wall to wall (l. & r.)		6.9 (22.6)
		Curb to curb (l. & r.)		7.0 (23.0)
Scrub Radius*				+1.5 mm
Manual	Gear	Type		NA
		Make		NA
		Ratios	Gear	NA
			Overall	NA
	No. wheel turns (stop to stop)			NA
Power	Type (coaxial, linkage, etc.)			Rack and Pinion
	Make			Saginaw Steering Gear
	Gear	Type		End Take Off
		Ratios	Gear	"C" Factor - 45.13 mm/rev
			Overall	17.56:1
	Pump (drive)			Belt
	No. wheel turns (stop to stop)			3.15
Linkage	Type			End Take Off Tie Rods
	Location (front or rear of wheels, other)			Rear
	Tie rods (one or two)			Two
Steering axis	Inclination at camber (deg.)			14.5°
	Bearings (type)	Upper		Ball
		Lower		Ball Joint
		Thrust		Ball
Steering spindle & joint type				MacPherson Strut
Wheel spindle	Diameter	Inner bearing		28.95 (1.1398)
		Outer bearing		28.95 (1.1398)
	Thread (size)			M20 x 2.5
	Bearing (type)			Ball

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type And/Or Engine Displacement	ALL

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	0.9° to 2.9°
		Camber (deg.)	0.0° to 0.5°
		Toe-in [outside track-mm (in.)]	0.0° +/- 0.1° (Degrees Per Wheel)
	Service reset*	Caster	0.9° to 2.9°
		Camber	0.0° +/- 0.5°
		Toe-in	0.0° +/- 0.1° (Degrees Per Wheel)
	Periodic M.V. inspection	Caster	NA
		Camber	NA
		Toe-in	NA
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	NA
		Toe-in [outside track-mm (in.)]	NA
	Service reset*	Camber	NA
		Toe-in	NA
	Periodic M.V. inspection	Camber	NA
		Toe-in	NA

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

Electrical – Instruments and Equipment

Speedometer	Type	Dial with Pointer
	Trip odometer (std., opt., n.a.)	Optional with Package
EGR maintenance indicator		NA
Charge indicator	Type	Tell-Tale Lamp
	Warning device	Inherent
Temperature indicator	Type	Tell-Tale Lamp
	Warning device	Inherent
Oil pressure indicator	Type	Tell-Tale Lamp
	Warning device	Inherent
Fuel indicator	Type	Electric Gauge
	Warning device	None
Windshield wiper	Type (standard)	Electric 2-speed
	Type (optional)	Controlled Cycle (Pulse)
	Blade length	406.4 (16.0)
	Swept area [cm^2($in.^2$)]	
Windshield washer	Type (standard)	Electric Pump Mounted on Motor Asm.
	Type (optional)	NA
	Fluid level indicator	NA
Horn	Type	Vibrator
	Number used	Two
Other		Tell-Tale Lamp for Brake Failure and Parking Brake Restraint System Warning Lamp and Buzzer.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.5L L4 (151 CID) Elect. Fuel Inj. RPO LR8	2.8L V6 (173 CID) 2-Bbl Carburetor RPO LE2

Electrical – Supply System

Battery	Make	Delco Remy	
	Model, std., (opt.)	75-630 Std, N.A., Opt	70-425 Std, 75-525, Opt.
	Voltage	12 Volt	
	Amps at 0°F cold crank	630 Std, N.A. Opt.	425 Std, 525 Opt.
	Minutes-reserve capacity	90 Std, N.A. Opt.	75 Std, 90 Opt.
	Amp/hrs. - 20 hr. rate	--	
	Location	Engine Compartment	
Generator or alternator	Type and rating	(a,b,c)	(a,b,c)
	Ratio (alt. crank/rev.)	Not Available	2.63:1
	Optional (type & rating)	None	
Regulator	Type	Integral with Alternator	

Electrical – Starting System

Start. motor	Current drain at 0°F	270*	235*
Motor drive	Engagement type	Overrunning Clutch	Pinion
	Pinion engages from (front, rear)	Front	Rear

Electrical – Ignition System

Type	Conventional (std., opt., n.a.)		
	Electronic (std., opt., n.a.)	Not Availab.e	
	Other (specify)	High Energy Ignition System (HEI)	
Coil	Make	Delco Remy	
	Model	Not Available	1115463
	Current – Engine stopped – A	0	
	Current – Engine idling – A	5.5 Max	
Spark plug	Make	AC	
	Model	R44TSX	R43CTS
	Thread (mm)	14	M14x1.25
	Tightening torque [N-m (lb., ft.)]	20 (15)	9-20 (7-15)
	Gap	1.52 (.060)	1.143 (.045)
	Number per cylinder	One	
Distributor	Make	Delco Remy	
	Model	--	1103569

Electrical – Suppression

Locations & type	Internal alt. capacitor, non-metallic high-tension ignition cables, resistor spark plugs, ingition 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" blower motors and coax capacitor.

(a) - 56 amp with heater, 10 SI (22 amp @ idle).
(b) - 66 amp with heater and heated backlite, 10 SI (23 amp @ idle).
(c) - 78 amp with A/C, 15 SI (40 amp @ idle).
* - Current drain for starting motor is at -20°F.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb. Engine Code	2.8 Liter - V6 H.O. 2.8 Multi-Port FI RPO LB6

Electrical – Supply System

Battery	Make	Delco Remy
	Model, std., (opt.)	75-525 (Std.), 75-630 (Opt.)
	Voltage	12 Volts
	Amps at 0°F cold crank	525 (Std.), 630 (Opt.)
	Minutes-reserve capacity	90 (Std.), 90 (Opt.)
	Amp/hrs. - 20 hr. rate	--
	Location	Engine Compartment
Generator or alternator	Type and rating	(a,b,c)
	Ratio (alt. crank/rev.)	Not Available
	Optional (type & rating)	None
Regulator	Type	Integral with Alternator

Electrical – Starting System

Start. motor	Current drain at 0°F	250 @ -20°F
Motor drive	Engagement type	Positive Shift Solenoid
	Pinion engages from (front, rear)	Rear

Electrical – Ignition System

Type	Electronic (std., opt., n.a.)		Not Applicable
	Other (specify)		High Energy Ignition System (HEI)
Coil	Make		Delco-Remy
	Model		1115463
	Current	Engine stopped – A	0
		Engine idling – A	5.5 Max.
Spark plug	Make		AC
	Model		R42CTS
	Thread (mm)		M14 x 1.25
	Tightening torque [N•m (lb, ft)]		9-20 (7-15)
	Gap		1.143 (.045)
	Number per cylinder		One
Distributor	Make		Delco Remy
	Model		--

Electrical – Suppression

Locations & type	Internal alt. capacitor, non-metallic high-tension ignition 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" blower motors and coax capacitor.

(a) - 66 amp with heater
(b) - 78 amp with heater and heated backlite
(c) - 97 amp with A/C

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type	ALL

Body

Structure	Partially-Unitized Frame
Bumper system front - rear	
Anti-corrosion treatment	

Body – Miscellaneous Information

Type of finish (lacquer, enamel, other)			Lacquer
Hood	Hinge location (front, rear)		Rear
	Type (counterbalance, prop)		Prop
	Release control (internal, external)		Internal
Trunk lid	Type (counterbalance, other)		Gas Cylinder on Station Wagon, Torque Rods on Coupe & Sedan
	Internal release control (elec., mech., n.a.)		Electrical (Optional)
Hatch-back lid	Type (counterbalance, other)		NA
	Internal release control (elec., mech., n.a.)		NA
Vent window control (crank, friction, pivot, power)		Front	None
		Rear	None
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam etc.)		Front	Full-Foam
		Rear	Full-Foam
		3rd seat	Foam (Station Wagon)
Seat back type (e.g., 60/40, bucket, bench, wire, foam etc.)		Front	Full-Foam
		Rear	Full-Foam
		3rd seat	Foam (Station Wagon)
Vehicle I.D. no. location			Left Topside of I/P

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

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type	Coupe (ALL)	Sedan	Wagon

Restraint System NA

Active restraint system	Standard/optional	
	Type and description	
	Location	
Passive seat belts	Standard/optional	
	Power/manual	
	2 or 3 point	
	Knee bar/lap belt	

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Partially-Unitized Frame

Glass	SAE Ref. No.			
Windshield glass exposed surface area [cm^2($in.^2$)]	S1	8525 (1322)	8525 (1322)	8525 (1322)
Side glass exposed surface area [cm^2($in.^2$)] - total 2-sides	S2	11412 (1769)	11251 (1744)	17736 (2750)
Backlight glass exposed surface area [cm^2($in.^2$)]	S3	4217 (654)	4217 (654)	5837 (905)
Total glass exposed surface area [cm^2($in.^2$)]	S4	24154 (3745)	23993 (3720)	32098 (4976)
Windshield glass (type)		Compound Curved (Laminated)		
Side glass (type)		Curved Tempered		
Backlight glass (type)		Curved Tempered		

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

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type ALL

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

Air conditioning (manual, auto. temp control)		(C60) Opt. - Manual
Clock (digital, analog)		Part of Radio Package
Compass / thermometer		NA
Console (floor, overhead)	#	(DE9) Opt. (exc. 3AJ19) Frt. Compt.-Nonshifting;
Defroster, elec. backlight		(C49) Opt. - Electric
Electronic	Diagnostic warning (integrated, individual)	NA
	Instrument cluster (list instruments) +	(U21) Opt. - Trip OD, Voltmeter, Water Temp., Oil Press.
	Keyless entry	NA
	Tripminder (avg. spd., fuel)	Opt. - Trip Monitor Instrument
	Voice alert (list items)	NA
	Other	
Fuel door lock (remote, key, electric)		(N05) - Opt.
Lamps	Auto head on / off delay, dimming	NA
	Cornering	NA
	Courtesy (map, reading)	(C95) Opt. (C78) Std. - 3AM00
	Door lock, ignition	NA
	Engine compartment	(U26) Std. - 3AM00
	Fog	Opt. (T96)
	Glove compartment	Std.
	Trunk	(U25) Std. - 3AM00
	Other	
Mirrors	Day/night (auto. man.)	Std. - Manual
	L.H. (remote, power, heated)	Std. - Manual
	R. H. (convex, remote, power, heated)	Opt. - Manual (D35)
	Visor vanity (RH / LH, illuminated)	(D64) Opt. - Illuminated - R.H. (D34) Std. - 3AM00
Parking brake-auto release (warning light)		
Power equipment	Door locks / deck lid - specify	(AU3) Opt. - Door Locks
	Seat (2-4-6 way) heated (driver, pass, other) lumbar, hip, thigh support (power, manual) reclining (driver, pass) memory (1-2 preset, recline)	*(AC3) Opt. (3AJ00) 6-way, Power, Bucket, Driver Side Only
	Side windows	(A31) Opt.
	Vent windows	NA
	Rear window	(AU6) Opt. - 3AJ35 Only
Radio systems	Antenna (location, whip, w/shield, power)	(U73) Std. - Fixed (U75) Opt. - Power
	AM, FM, stero, tape, CB X	(UK4) Std. - AM/FM Stereo, Seek & Scan, ETR; (UM6) Opt.
	Speaker (number, location) Premium sound	(U64) Std. - (U66) Opt.
Roof open air/fixed (flip-up, sliding, "T")		(AD3) Opt. - Hinged Roof Window
Speed control device		(K34) Opt.
Speed warning device (light, buzzer,etc.)		NA
Tachometer (rpm)		NA
Theft protection-type		NA

(D55) Opt. (except 3AJ19) Frt. Compt. Floor - Shifting
+ Tach., (U52) Opt. - Digital Speedo, Bar Graph Fuel & Eng. Temp, Trip OD, Turn Signal Ind.
* (AG1) Opt. - (ALL) 6-way, Power, Split Bench, Driver Side Only
X 3AJ19 3AJ35 AM/FM Stereo, Seek & Scan, Auto Rev., Cassette, clock, ETR; (UM7) Opt.-AM/FM Stereo, Seek & Scan, Clock, ETR; (UXI) Opt.-AM Stereo & FM Stereo, Seek & Scan Auto Rev., Search Repeat Cassette, Equalizer, Clock, ETR

MVMA Specifications Form
Passenger Car

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

METRIC (U.S. Customary)
Car and Body Dimensions

See Key Sheets for definitions

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

Body Type	SAE Ref. No.	Coupe	Sedan
Width			
Tread (front)	W101	1492 (58.7)	1492 (58.7)
Trear (rear)	W102	1447 (57.0)	1447 (57.0)
Vehicle width	W103	1766 (69.5)	1766 (69.5)
Body width at Sg RP (front)	W117	1719 (67.7)	1720 (67.7)
Vehicle width (front doors open)	W120	3793 (149.3)	3316 (130.6)
Vehicle width (rear doors open)	W121	–	3170 (124.8)
Front fender overall width	W106		
Rear fender overall width	W107		
Tumble-home (deg.)	W122		
Length			
Wheelbase	L101	2664 (104.9)	2664 (104.9)
Vehicle length	L103	4834.5 (190.3)	4834.5 (190.3)
Overhang (front)	L104	1098.5 (43.2)	1098.5 (43.2)
Overhang (rear)	L105	1072 (42.2)	1072 (42.2)
Upper structure length	L123	2400 (94.5)	2400 (94.5)
Rear wheel C/L "X" coordinate	L127	2459 (96.8)	2459 (96.8)
Cowl point "X" coordinate	L125	206 (8.1)	207 (8.1)
Front end length at centerline	L126		
Rear end length at centerline	L129		
Height **			
Passenger distribution (front/rear)	PD1,2,3	2/0**	** 2/0**
Trunk/cargo load		0	** 0
Vehicle height	H101	1375 (54.1)	1375 (54.1)
Cowl point to ground	H114	941.1 (37.1)	941.1 (37.1)
Deck point to ground	H138	985.9 (38.8)	985.9 (38.8)
Rocker panel-front to ground	H112	211.6 (8.3)	211.6 (8.3)
Bottom of door closed-front to grd.	H133	281.6 (11.1)	282.6 (11.1)
Rocker panel-rear to ground	H111	212.2 (8.4)	212.2 (8.4)
Bottom of door closed-rear to grd.	H135	–	283.2 (11.1)
Windshield slope angle	H122		
Backlight slope angle	H121		
Ground Clearance **		ALL	
Front bumper to ground	H102	306 (12.0)	
Rear bumper to ground	H104	394 (15.5)	
Bumper to ground [front at curb mass (wt.)]	H103	328 (12.9)	
Bumper to ground [rear at curb mass (wt.)]	H105	422 (16.6)	
Angle of approach (degrees)	H106	15.5°	
Angle of departure (degrees)	H107	17.3°	
Ramp breakover angle (degrees)	H147	14.3°	
Axle differential to ground (front / rear)	H153	–	
Min. running ground clearance	H156	145.6 (5.7)	
Location of min. run. grd. clear.		Stabilizer Bracket	

***All Vehicle Height And Ground Clearances Are Made Using EPA Loaded Vehicle Weight, Loading Conditions.*

EPA LOADED VEHICLE WEIGHT Is The Base Vehicle Weight Plus All Coolant And Fluids Necessary For Operation Plus 100% Of The Fuel Capacity, Plus The Weight Of All Options And Accessories Which Weigh Three Pounds Or More And Which Are Sold On At Least 33% Of The Car Line, Plus Two Occupants.

MVMA Specifications Form
Passenger Car

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

METRIC (U.S. Customary)
Car and Body Dimensions

See Key Sheets for definitions

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

Body Type	SAE Ref. No.	Wagon
Width		
Tread (front)	W101	1492 (58.7)
Trear (rear)	W102	1447 (57.0)
Vehicle width	W103	1766 (69.5)
Body width at Sg RP (front)	W117	1720 (67.7)
Vehicle width (front doors open)	W120	3316 (130.6)
Vehicle width (rear doors open)	W121	3174 (125.0)
Front fender overall width	W106	
Rear fender overall width	W107	
Tumble-home (deg.)	W122	
Length		
Wheelbase	L101	2664 (104.9)
Vehicle length	L103	4937 (194.4)
Overhang (front)	L104	1098.5 (43.2)
Overhang (rear)	L105	1175 (46.3)
Upper structure length	L123	3267 (128.6)
Rear wheel C/L "X" coordinate	L127	2459 (96.8)
Cowl point "X" coordinate	L125	207 (8.1)
Front end length at centerline	L126	
Rear end length at centerline	L129	
Height **		
Passenger distribution (front/rear)	PD1,2,3	2/0 **
Trunk/cargo load		0 **
Vehicle height	H101	1385.3 (54.5)
Cowl point to ground	H114	941.1 (37.1)
Deck point to ground	H138	–
Rocker panel-front to ground	H112	217.7 (8.6)
Bottom of door closed-front to grd.	H133	288.7 (11.4)
Rocker panel-rear to ground	H111	224.6 (8.8)
Bottom of door closed-rear to grd.	H135	295.6 (11.6)
Windshield slope angle	H122	
Backlight slope angle	H121	
Ground Clearance **		
Front bumper to ground	H102	304 (12.0)
Rear bumper to ground	H104	350 (13.8)
Bumper to ground [front at curb mass (wt.)]	H103	326 (12.8)
Bumper to ground [rear at curb mass (wt.)]	H105	367 (14.4)
Angle of approach (degrees)	H106	18.4°
Angle of departure (degrees)	H107	18.5°
Ramp breakover angle (degrees)	H147	19.9°
Axle differential to ground (front / rear)	H153	–
Min. running ground clearance	H156	147.2 (5.8)
Location of min. run. grd. clear.		Frame Front

***All Vehicle Height And Ground Clearances Are Made Using EPA Loaded Vehicle Weight, Loading Conditions.*

EPA LOADED VEHICLE WEIGHT Is The Base Vehicle Weight Plus All Coolant And Fluids Necessary For Operation Plus 100% Of The Fuel Capacity, Plus The Weight Of All Options And Accessories Which Weigh Three Pounds Or More And Which Are Sold On At Least 33% Of The Car Line, Plus Two Occupants.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)
Car and Body Dimensions See Key Sheets for definitions

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type	SAE Ref. No.	Coupe	Sedan
Front Compartment			
Sg RP front, "X" coordinate	L31	1138 (44.8)	1138 (44.8)
Effective head room	H61	980 (38.6)	980 (38.6)
Max. eff. leg room (accelerator)	L34	1070 (42.1)	1070 (42.1)
SgRP to heel point	H30	260 (10.2)	258 (10.2)
SgRP to heel point	L53		
Back angle	L40	26°	26°
Hip angle	L42		
Knee angle	L44		
Foot angle	L46		
Design H-point front travel	L17	192 (7.6)	192 (7.6)
Normal driving & riding seat track trvl.	L23		
Shoulder room	W3	3AJ27-1426(56.1) 3AM27-1410(55.5)	3AJ19-1427(56.2) 3AM19-1412(55.6)
Hip room	W5	1329 (52.3)	1330 (52.4)
•• Upper body opening to ground	H50		
Steering wheel maximum diameter	W9		
Steering wheel angle	H18	22°	22°
Accel. heel pt. to steer. whl. cntr	L11		
Accel. heel pt. to steer. whl. cntr	H17		
Steering wheel to C / L of thigh	H13		
Steering wheel torso clearance	L7		
Headlining to roof panel (front)	H37		
Undepressed floor covering thickness	H67		

Rear Compartment

All Interior Dimensions Are Measured With The Seating Reference Point (SgRP) 21 mm (1 Seat Adjuster Notch) Forward Of Rearmost Seat Position.

Sg RP Point couple distance	L50	809 (31.9)	809 (31.9)
Effective head room	H63	963 (37.9)	965 (38.0)
Min. effective leg room	L51	910 (35.8)	910 (35.8)
Sg RP (second to heel)	H31	260 (10.2)	261 (10.3)
Knee clearance	L48	34 (1.3)	34 (1.3)
Compartment room	L3	687 (27.0)	694 (27.3)
Shoulder room	W4	1447 (57.0)	3AJ19-1427(56.2) 3AM19-1412(55.6)
Hip room	W6	1362 (53.6)	1338 (52.7)
•• Upper body opening to ground	H51	–	
Back angle	L41		
Hip angle	L43		
Knee angle	L45		
Foot angle	L47		
Headlining to roof panel (second)	H38		
Depressed floor covering thickness	H73		

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	448.5 (15.8)	448.5 (15.8)
•• Liftover height	H195		

Interior Volumes (EPA Classification)

Vehicle class (subcompact, compact, etc.)			Mid-size (113.1)
Interior volume index (cu. ft.)		97.514	97.096
Trunk/cargo index (cu. ft.)		15.835	15.835

All linear dimensions are in millimeters (inches).
** EPA Loaded Vehicle Weight, Loading Conditions

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)
Car and Body Dimensions See Key Sheets for definitions

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type	SAE Ref. No.	
		Wagon

Front Compartment

Sg RP front, "X" coordinate	L31	1138 (44.8)
Effective head room	H61	980 (38.6)
Max. eff. leg room (accelerator)	L34	1070 (42.1)
SgRP to heel point	H30	258 (10.2)
SgRP to heel point	L53	
Back angle	L40	26°
Hip angle	L42	
Knee angle	L44	
Foot angle	L46	
Design H-point front travel	L17	192 (7.6)
Normal driving & riding seat track trvl.	L23	
Shoulder room	W3	1427 (56.2)
Hip room	W5	1330 (52.4)
** Upper body opening to ground	H50	
Steering wheel maximum diameter	W9	
Steering wheel angle	H18	22°
Accel. heel pt. to steer. whl. cntr	L11	
Accel. heel pt. to steer. whl. cntr	H17	
Steering wheel to C / L of thigh	H13	
Steering wheel torso clearance	L7	
Headlining to roof panel (front)	H37	
Undepressed floor covering thickness	H67	

Rear Compartment

All Interior Dimensions Are Measured With The Seating Reference Point (SgRP) 21 mm (1 Seat Adjuster Notch) Forward Of Rearmost Seat Position.

Sg RP Point couple distance	L50	786 (30.9)
Effective head room	H63	987 (38.9)
Min. effective leg room	L51	882 (34.7)
Sg RP (second to heel)	H31	261 (10.3)
Knee clearance	L48	15 (0.6)
Compartment room	L3	717 (28.2)
Shoulder room	W4	1427 (56.2)
Hip room	W6	1338 (52.7)
** Upper body opening to ground	H51	
Back angle	L41	
Hip angle	L43	
Knee angle	L45	
Foot angle	L47	
Headlining to roof panel (second)	H38	
Depressed floor covering thickness	H73	

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	2106 (74.4)
** Liftover height	H195	

Interior Volumes (EPA Classification)

Vehicle class (subcompact, compact, etc.)		Midsize (138.4)
Interior volume index (cu. ft.)		96.753
Trunk/cargo index (cu. ft.)		41.623

All linear dimensions are in millimeters (inches).
** EPA Loaded Vehicle Weight, Loading Conditions

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

See Key Sheets for definitions

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type	SAE Ref. No.	
		Wagon

Station Wagon – Third Seat

Sg RP couple distance	L85	
Shoulder room	W85	1125 (44.3)
Hip room	W86	1100 (43.3)
Effective leg room	L86	483 (19.0)
Effective head room	H86	920 (36.2)
Sg RP to heel point	H87	
Knee clearance	L87	
Seat facing direction	SD1	Rear
Back angle	L88	25°
Hip angle	L89	
Knee angle	L90	
Foot angle	L91	

Station Wagon – Cargo Space

Cargo length (open front)	L200	NA
Cargo length (open second)	L201	NA
Cargo length (closed front)	L202	1914 (75.4)
Cargo length (closed second)	L203	1152 (45.4)
Cargo length at belt (front)	L204	1838 (72.4)
Cargo length at belt (second)	L205	1029 (40.5)
Cargo width (wheelhouse)	W201	930 (36.6)
Rear opening width at floor	W203	1082 (42.6)
Opening width at belt	W204	1376 (54.2)
Max. rear opening width above belt	W205	996 (39.2)
Cargo height	H201	803 (31.6)
Rear opening height	H202	729 (28.7)
Tailgate to ground height	H250	NA
Front seat back to load floor height	H197	404 (15.9)
Cargo volume index [m^3($ft.^3$)]	V2	2106.13 (74.4)
Hidden cargo volume [m^3($ft.^3$)]	V4	
Cargo volume. index-rear of 2-seat	V10	1179 (41.6)

Hatchback – Cargo Space

Cargo length at front seatback height	L208	
Cargo length at floor (front)	L209	
Cargo length at second seatback height	L210	
Cargo length at floor (second)	L211	
Front seatback to load floor height	H197	404 (15.9)
Second seatback to load floor height	H198	
Cargo volume index [m^3($ft.^3$)]	V3	
Hidden cargo volume [m^3($ft.^3$)]	V4	
Cargo volume index-rear of 2-seat	V11	

Aerodynamics*

NA

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

* EPA Loaded Vehicle Weight, Loading Conditions

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

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type

ALL

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
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 centerline of car - front, width measurement made from centerline of car to the fiducial mark located on top of the front seat adjuster mounting bolt.
	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.
Rear	X	Fiducial mark to vertical base grid line - rear, measured horizontally from the base grid line to rear fiducial mark located on the rail (compartment pan - longitudinal).
	Y	Fiducial mark to centerline of car - rear, width measurement made from centerline of car to fiducial mark located on the rail (compartment pan - longitudinal).
	Z	Fiducial mark to horizontal base grid line - rear, measured vertically from base grid line to rear fiducial mark located on the rail (compartment pan - longitudinal).

Fiducial Mark Number		Coupe/Sedan	Wagon
Front	W21	564 (22.2)	564 (22.2)
	L54	2771 (109.1)	2771 (109.1)
	H81	258 (10.2)	258 (10.2)
	H161		
**	H163		
Rear	W22	489 (19.3)	510 (20.1)
	L55	4980 (196.1)	5215 (205.3)
	H82	387 (15.2)	186 (7.3)
	H162		
**	H164		

* Reference – SAE Recommended Practice, J182, Motor Vehicle Fiducial Marks.

All linear dimensions are in millimeters (inches).
** **EPA Loaded Vehicle Weight, Loading Conditions**

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

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type

ALL

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
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 centerline of car - front, width measurement made from centerline of car to the fiducial mark located on top of the front seat adjuster mounting bolt.
	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.
Rear	X	Fiducial mark to vertical base grid line - rear, measured horizontally from the base grid line to rear fiducial mark located on the rail (compartment pan - longitudinal).
	Y	Fiducial mark to centerline of car - rear, width measurement made from centerline of car to fiducial mark located on the rail (compartment pan - longitudinal).
	Z	Fiducial mark to horizontal base grid line - rear, measured vertically from base grid line to rear fiducial mark located on the rail (compartment pan - longitudinal).

Fiducial Mark Number		Coupe/Sedan	Wagon
Front	W21	564 (22.2)	564 (22.2)
	L54	2771 (109.1)	2771 (109.1)
	H81	258 (10.2)	258 (10.2)
	H161		
**	H163		
Rear	W22	489 (19.3)	510 (20.1)
	L55	4980 (196.1)	5215 (205.3)
	H82	387 (15.2)	186 (7.3)
	H162		
**	H164		

* Reference – SAE Recommended Practice, J182, Motor Vehicle Fiducial Marks.

All linear dimensions are in millimeters (inches).

** **EPA Loaded Vehicle Weight, Loading Conditions**

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

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Body Type	Coupe/Sedan (ALL)	Wagon

Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (SAE - H127)	Highest**	654.3 (25.8)	654.1 (25.8)
		Lowest		
	Taillamp (SAE - H128)	Highest**	768.7 (30.2)	670.3 (26.4)
		Lowest		
	Sidemarker	Front	487.3 (19.2)	
		Rear	768.7 (30.2)	670.3 (26.4)
Distance from C/L of car to center of bulb	Headlamp	Inside		
		Outside**	665.0 (26.2)	
	Taillamp	Inside		
		Outside**	702.0 (27.6)	715.0 (28.1)
	Directional	Front	561.0 (22.1)	
		Rear	702.0 (27.6)	715.0 (28.1)
Halogen headlamp (std., opt., n.a.)	Lo beam			
	Hi beam			
	Replaceable bulb			
	Shape			
Headlamp other than above	Lo beam			
	Hi beam			
	Replaceable			
	Shape			
	Type			

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera

Model Year 1986 Issued _____ 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	
3AJ19 Sedan	793.7	465.9	1259.6					1222.2
	1749.8	1027.1	2776.9					2694.5
3AJ27 Coupe	787.5	452.2	1239.7					1202.3
	1736.2	996.9	2733.1					2650.6
3AM19 Sedan	800.6	472.4	1273.0					1235.6
	1765.0	1041.5	2806.5					2724.0
3AM27 Coupe	790.3	456.9	1247.2					1209.8
	1742.3	1007.3	2749.6					2667.2
3AJ35 Wagon	792.9	538.4	1331.3					1293.9
	1748.0	1187.0	2935.0					2852.6
AJ37 Coupe	806.4	450.7	1257.1					1219.7
	1777.8	993.6	2771.4					2689.0
AM37 Coupe	811.8	451.0	1262.8					1225.4
	1789.7	994.3	2784.0					2701.5

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Optional Equipment Differential Mass (weight)*

Equipment	MASS, kg. (weight, lb.) Front	Rear	Total	Remarks
Power Door Locks AU3	.3	.7	1.0	
Coupe	(.7)	(1.5)	(2.2)	
Power Door Locks AU3	.5	1.5	2.0	
Sedan/Wagon	(1.1)	(3.3)	(4.4)	
Power Windows A31	.8	1.1	1.9	
Coupe	(1.8)	(2.4)	(4.2)	
Power Windows A31	1.8	2.9	4.7	
Sedan/Wagon	(4.0)	(6.4)	(10.4)	
Trunk Release Power A90	-.2	.7	.5	
	(-.4)	(1.5)	(1.1)	
Front Floor Mats B34	1.2	.3	1.5	
	(2.6)	(.7)	(3.3)	
Rear Floor Mats B35	.2	.6	.8	
	(.4)	(1.4)	(1.8)	
Vinyl Top CB4	.3	.7	1.0	
Coupe	(.7)	(1.5)	(2.2)	
Vinyl Top C09	.7	1.4	2.1	
Sedan	(1.5)	(3.1)	(4.6)	
Air Conditioning C60	24.7	2.6	27.3	With LR8 Engine
	(54.5)	(5.7)	(60.2)	
Air Conditioning C60	22.0	2.4	24.4	With LE2/LG3 Engine
	(48.5)	(5.3)	(53.8)	
Air Conditioning C60	21.7	.6	22.3	With LB6 Engine
	(47.8)	(1.3)	(49.2)	
Heavy Duty Susp. F41	1.2	.4	1.6	
Coupe/Sedan	(2.6)	(.9)	(3.5)	
Heavy Duty Susp. F41	1.6	.8	2.4	
Wagon	(3.5)	(1.7)	(5.2)	

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

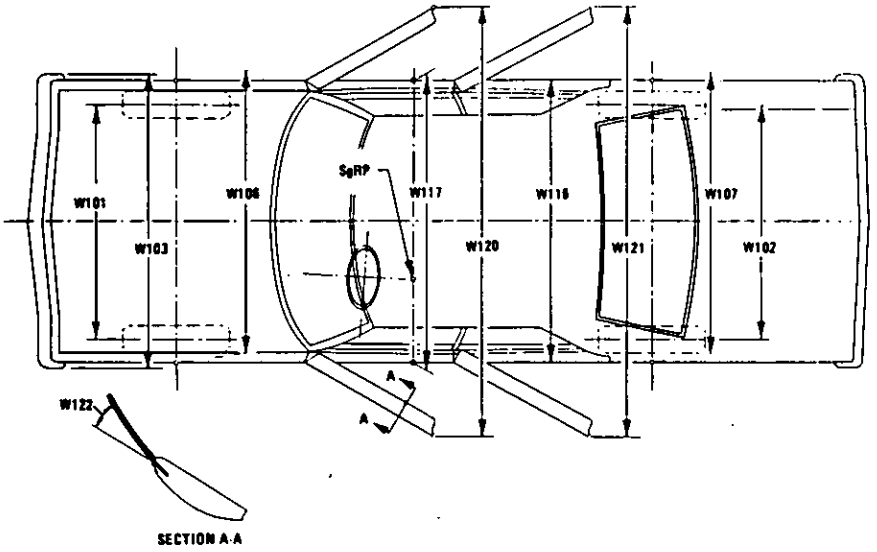
Car Line Cutlass Ciera
Model Year 1986 Issued _____ Revised (•) _____

Equipment	Optional Equipment Differential Mass (weight)*			Remarks
	MASS, kg. (weight, lb.)			
	Front	Rear	Total	
Engine Option V6 LE2	28.6	-2.6	26.0	
Coupe/Sedan	(63.1)	(-5.7)	(57.4)	
Engine Option V6 LE2	28.1	-1.4	26.7	
Wagon	(61.9)	(-3.0)	(58.9)	
Engine Option V6 LB6	26.0	-1.8	24.2	
Coupe/Sedan/Wagon	(57.3)	(-3.9)	(53.4)	
Engine Option V6 LG3	65.4	-7.7	57.7	
Coupe	(144.2)	(-17.0)	(127.2)	
Engine Option V6 LG3	65.4	-6.9	58.5	
Sedan	(144.2)	(-15.2)	(129.0)	
Tilt Wheel N33	.6	.4	1.0	
	(1.3)	(.9)	(2.2)	
Sport Wheel (& JA1) N67*	.9	.9	1.8	
	(2.0)	(2.0)	(4.0)	
Wire Wheel Disc N91	2.2	2.2	4.4	
	(4.9)	(4.9)	(9.8)	
Sport Wheel N67*	1.8	1.8	3.6	
(& JA8/JA2)	(4.0)	(4.0)	(8.0)	

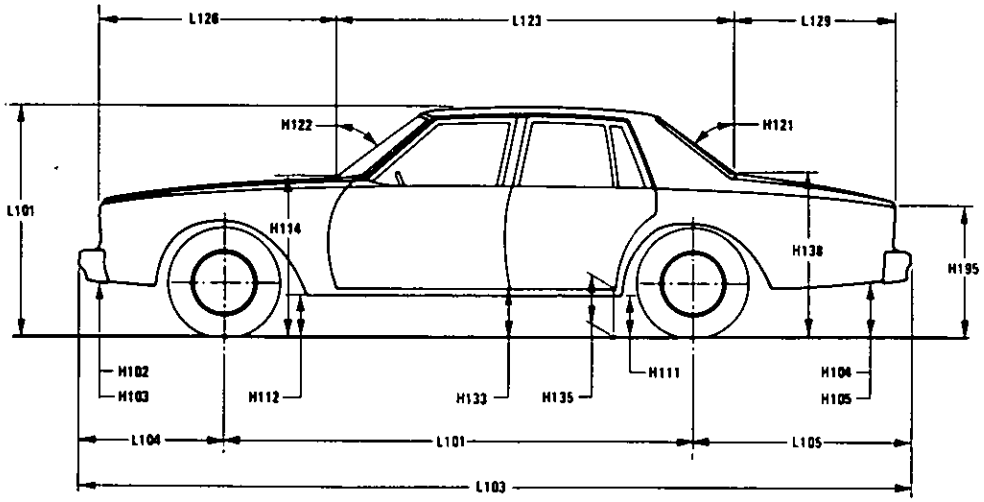
*Also see Engine - General Section for dressed engine mass (weight).

Exterior Car And Body Dimensions – Key Sheet

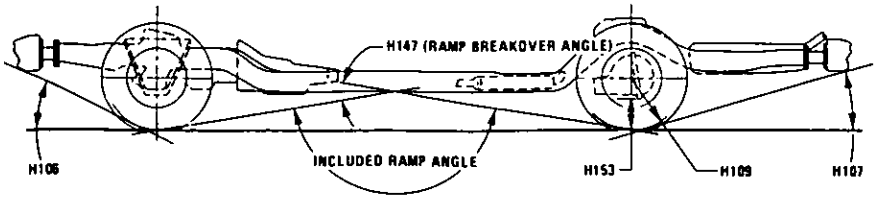
Exterior Width



Exterior Length & Height

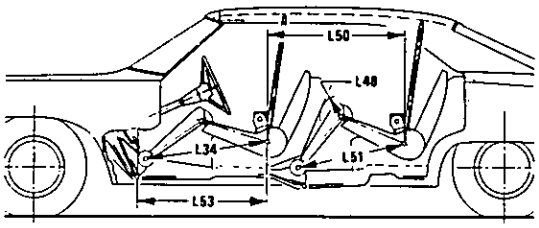


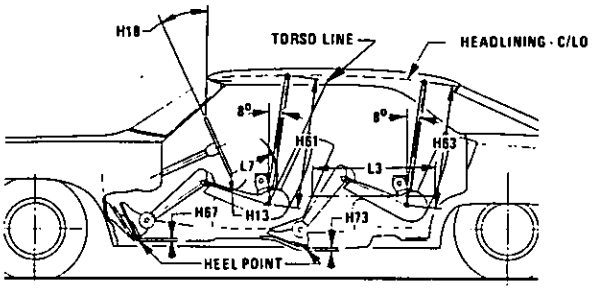
Exterior Ground Clearance

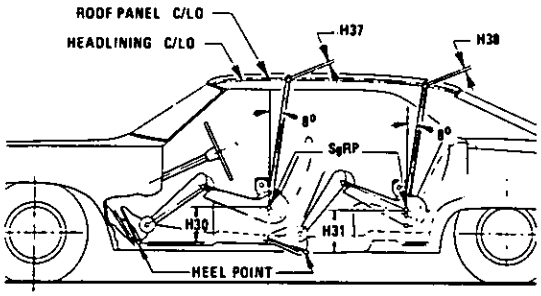


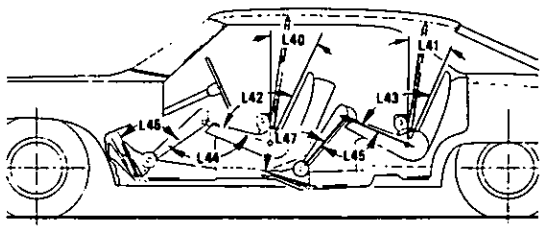
MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

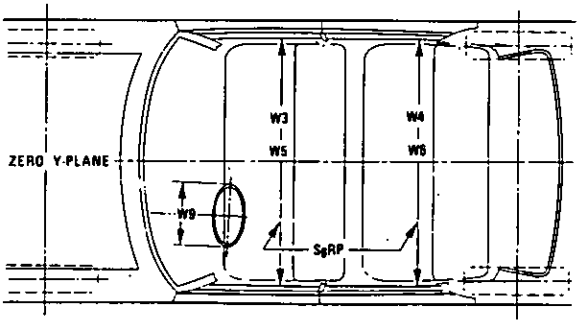
Interior Car And Body Dimensions – Key Sheet

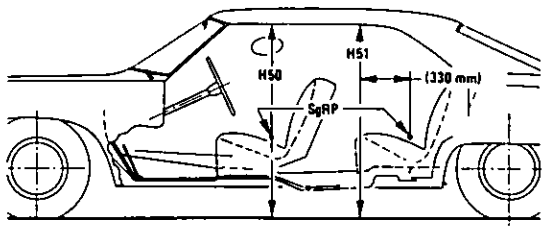






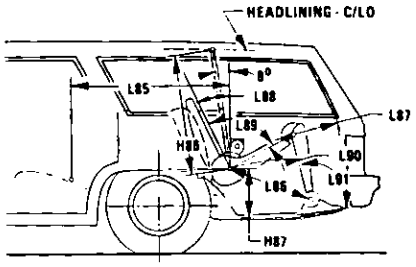


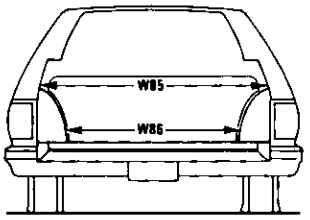




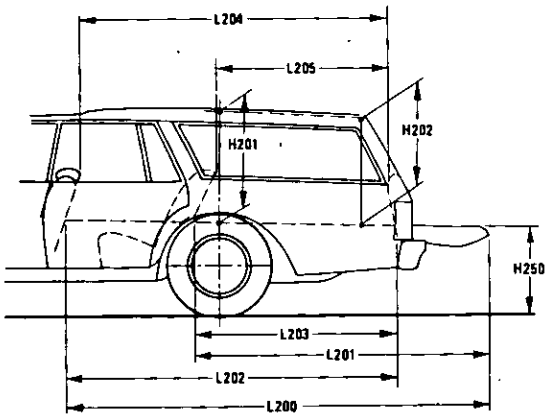
Interior Car And Body Dimensions – Key Sheet

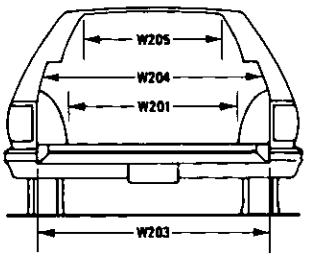
Third Seat



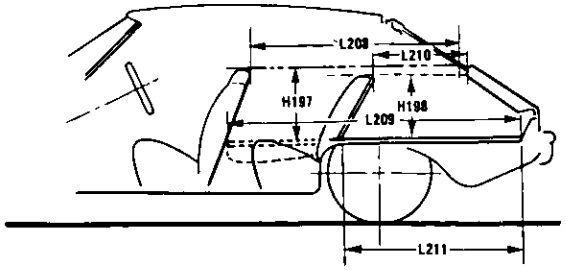


Cargo Space





Station Wagon



Hatchback

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

Exterior Car And Body Dimensions – Key Sheet
Dimensions Definitions

Seating Reference Point

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

(a) Establishes the rearmost normal design driving or riding position of each designated seating position in a vehicle;

(b) Has coordinates established relative to the design vehicle structure;

(c) Simulates the position of the pivot center of the human torso and thigh; and

(d) Is the reference point employed to position the two dimensional templates described in SAE Recommended Practice J826, "Devices for Use in Defining and Measuring Vehicle Seating Accommodations,"

Width Dimensions

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

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

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

W106 FRONT FENDER WIDTH. The dimension measured between the widest points at the front wheel centerline, excluding moldings.

W107 REAR FENDER WIDTH. The dimension measured between the widest points at the rear wheel centerline, excluding moldings.

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

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

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

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

Length Dimensions

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

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

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

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

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

L125 COWL POINT "X" COORDINATE.

L126 FRONT END LENGTH. The dimension measured longitudinally from the cowl point to the foremost point on the vehicle at the zero "Y" plane excluding ornamentation or bumpers. In cases where bumpers and/or grills are integrated with the profile, measurement is made at the foremost point of front end contour.

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

L129 REAR END LENGTH. The dimension measured longitudinally from the deck point to the rearmost visible point of the body sheet metal at the zero "Y" plane, excluding ornamentation or bumpers.

Height Dimensions

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

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

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

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

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

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

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

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

H133 BOTTOM OF DOOR CLOSED–FRONT TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum closed position, to ground.

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

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

Ground Clearance Dimensions

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

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

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

Interior Car And Body Dimensions – Key Sheet
Dimensions Definitions

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

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

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

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

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

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

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

Glass Areas

S1 Windshield area.

S2 Side windows area. Includes the front door, rear door, vents, and rear quarter windows on both sides of the vehicle.

S3 Backlight areas.

S4 Total area. Total of all areas (S1 + S2 + S3).

Fiducial Mark Dimensions

Fiducial Mark – Number 1

L54 "X" coordinate.

W21 "Y" coordinate.

H81 "Z" coordinate.

H161 Height "Z" coordinate to ground at curb weight.

H163 Height "Z" coordinate to ground.

Fiducial Mark – Number 2

L55 "X" coordinate.

W22 "Y" coordinate.

W82 "Z" coordinate.

H162 Height "Z" coordinate to ground at curb weight.

H164 Height "Z" coordinate to ground.

Front Compartment Dimensions

L7 STEERING WHEEL TORSO CLEARANCE. The minimum dimension measured in the side view from the rearmost edge of the steering wheel, with front wheels in the straight ahead position, to the torso line.

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

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

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

L31 SgRP–FRONT. "X" COORDINATED.

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

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

L42 HIP ANGLE–FRONT. The angle measured between torso line and thigh centerline.

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

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

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

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

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

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

H13 STEERING WHEEL TO CENTERLINE OF THIGH. The minimum dimension measured from the bottom of steering wheel, with front wheels in the straight position, to the thigh centerline.

H17 ACCELERATOR HEEL POINT TO THE STEERING WHEEL CENTER. The dimension measured vertically from the AHP–front to the intersection of the steering column centerline to a plane tangent to the upper surface of the steering wheel rim.

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

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

H37 HEADLINING TO ROOF PANEL–FRONT. The dimension measured from the intersection of the headlining and the extended effective head room line normal to the sheet metal.

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

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

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

PD1 PASSENGER DISTRIBUTION–FRONT.

Rear Compartment Dimensions

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

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

Interior Car And Body Dimensions – Key Sheet
Dimensions Definitions

L41 BACK ANGLE–SECOND. The angle measured between a vertical line through the SgRP – second and the torso line.

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

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

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

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

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

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

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

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

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

H38 HEADLINING TO ROOF PANEL–SECOND. The dimension measured from the intersection of the headlining and the extended effective head room line normally to the roof sheet metal.

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

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

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

PD2 PASSENGER DISTRIBUTION–SECOND.

Luggage Compartment Dimensions

V1 USABLE LUGGAGE CAPACITY–Total of volumes of individual pieces of standard luggage set plus H-boxes stowed in the luggage compartment in accordance with the procedure described in paragraph 8.2 of SAE-J1100.

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

Interior Volumes (EPA Classification)

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

The Trunk/Cargo Index is an estimate of the size of the trunk/cargo space. In station wagons and hatchbacks it is an estimate of the space behind the second seat.

Station Wagon – Third Seat Dimensions

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

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

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

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

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

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

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

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

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

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

PD3 PASSENGER DISTRIBUTION–THIRD.

SD1 SEAT FACING DIRECTION–THIRD.

Station Wagon – Cargo Space Dimensions

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

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

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

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

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

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

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Interior Car And Body Dimensions – Key Sheet
Dimensions Definitions

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

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

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

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

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

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

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

V2 STATION WAGON
Measured in inches:

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

Measured in mm:

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

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

V5 TRUCKS AND MPV'S WITH OPEN AREA.
Measured in inches:

$$\frac{L506 \times W500 \times H503}{1728} = ft^3$$

Measured in mm:

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

V6 TRUCKS AND MPV'S WITH CLOSED AREA.
Measured in inches:

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

Measured in mm:

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

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

V10 STATION WAGON CARGO VOLUME INDEX.
Measured in inches:

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

Measured in mm:

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

Hatchback – Cargo Space Dimensions

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

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

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

L210 CARGO LENGTH AT SECOND SEATBACK HEIGHT–HATCHBACK. The minimum dimension measured from the "X" plane tangent to the rearmost surface of second seatback or the load floor which is stowed at least one half of the H198 dimension height above the rear load floor, to the rearmost inside limiting interference on the zero "Y" plane.

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

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

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

V3 HATCHBACK.
Measured in inches:

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

Measured in mm:

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

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

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

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

Measured in mm:

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

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

Index