MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC(U.S. Customary)

Passenger Car

1986

Manufacturer	Car Line
BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION	SKYHAWK CUSTOM SKYHAWK SPORT SKYHAWK LIMITED SKYHAWK T TYPE SKYHAWK WAGON
Mailing Address	
902 E. Hamilton Ave. Flint, Michigan 48550	

Issued	Revised
10-31-85	

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 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 SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON

Model Year 1986 Issued 10-31-85 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)
SKYHAWK CUSTOM COUPE		4JS27	2/3	60.8 (134)
SKYHAWK CUSTOM SEDAN		4JS69	2/3	60.8 (134)
SKYHAWK SPORT HATCHBACK		4JS77	2/3	60.8 (134)
SKYHAWK WAGON		4JS35	2/3	40.0 (88.2)
SKYHAWK LIMITED COUPE		4JT27	2/3	60.8 (134)
SKYHAWK LIMITED SEDAN		4JT69	2/3	60.8 (134)
SKYHAWK LIMITED WAGON		4JT35	2/3	40.0 (88.2)
SKYHAWK T-TYPE COUPE		4JE27	2/3	60.8 (134)
SKYHAWK T-TYPE HATCHBACK		4JE77	2/3	60.8 (134)

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON

Model Year 1986 Issued 10-31-85 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.)			
SKYHAWK (S) CUSTOM, LIMITED, HATCHBACK	2.0L (121) L-4 LQ5	TBI	9.0:1	88 @ 4800	110 @ 2400	S	4 SPD MAN AUTO 125	3.65 FED/CALIF. 3.18/3.43 FED/CALIF.
(O)	1.8 (110) L-4 LH8	TBI	8.8:1	84 @ 5200	98 @ 2800	S	5 SPD MAN 5 SPD MAN AUTO 125	3.19 FED/CALIF. 3.45 FED/CALIF. 3.18/3.43 FED/CALIF.
SKYHAWK (S) T TYPE	1.8L (110) L-4 LH8	TBI	8.8:1	88 @ 4800	98 @ 2806	S	5 SPD MAN 5 SPD MAN AUTO 125	3.19 FED/CALIF. 3.45 FED/CALIF. 3.18/3.43 FED/CALIF.
(O)	1.8L (110) L-4 LA5	MFI TURBO	8.0:1	150 @ 5600	150 @ 2800	S	4 SPD MAN AUTO 125	3.65 FED/CALIF. 3.33 FED/CALIF.

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	2.0L L4 (121 CID) (LQ5)	1.8L L4 (110 CID) (LH8)	1.8L L4 (110 CID) MFI TURBO (LA5)

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.	
Manufacturer			
No. of cylinders		4	4
Bore		89 (3.50)	84.8
Stroke		80 (3.15)	79.5
Bore spacing (C / L to C / L)		99 (3.90)	93.0
Cylinder block material & mass kg (lbs.)		CAST IRON	CAST IRON
Cylinder block deck height		215.55 (8.49)	216.0 (8.50)
Deck clearance (minimum) (above or below block)		0.15 (.006) BELOW	36 ABOVE (.14 BELOW)
Cylinder head material & mass kg (lbs.)		CAST IRON	ALUM.
Cylinder head volume (cm^3)		NA	33.36 (2.04)
Head gasket thickness (compressed)		1.1 (.043)	1.2 (.047)
Minimum combustion chamber total volume (cm^3)		59.988 (3.66)@	54.1 58.64#
Cyl. no. system (front to rear)*	L. Bank	1-2-3-4	1-2-3-4
	R. Bank		
Firing order		1-3-4-2	1-3-4-2
Intake manifold material & mass [kg (weight, lbs.)]			
Exhaust manifold material & mass [kg (weight, lbs.)]			
Recommended fuel (leaded, unleaded, diesel)		UNLEADED	UNLEADED
Fuel antiknock index	(R + M) 2	87	87
Total dressed engine mass (wt) dry**		141.3(311.5) AUTO/149.9(330.5) MAN	160(352.0) 131.9(290.8)

Engine – Pistons

Material & mass, g (weight, oz.) - piston only	ALUM. ALLOY 467 (16.5)	CAST ALUM ALLOY, TIN OR LEAD PLTD 333 +/-5g 402(14.2 oz)

Engine – Camshaft

Location		IN CYL. BLOCK - RT. SIDE	OVERHEAD CAMSHAFT
Material & mass kg (weight, lbs.)		CAST IRON 3.138 (6.92)	HARDENED ALLOY CAST IRON 2.48 (5.47)
Drive type	Chain / belt	CHAIN	CHAIN
	Width / pitch	19.3(0.76)/9.53(0.38)	W-19.0(.748); 10mm(.39)

* 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.

NOMINAL COMBUSTION CHAMBER VOLUME

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	2.0L L4 (121 CID) (LQ5)	1.8L L4 (110 CID) (LH8)	1.8L L4 (110 CID) MFI TURBO (LA5)

Engine – Valve System

Hydraulic lifters (std., opt., NA)		STANDARD	
Valves	Number intake./ exhaust	4/4	
	Head O.D. intake / exhaust	40.64/35.00	

Engine – Connecting Rods

Material & mass [kg., (weight, lbs.)]	CAST STEEL .675(1.49) STEEL 10A 11MS 65(.760Kg)

Engine – Crankshaft

Material & mass [kg., (weight, lbs.)]		NODULAR CAST IRON	
End thrust taken by bearing (no.)		5	3
Number of main bearings			
Seal (material, one, two piece design, etc.)	Front		
	Rear		

Engine – Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	435-530(63-77)@1200RPM	448(65)@2500RPM
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

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

Engine – Intake System

Turbo charger - manufacturer	AIRESEARCH T2
Super charger - manufacturer	NA
Charge cooler	NA

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•)

Engine Description/Carb. Engine Code	2.0L (121 CID) L-4 (LQ5)

Engine – Cooling System

Coolant recovery system (std., opt., n.a.)		STANDARD
Coolant fill location (rad., bottle)		BOTTLE
Radiator cap relief valve pressure [kPa (psi)]		103.4 (15)
Circulation thermostat	Type (choke, bypass)	CHOKE
	Starts to open at °C (°F)	91 (195)
Water pump	Type (centrifugal, other)	CENTRIFUGAL
	GPM 1000 pump rpm	7.3 @ 1000 pump RPM
	Number of pumps	ONE
	Drive (V-belt, other)	V-BELT
	Bearing type	SEALED, DOUBLE ROW BALL
	Impeller material	
	Housing material	
By-pass recirculation [type (inter., ext.)]		INTERNAL
Cooling system capacity	With heater–L(qt.)	9.0(9.5) AUTO, 9.1(9.6) MANUAL
	With air cond.–L(qt.)	9.04(9.56) AUTO, 9.14(9.7) MANUAL
	Opt. equipment [specify–L(qt.)]	9.18(9.7) H.D. RADIATOR, AUTO & MANUAL
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	
	Type (cross-flow, etc.)	
	Construction (fin & tube mechanical, braze, etc.)	
	Material, mass [kg (wgt, lbs.)]	
	Width	430.0
	Height	387.5 (15.25)
	Thickness	25.0 (.98)
	Fins per inch	3.5
Radiator end tank material		
Fan	Std., elec., opt.	ELECTRIC
	Number of blades & type (flex, solid, material)	7 BLADE, ELEC. WITH ROTATION REINFORCEMENT RING
	Diameter & projected width	291.0
	Ratio (fan to crankshaft rev.)	NA
	Fan cutout type	ECM CONTROLLED
	Drive type (direct, remote)	DIRECT
	RPM at idle (elec.)	2200-2400 (CONSTANT)
	Motor rating (wattage) (elec.)	96
	Motor switch (type & location) (elec.)	COOLANT SWITCH, ENGINE CYLINDER HEAD
	Switch point (temp., pressure) (elec.)	110°F
	Fan shroud (material)	PLASTIC

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•)

Engine Description/Carb. Engine Code	1.8L (110 CID) L-4 (LH8)	1.8L (110 CID) L-4 MFI TURBO (LA5)

Engine – Cooling System

Coolant recovery system (std., opt., n.a.)		STANDARD	
Coolant fill location (rad., bottle)		BOTTLE	
Radiator cap relief valve pressure [kPa (psi)]		103.43 (15)	
Circulation thermostat	Type (choke, bypass)	CHOKE	
	Starts to open at °C (°F)	91 (195°F)	
Water pump	Type (centrifugal, other)	CENTRIFUGAL	
	GPM 1000 pump rpm		
	Number of pumps	ONE	
	Drive (V-belt, other)	COG BELT	
	Bearing type		
	Impeller material		
	Housing material		
By-pass recirculation [type (inter,. ext.)]			
Cooling system capacity	With heater–L(qt.)	7.42 (7.8)	
	With air cond.–L(qt.)	7.46 (7.9)	
	Opt. equipment [specify–L(qt.)]		
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
	Type (cross-flow, etc.)		
	Construction (fin & tube mechanical, braze, etc.)		
	Material, mass [kg (wgt, lbs.)]		
	Width	430(16.9)	500(19.7)
	Height	387.5(15.3)	387.5(15.3)
	Thickness	25(.98)	40.2(1.6)
	Fins per inch	14.5	14.5
Radiator end tank material		ELEC. - STD.	
Fan	Std., elec., opt.		
	Number of blades & type (flex, solid, material)	7 BLADES	
	Diameter & projected width	280 HRT, 355 (A/C)	290HRT, 386 (A/C)
	Ratio (fan to crankshaft rev.)	-	
	Fan cutout type	-	
	Drive type (direct, remote)	-	
	RPM at idle (elec.)	1700-1850	
	Motor rating (wattage) (elec.)	96HTR	150 A/C
	Motor switch (type & location) (elec.)	THERMAL-CYL HEAD	
	Switch point (temp., pressure) (elec.)	110.5+/-3C	
	Fan shroud (material)	GLASS FILLER NYLON	

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	2.0L (121 CID) L-4 (LQ5)

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.		ROCHESTER
	Choke (type)		-
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	AUTOMATICALLY ECM CONTROLLED - NO ADJUSTMENT
		Automatic	SAME AS MANUAL
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)]		68.95 - 82.74
Intake manifold heat control (exhaust or water thermostatic or fixed)			WATER - THERMOSTATIC
Air cleaner type	Standard		REPLACEABLE PAPER ELEMENT - THERMAC HEAT
	Optional		NONE
Fuel pump	Type (elec. or mech.)		ELECTRICAL
	Location (eng., tank)		TANK
	Pressure range [kPa (psi)]		NA

Fuel Tank

Capacity [refill L (gallons)]		51.5 (13.6)
Location (describe)		RIGHT HAND REAR QUARTER
Attachment		TWO STRAPS TO UNDERBODY
Material & Mass [kg (weight lbs)]		STEEL
Filler pipe	Location & material	RR QUARTER PANEL STEEL
	Connection to tank	ELASTOMER HOSE
Fuel line (material)		STEEL
Fuel hose (material)		GM 6163-m ELASTOMER HOSE
Return line (material)		STEEL
Vapor line (material)		STEEL
Extended range tank	Opt., n.a.	NA
	Capacity [L (gallons)]	NA
	Location & material	NA
	Attachment	NA
Auxiliary tank	Opt., n.a.	NA
	Capacity [L (gallons)]	NA
	Location & material	NA
	Attachment	NA
	Selector switch or valve	NA
	Separate fill	NA

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	1.8L (110 CID) L-4 (LH8)	1.8L (110 CID) L-4 MFI TURBO (LA5)

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	PORT FUEL INJECTION
Carburetor	Mfgr.			BOSCH
	Choke (type)			
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual		
		Automatic		
Idle A/F mix.				
Fuel injection	Point of injection (no.)		THROTTLE BODY	PORT
	Constant, pulse, flow		PULSE	
	Control (electronic, mech.)		ELECTRONIC	
	System pressure [kPa (psi)]		83.0 (12.0)	180-300KPA(26.5-43 PSI)
Intake manifold heat control (exhaust or water thermostatic or fixed)			WATER - THERMOSTATIC	
Air cleaner type	Standard		REPLACEABLE PAPER ELEMENT-THERMAC HEAT	
	Optional			
Fuel pump	Type (elec. or mech.)		ELECTRICAL	
	Location (eng., tank)		FUEL TANK	
	Pressure range [kPa (psi)]		83 KPA (12 PSI)	180-300KPA(26.5-43 PSI)

Fuel Tank

Capacity [refill L (gallons)]		51.5 (13.6)
Location (describe)		FLOOR PAN AREA, FRT OF RR AXLE
Attachment		TWO STRAPS TO UNDERBODY
Material & Mass [kg (weight lbs)]		STEEL
Filler pipe	Location & material	RR QUARTER PANEL - STEEL
	Connection to tank	ELASTOMER HOSE
Fuel line (material)		STEEL
Fuel hose (material)		GM 6163-M ELASTOMER HOSE
Return line (material)		STEEL
Vapor line (material)		STEEL
Extended range tank	Opt., n.a.	N.A.
	Capacity [L (gallons)]	
	Location & material	
	Attachment	
Auxiliary tank	Opt., n.a.	N.A.
	Capacity [L (gallons)]	
	Location & material	
	Attachment	
	Selector switch or valve	
	Separate fill	

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	2.0L (121 CID) L-4 (LQ5)

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		AIR INJECTION WITH CCC
	Air Injection	Pump or pulse	NONE
		Driven by	EXHAUST BELTS
		Air distribution (head, manifold, etc.)	SEP. MANIFOLD •
		Point of entry	EXHAUST MANIFOLD
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	CONTROLLED FLOW
		Exhaust source	EXHAUST MANIFOLD
		Point of exhaust injection (spacer, carburetor, manifold, other)	INLET MANIFOLD
	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)		CARBURETOR AIR CLEANER
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	CANNISTER
		Carburetor	
	Vapor storage provision		CANNISTER
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	44.5 x 0.84
	Material & Mass [kg (weight lbs)]	GM 6125M S.S. OVER SAE 1009 C.R.
Intermediate pipe	o.d. & wall thickness	50.8 - 1.09
	Material & Mass [kg (weight lbs)]	1009 C.R. ALUMINIZED
Tail pipe	o.d. & wall thickness	SINGLE 57.15 - 1.09
	Material & Mass [kg (weight lbs)]	1009 C.R. ALUMINIZED

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	1.8L (112 CID) L-4 (LH8)	1.8L (110 CID) L-4 MFI TURBO (LA5)

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		3C - TBI, SINGLE BED 3-WAY EST, BPEGR
	Air Injection	Pump or pulse	N.A.
		Driven by	N.A.
		Air distribution (head, manifold, etc.)	N.A.
		Point of entry	N.A.
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	BACKPRESSURE MODULATED
		Exhaust source	MANIFOLD
		Point of exhaust injection (spacer, carburetor, manifold, other)	INTAKE MANIFOLD
	Catalytic Converter	Type	PLAT-PALLADIUM-RHODIUM / PLANTINUM-PALLADIUM-RHODIUM
		Number of	ONE
		Location(s)	MOUNTED UNDER FLOOR
		Volume (L (in^3))	2.62 (160 CU. IN.)
		Substrate type	PELLETS
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)		CARBURETOR AIR CLEANER
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	CANNISTER
		Carburetor	-
	Vapor storage provision		CANNISTER
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 - .90 OVER 1.02	
	Material & Mass [kg (weight lbs)]	GM 6125M S.S. OVER SAE 1009 C.R.	
Intermediate pipe	o.d. & wall thickness	44.5 - 1.09	
	Material & Mass [kg (weight lbs)]	1009 C.R. ALUMINIZED	
Tail pipe	o.d. & wall thickness	OVAL 57.15 - 1.09	
	Material & Mass [kg (weight lbs)]	1009 C.R. ALUMINIZED	

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	2.0L (LQ5)	1.8L (LH8)	1.8LT (LA5)

Transmissions/Transaxle

Manual 3-speed (std., opt., n.a.) (mfr.)	-	N.A.	-
Manual 4-speed (std., opt., n.a.) (mfr.)	MUNCIE STD.		STD MUNCIE
Manual 5-speed (std., opt., n.a.) (mfr.)	-	STD. ISUZU	-
Manual overdrive (std., opt., n.a.) (mfr.)	-	-	-
Automatic (std., opt., n.a.) (mfr.)	OPT.	OPT.	OPT.
Automatic overdrive (std., opt., n.a.) (mfr.)	-	-	-

Manual Transmission/Transaxle

			MK7	MY7	
Number of forward speeds		4	5	5	4
Transmission ratios	In first	3.53	3.91	3.91	3.53
	In second	1.95	2.15	2.15	1.95
	In third	1.24	1.45	1.33	1.24
	In fourth	.81	1.03	.92	.81
	In fifth	-	.74	.74	-
	In overdrive	-	-		-
	In reverse	3.42	3.50	3.50	3.42
Synchronous meshing (specify gears)		ALL FORWARD GEARS	ALL EXCEPT REVERSE		ALL FORWARD GEARS
Shift lever location		FLOOR	FLOOR		FLOOR
Lubricant	Capacity [L (pt.)]	2.8L (5.9)	2.5L(5.4)		2.8
	Type recommended	SAE 5W-30	SAE 5W-30		SAE 5W-30
	SAE viscosity number: Summer				
	SAE viscosity number: Winter				
	SAE viscosity number: Extreme cold				

Clutch (Manual Transmission)

Make, type, engagement (describe) – (hydraulic, cable, rod)		BORG & BECK DRY DISC	DAIKIN DRY DISC	SAME AS (LQ5)
Assist (yes, no / percent)				
Type pressure plate springs		BELLEVILLE SPRING	BELLEVILLE SPRING	"
Total spring load [N (lb.)]		5516 (1240)	5391 (1212)	"
No. of clutch driven discs		ONE	ONE	"
Clutch facing	Material	MOLDED TYPE ASBESTOS	WOVEN MOLDED ASBESTOS	"
	Manufacturer	BORG & BECK	DAIKIN	"
	Part number	14049775	94253238	"
	Rivets/plate	36	16	"
	Rivet size	4.09mm	5mm	"
	Outside & inside dia.	203.2x152.4(8.0x6.0)	215mm/154mm(8.5x6.1)	"
	Total eff. area [cm^2(in.^{2})]	142 (22.0)	176.79cm^2(27.4)	"
	Thickness	8.128 (.320)	8.6 +/- .3mm(.34+/- .01)	"
	Engagement cushion method	DRIVE PLATE WAVE SPOKE SPRINGS		
Release bearing	Type & method of lubrication	BALL THRUST-PRE PACKED AND SEALED		
Torsional damping	Method: springs, friction material	COIL SPRINGS AND METAL TO METAL STOPS		

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Engine Description/Carb. Engine Code	2.0L (LQ5)	1.8L (LH8)	1.8LT (LA5) (T TYPE)

Automatic Transmission/Transaxle

Trade name		THM 125C		
Type and special features (describe)		3 - SPEED AUTOMATIC TRANSAXLE WITH TORQUE CONVERTER CLUTCH		
Selector	Location	FLOOR		
	Ltr./No. designation	P-R-N-D-2-1		
Gear ratios	R	2.07		
	D	2.00		
	L_3	NA		
	L_2	1.60		
	L_1	2.84		
Max. upshift speed - drive range [km/h (mph)]		65(40)-114(71)	67(41)-114(71)	69(42)-121(74)
Max. kickdown speed - drive range [km/h (mph)]		102(63)	105(65)	111(68)
Min. overdrive speed [km/h (mph)]		NA		
Torque converter	Number of elements	3		
	Max. ratio at stall	2.70	2.38	2.38
	Type of cooling (air, liquid)	LIQUID		
	Nominal diameter	245MM		
Lubricant	Capacity [refill L (pt.)]	8.5L (18 pts)		
	Type Recommended	DEXRON R II		
Oil cooler (std., opt., NA, internal, external, air, liquid)		LIQUID	LIQUID, INTERNAL TO RADIATOR	

Axle or Front Wheel Drive Unit

Type (front, rear)		FRONT	
Description		HELICAL PLANETARY FINAL DRIVE AND BEVEL GEAR DIFFERENTIAL: BOTH INTEGRAL TO TRANSMISSION	
Limited slip differential (type)		NA	
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)		NA	
Lubricant	Capacity [L (pt.)]	NA-TRANSAXLE ASM.	
	Type recommended	NA	
	SAE viscosity number — Summer	NA	
	SAE viscosity number — Winter	NA	
	SAE viscosity number — Extreme cold	NA	

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

Axle ratio (or overall top gear ratio)		3.18	3.33
No. of teeth	Pinion	NA	NA
	Ring gear or gear	NA	
Ring gear o.d.		NA	
Transaxle	Transfer gear ratio	33/37 SPROCKETS	35/35 SPROCKETS
	Final drive ratio	2.84	3.33

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•)

Engine Description/Carb. Engine Code	2.0L (LQ5)	1.8L (LH8)	1.8LT (LA5)

Axle Shafts – Front Wheel Drive

Number used			2
Type (straight, solid bar, tubular, etc.)		Left	SOLID
		Right	SOLID
Outer diam. x length* x wall thick-ness	Manual transmission	Left	23.81 x 320.0
		Right	23.81 x 663.0
	Automatic transmission	Left	23.81 x 311.0
		Right	23.81 x 365.0
	Optional transmission	Left	--
		Right	--
Slip yoke	Type		--
	Number of teeth		--
	Spline o.d.		--
Universal joints	Make and mfg. no.	Inner	SSG
		Outer	SSG
	Number used		2 ON EACH DRIVE AXLE
	Type, size, plunge	Inner	TRIPOT
		Outer	RZEPPA
	Attach (u-bolt, clamp, etc.)		RETAINING RING
	Bearing – Type (plain, anti-friction)		(BALL & ROLLER INR) BALL (OTR)
	Bearing – Lubrication (fitting, prepack)		PREPACK
Drive taken through (torque tube, arms or springs)			FRONT WHL DRIVE SHAFT
Torque taken through (torque tube, arms or springs)			ENGINE CRADLE

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Body Type And/Or Engine Displacement	COUPE/SEDAN/HATCHBACK/WAGON	T TYPE

Suspension – General

Car leveling	Std./opt./n.a.	NA
	Type (air, hyd., etc.)	NA
	Manual/auto. controlled	NA
Provision for brake dip control		FRONT SUSPENSION GEOMETRY
Provision for accl. squat control		FRONT SUSPENSION GEOMETRY
Provisions for car jacking		NONE
Shock absorber (front & rear)	Type	DIRECT, DOUBLE ACTING, HYDRAULIC
	Make	DELCO PRODUCTS
	Piston diameter	FRONT 32mm, REAR 25mm
	Rod diameter	

Suspension – Front

Type and description		McPHERSON STRUT WITH COIL SPRINGS, STAMPED LOWER CONTROL ARMS, NODULAR IRON STEERING KNUCKLES	
Drive and torque taken through			
Travel	Full jounce	105mm	
	Full rebound	73mm	
Spring	Type (coil, leaf, other) & material	COIL	
	Insulators (type & material)	STEEL	
	Size (coil design height & i.d., bar length x dia.)	226x150mm; 3000x13.5mm	
	Spring rate [N/mm (lb./in.)]	16.0(90.0)	24.0
	Rate at wheel [N/mm (lb./in.)]	17.2(98.2)	
Stabilizer	Type (link, linkless, frameless)	LINK	
	Material & bar diameter	STEEL 22mm	STEEL 28mm

Suspension – Rear

Type and description		TRAILING AXLE	
Drive and torque taken through		--	
Travel	Full jounce	128mm	
	Full rebound	78mm	
Spring	Type (coil, leaf, other) & material	COIL-STEEL	
	Size (length x width, coil design height & i.d., bar length & dia.)	CONIAL SHAPED - 290mm x 215mm LXW: 13.9 BAR DIA.	
	Spring rate [N/mm (lb./in.)]	23.1 (132)	28
	Rate at wheel [N/mm (lb./in.)]	14.6 (83)	
	Insulators (type & material)	RUBBER	
	If leaf: No. of leaves	--	
	If leaf: Shackle (comp. or tens.)	--	
Stabilizer	Type (link, linkless, frameless)	LINK TYPE - OPTIONAL	
	Material & bar diameter	NONE	STEEL 19mm
Track bar (type)		NONE	

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•)

Body Type And/Or Engine Displacement	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.)				STANDARD
Special valving	Type (proportion, delay, metering, other)			PROPORTIONING DIAGONAL SPLIT CIRCUIT
Power brake (std., opt., n.a.)				STANDARD
Booster type (remote, integral, vac., hyd., etc.)				VACUUM
Vacuum source (inline, pump, etc.)				ENGINE VACUUM
Vacuum reservoir (volume in.^{3})				-
Vacuum pump-type (elec, gear driven, belt driven, if other so state)				NONE
Anti-skid device type (std., opt., n.a..) (F/R)				NA
Effective area [cm^2(in.^{2})]*				318 CM^2
Gross lining area [cm^2(in.^{2})]**(F/R)				381 CM^2
Swept area [cm^2(in.^{2})]***(F/R)				1624 CM^2
Rotor	Outerworking diameter		F/R	247 MM
	Inner working diameter		F/R	147 MM
	Thickness		F/R	22 MM
	Material & type (vented/solid)		F/R	CAST IRON VENTED
Drum	Diameter & width		F/R	200 MM
	Type and material		F/R	CAST IRON, NON FINNED
Wheel cylinder bore			F/R	57MM FRT: 16MM CPE & SED REAR, 17.5MM WAG. REAR
Master cylinder	Bore/stroke		F/R	22MM/33.88MM
Pedal arc ratio				3.9:1
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]				10,342 KPA (1500 PSI)
Lining clearance			F/R	0/.381 (.015) EACH SIDE
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		RIV. IB, INTEGRALLY MOLDED OB 6 RIVETS
		Rivet size		NONE
		Manufacturer		DELCO MORAINE
		Lining code*****		121 EE
		Material		SEMI-METALLIC
		**** Primary or out-board		116.7 x 47 x 8.2
		Size Secondary or in-board		125 x 47 x 10.9
		Shoe thickness (no lining)		4.72 IB, 3.14 OB
	Rear wheel	Bonded or riveted (rivets/seg.)		RIVETED, 8
		Manufacturer		INLAND DIVISION
		Lining Code*****		235 FE
		Material		ORGANIC
		**** Primary or out-board		167.7 x 43.9 x 6MM
		Size Secondary or in-board		194 x 43.9 x 7MM
		Shoe thickness (no lining)		2.75MM

*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 SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Body Type And/Or Engine Displacement	COUPE/SEDAN/HATCHBACK/WAGON	T TYPE

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P175/80R13 BW	P195/70R13 B/W
	Type (bias, radial, etc.)		STEEL BELT RADIAL	STEEL BELT RADIAL
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	240 (35)*	
		Rear [kPa (psi)]	240 (35)*	
	Rev./mile–at 70 km/h (45 mph)		869	878
Wheels	Type & material		STAMPED STEEL	FORGED ALUMINUM
	Rim (size & flange type)		13 x 5.5 JB	13 x 5.5 JB
	Wheel offset		48MM	48MM
	Attachment	Type (bolt or stud)	STUD	
		Circle diameter	100MM	
		Number & size	5-M12 X 1.5	
Spare	Tire and wheel (same, if other describe)		T115/70D14 COMPACT SPARE, 14 X 4 T WHEEL	
	Storage position & location (describe)		SPARE TIRE WELL BELOW FLOOR OR REAR COMPARTMENT	

Tires And Wheels (Optional)

Size (load range, ply)	P175/80R13(WS & SEALANT)	P205/60R14 B/W
Type (bias, radial, etc.)	STEEL BELTED RADIAL	STEEL BELTED RADIAL
Wheel (type & material)	STAMPED STEEL	FORGED ALUM
Rim (size, flange type and offset)	13 x 5.5 JB, 49MM	14 X 6JJ, 47MM
Size (load range, ply)	P195/70R13 B/W,WS,WL	P205/60R14 WL
Type (bias, radial, etc.)	STEEL BELTED RADIAL	STEEL BELTED RADIAL
Wheel (type & material)	STAMPED STEEL	FORGED ALUM
Rim (size, flange type and offset)	13 X 5.5JB, 49MM	14 X 6JJ, 47MM
Size (load range, ply)		P195/70R13 WL
Type (bias, radial, etc.)		STEEL BELT RADIAL
Wheel (type & material)	FORGED ALUMINUM	FORGED ALUMINUM
Rim (size, flange type and offset)	13 X 5.5JB, 49MM	13 X 5.5JB, 49MM
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		T125/70/D14 W/P205/60R14 TIRE: 14 X 4T WHEEL

Brakes – Parking

Type of control		HAND APPLY AND RELEASE
Location of control		CENTER CONSOLE
Operates on		REAR BRAKES
If separate from service brakes	Type (internal or external)	
	Drum diameter	
	Lining size (length x width x thickness)	

*210 (30) WITH P205/60R14 TIRE

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•)

Body Type And/Or Engine Displacement	COUPE/SEDAN/HATCHBACK/WAGON	T TYPE

Steering

Manual (std., opt., n.a.)					STD	NA
Power (std., opt., n.a.)					OPT	STD
Adjustable steering wheel (tilt, swing, other)		Type and description			NON TILT	
		(Std., opt., n.a.)			STD	
Wheel diameter (W9) SAE J1100		Manual				
		Power				
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)				
		Curb to curb (l. & r.)			10.59M (34.74 FT)	
	Inside rear	Wall to wall (l. & r.)				
		Curb to curb (l. & r.)				
Scrub Radius*						
Manual	Gear	Type			RACK & PINION	
		Make			SAGINAW STEERING GEAR	
		Ratios	Gear			
			Overall		22.0:1	
	No. wheel turns (stop to stop)				4.04	
Power	Type (coaxial, linkage, etc.)				RACK & PINION WITH INTEGRAL UNIT	
	Make				SSG	
	Gear	Type			RACK & PINION	
		Ratios	Gear			
			Overall		16.0:1	14.0:1
	Pump (drive)				BELT	
	No. wheel turns (stop to stop)				2.88	
Linkage	Type					
	Location (front or rear of wheels, other)				REAR OF WHEELS	
	Tie rods (one or two)				TWO	
Steering axis	Inclination at camber (deg.)				13.5°	
	Bearings (type)	Upper			BALL BEARING	
		Lower			BALL JOINT	
		Thrust				
Steering spindle & joint type						
Wheel spindle	Diameter	Inner bearing			NOT APPLICABLE TO INTEGRAL BEARINGS SERVICED	
		Outer bearing			ONLY AS ASSEMBLY	
	Thread (size)					
	Bearing (type)				INTEGRAL DOUBLE ROW BALL - PERMANENTLY LUBRICATED	

*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 SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON

Model Year 1986 Issued 10-31-85 Revised (•) _____

Body Type And/Or Engine Displacement	COUPE/SEDAN/HATCHBACK/WAGON	WAGON

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1.7 ± 1.0
		Camber (deg.)	.7 ± .5
		Toe-in [outside track-mm (in.)]	-.125 ± .1
	Service reset*	Caster	1.7 ± 1.0
		Camber	.7 ± .5
		Toe-in	-.125 ± .1
	Periodic M.V. inspection	Caster	1.7 ± 1
		Camber	.7 ± .5
		Toe-in	-.125 ± .1
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	--
		Toe-in [outside track-mm (in.)]	--
	Service reset*	Camber	--
		Toe-in	--
	Periodic M.V. inspection	Camber	--
		Toe-in	--

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

Electrical – Instruments and Equipment

Speedometer	Type	MECHANICAL
	Trip odometer (std., opt., n.a.)	OPTIONAL / STANDARD
EGR maintenance indicator		
Charge indicator	Type	GENERATOR OUTPUT VOLTAGE
	Warning device	TELLTALE LIGHT (GAUGE OPT)
Temperature indicator	Type	OVERTEMP SWITCH
	Warning device	TELLTALE LIGHT (GAUGE OPT)
Oil pressure indicator	Type	PRESSURE SWITCH
	Warning device	TELLTALE LIGHT
Fuel indicator	Type	ELECTRIC GAUGE
	Warning device	NONE
Windshield wiper	Type (standard)	NON-DEPRESSED PARK 2-SPEED WIPER
	Type (optional)	DELAY FEATURE
	Blade length	16 IN. (40CM)
	Swept area [cm^2(in.^{2})]	4900.6CM^2 (COUPE) - 4937.3 CM^2 (SEDAN)
Windshield washer	Type (standard)	DEMAND FLUID
	Type (optional)	NONE
	Fluid level indicator	N.A.
Horn	Type	AIR TONE
	Number used	ONE 'F' AND ONE 'A' NOTE
Other	TURBO BOOST GAUGE	ELECTRIC GUAGE

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line: SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year: 1986 Issued: 10-31-85 Revised (•):

Engine Description/Carb. Engine Code	2.0L (LQ5)	1.8L (LH8)	1.8LT (LA5)

Electrical – Supply System

Battery	Make	DELCO REMY FREEDOM II		
	Model, std., (opt.)	1981104STD(1981246/opt)	1981104STD(1981157/opt)	
	Voltage		12.6	
	Amps at 0°F cold crank	500STD(630opt)	500STD(465opt)	
	Minutes-reserve capacity	90	90STD(115opt)	
	Amp/hrs. - 20 hr. rate	NA	NA	
	Location	LH FRT SIDE OF ENGINE COMPARTMENT		
Generator or alternator	Type and rating	66 AMP	LUNDELL MACHINE 56 AMP	78 AMP
	Ratio (alt. crank/rev.)	2.33	2.52	2.32
	Optional (type & rating)	85 AMP	94 AMP	94 AMP
Regulator	Type	INTEGRAL WITH ALTERNATOR		

Electrical – Starting System

Start, motor	Current drain at 0°F		250-400 AMPS @ -20°F
Motor drive	Engagement type	SOLENOID	OVERRUNING CLUTCH
	Pinion engages from (front, rear)	FRONT	

Electrical – Ignition System

Type	Electronic (std., opt., n.a.)	-	-	-	
	Other (specify)	H.E.I.			
Coil	Make	DELCO REMY			
	Model	115317	REMOTE MOUNTED FROM DIST		
	Current – Engine stopped – A	0	0.5 MAX		
	Current – Engine idling – A	5.8A	5.1		
Spark plug	Make	AC SPARK PLUG			
	Model	R42 CTS	R44 X LS		
	Thread (mm)	M14 X 1.25	14		
	Tightening torque [N-m (lb, ft)]	9.0-20.0 (7-15)	20 (15)		
	Gap	.9 (.035)			
	Number per cylinder	-72MM			
Distributor	Make	DELCO REMY			
	Model	1103567	1103514		

Electrical – Suppression

Locations & type	

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Body Type	HATCHBACK	COUPE	SEDAN	WAGON

Body

Structure	
Bumper system front - rear	
Anti-corrosion treatment	

Body – Miscellaneous Information

Type of finish (lacquer, enamel, other)		ACRYLIC LACQUER
Hood	Hinge location (front, rear)	REAR
	Type (counterbalance, prop)	COUNTER BALANCE - ALL (GAS SPRING)
	Release control (internal, external)	INTERNAL
Trunk lid	Type (counterbalance, other)	GAS SPRING
	Internal release control (elec., mech., n.a.)	ELECTRIC SOLENOID (OPTIONAL)
Hatch-back lid	Type (counterbalance, other)	
	Internal release control (elec., mech., n.a.)	
Vent window control (crank, friction, pivot, power)	Front	NONE
	Rear	NONE
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	FOAM/WIRE - IND BUCKET (AR9) - 2 PASS
	Rear	FOAM/WIRE - FULL WIDTH/NON - FLDG - 3 PASS
	3rd seat	FOAM/WIRE - FULL WIDTH (STN. WAG)
Seat back type (e.g., 60/40, bucket, bench, wire, foam etc.)	Front	FOAM/WIRE - IND BUCKET (AR9) - RECLINING - 2 PASS
	Rear	FOAM/WIRE - FULL WIDTH/NON - FLDG - 3 PASS
	3rd seat	FOAM/WIRE - FULL WIDTH/STN. WAG.

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

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•)

Body Type	COUPE	SEDAN	H/B	WAGON

Restraint System

Active restraint system	Standard/optional	STANDARD	
	Type and description	LAP AND SHOULDER BELT	
	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)	

Glass	SAE Ref. No.				
Windshield glass exposed surface area [cm^2($in.^2$)]	S1		7487 (1160.5)		
Side glass exposed surface area [cm^2($in.^2$)] - total 2-sides	S2	10910 (1691.0)	11532 (1787.5)		16954 (2628.0)
Backlight glass exposed surface area [cm^2($in.^2$)]	S3	5154 (798.9)	5691 (882.1)		4892 (758.3)
Total glass exposed surface area [cm^2($in.^2$)]	S4	23551 (3650.4)	24710 (3830.0)		29334 (4546.8)
Windshield glass (type)					
Side glass (type)					
Backlight glass (type)					

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

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•)

Body Type	ALL

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

Air conditioning (manual, auto. temp control)		OPT/MANUAL OPT/ELECTRONIC TOUCH CLIMATE CONTROL
Clock (digital, analog)		
Compass / thermometer		-
Console (floor, overhead)		FLOOR - STD.
Defroster, elec. backlight		OPT.
Electronic	Diagnostic warning (integrated, individual)	-
	Instrument cluster (list instruments)	-
	Keyless entry	-
	Tripminder (avg. spd., fuel)	-
	Voice alert (list items)	-
	Other	-
Fuel door lock (remote, key, electric)		-
Lamps	Auto head on / off delay, dimming	-
	Cornering	STD.
	Courtesy (map, reading)	-
	Door lock, ignition	STD.
	Engine compartment	STD. - T TYPE
	Fog	STD.
	Glove compartment	STD.
	Trunk	DOME - STD.
	Other	-
Mirrors	Day/night (auto. man.)	STD.
	L.H. (remote, power, heated)	REMOTE - OPT.
	R. H. (convex, remote, power, heated)	POWER - OPT.
	Visor vanity (RH / LH, illuminated)	OPT.
Parking brake-auto release (warning light)		
Power equipment	Door locks / deck lid - specify	DOOR LOCKS - OPT.
	Seat (2-4-6 way) heated (driver, pass, other) lumbar, hip, thigh support (power, manual) reclining (driver, pass) memory (1-2 preset, recline)	EASY ENTRY - STD LIMITED COUPE 6 WAY POWER DRIVER - OPT.
	Side windows	OPT.
	Vent windows	-
	Rear window	ROLL DOWN - SEDAN
Radio systems	Antenna (location, whip, w/shield, power)	FIXED MAST - STD.
	AM, FM, stero, tape; CB	AM - STD.
	Speaker (number, location) Premium sound	EXTENDED RANGE SPEAKERS - OPT.
Roof open air/fixed (flip-up, sliding, "T")		FLIP OPEN SUNROOF - OPT.
Speed control device		RESUME CRUISE - OPT.
Speed warning device (light, buzzer,etc.)		
Tachometer (rpm)		STD - T TYPE
Theft protection-type		

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

See Key Sheets for definitions

Car Line SKYHAWK CUSTOM, LIMITED, T TYPE HATCHBACK, WAGON

Model Year 1986 Issued 10-31-85 Revised (•) _____

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.	HATCHBACK	COUPE	SEDAN	WAGON
Width					
Tread (front)	W101		1406 (55.3)	1408 (55.4)	4512 (177.6)
Trear (rear)	W102		1401 (55.1)	1401 (55.2)	373 (38.3)
Vehicle width	W103			1652 (65.0)	
Body width at Sg RP (front)	W117		1652 (65.0)		
Vehicle width (front doors open)	W120	3684 (145.0)	3684 (145.0)	3218 (126.7)	3218 (126.7)
Vehicle width (rear doors open)	W121			2832 (111.5)	2832 (111.5)
Front fender overall width	W106				
Rear fender overall width	W107	1677 (66.0)		1685 (66.3)	
Tumble-home (deg.)	W122		21 .5		22.0
Length					
Wheelbase	L101			2571 (101.2)	
Vehicle length	L103		4452 (175.3)	4503 (177.3)	4503 (177.3)
Overhang (front)	L104			973 (38.3)	
Overhang (rear)	L105		908 (35.7)	959 (37.8)	968
Upper structure length	L123	2800 (110.2)	2335 (91.9)	2363 (93.0)	2924 (115.1)
Rear wheel C/L "X" coordinate	L127			2354 (92.6)	
Cowl point "X" coordinate	L125	247 (9.7)		245 (9.6)	246 (9.6)
Front end length at centerline	L126				
Rear end length at centerline	L129	117 (4.6)	570 (22.4)	595 (23.4)	34
Height **					
Passenger distribution (front/rear)	PD1,2,3		**		
Trunk/cargo load			**		
Vehicle height	H101			1372 (54.0)	1383 (54.4)
Cowl point to ground	H114		945 (37.2)	912 (35.6)	915 (36.0)
Deck point to ground	H138		969.9 (38.2)	977.9 (38.5)	----
Rocker panel-front to ground	H112		215.6 (8.5)		220 (8.7)
Bottom of door closed-front to grd.	H133		485.8 (19.1)		496.1 (19.5)
Rocker panel-rear to ground	H111		215.8 (8.5)		230.4 (9.1)
Bottom of door closed-rear to grd.	H135		----	485.8 (19.1)	500.1 (19.7)
Windshield slope angle	H122	58.75	58.75	55.0	55.0
Backlight slope angle	H121	69.0	51.0	49.0	35.5
Ground Clearance **					
Front bumper to ground	H102		341.5 (13.4)		340.1 (13.4)
Rear bumper to ground	H104		335.9 (13.2)		335.8 (14.0)
Bumper to ground [front at curb mass (wt.)]	H103		360.6 (14.2)		359.9 (14.2)
Bumper to ground [rear at curb mass (wt.)]	H105		362.5 (14.3)		380.4 (15.0)
Angle of approach (degrees)	H106		26.7		26.6
Angle of departure (degrees)	H107		23.5		24.8
Ramp breakover angle (degrees)	H147		16.2°		16.9°
Axle differential to ground (front / rear)	H153		138	(5.4)	
Min. running ground clearance	H156		156.8 (6.2)		170.6 (6.7)
Location of min. run. grd. clear.					

"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 SKYHAWK CUSTOM, LIMITED, T Type, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

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

	SAE Ref. No.				
Body Type		COUPE	SEDAN	WAGON	HATCHBACK
Front Compartment					
Sg RP front, "X" coordinate	L31		1113 (43.8)		
Effective head room	H61	958 (37.7)	980 (38.6)	973 (38.3)	955 (37.6)
Max. eff. leg room (accelerator)	L34	1071 (42.1)	1072 (42.2)	1072(42.2)	1071 (42.2)
SgRP to heel point	H30	233 (9.2)	257 (10.1)	256 (10.1)	233 (9.2)
SgRP to heel point	L53	872 (34.3)	866 (34.1)	866 (34.1)	872 (34.3)
Back angle	L40	25.0	25.0		25.0
Hip angle	L42	96.0	98.0	98.5	96.0
Knee angle	L44	126.5	127.0	127.5	126.5
Foot angle	L46	87.0	87.0	87.0	87.0
Design H-point front travel	L17	192 (7.6)	192	192 (7.6)	192 (7.6)
Normal driving & riding seat track trvl.	L23	171 (6.7)	171	170	171 (6.7)
Shoulder room	W3	1365 (53.7)	1363 (53.7)	1364	1344 (52.9)
Hip room	W5	1340 (52.8)	1247 (49.1)	1244 (49.0)	1340 (52.8)
** Upper body opening to ground	H50		1242 (48.9)	1252 (49.3)	
Steering wheel maximum diameter	W9		381 (15.0)		
Steering wheel angle	H18		20.0		
Accel. heel pt. to steer. whl. cntr	L11				
Accel. heel pt. to steer. whl. cntr	H17				
Steering wheel to C / L of thigh	H13	92 (3.6)	80 (3.1)	88 (3.5)	94 (3.7)
Steering wheel torso clearance	L7	386 (15.2)	376 (14.8)	370 (14.6)	388 (15.3)
Headlining to roof panel (front)	H37	10 (0.4)	10 (0.4)	13 (.5)	10 (0.4)
Undepressed floor covering thickness	H67	16 (0.6)	16 (0.6)	16 (0.6)	16 (0.6)

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	720 (28.3)	758 (29.8)	741 (29.2)	715 (28.1)
Effective head room	H63	931 (36.7)	964 (38.0)	986 (38.8)	925 (36.4)
Min. effective leg room	L51	807 (31.8)	871 (34.3)	857 (33.7)	807 (31.8)
Sg RP (second to heel)	H31	259 (10.2)	272 (10.7)	259 (10.2)	252 (9.9)
Knee clearance	L48	-21	7	2	-24 (0-9)
Compartment room	L3	635 (25.0)	658 (25.9)	660 (26.0)	652 (25.7)
Shoulder room	W4	1335 (52.6)	1366 (53.8)	1366 (53.8)	1322 (52.0)
Hip room	W6	1265 (49.8)	1245 (49.0)	1250 (49.2)	1234 (48.6)
** Upper body opening to ground	H51	----	1240 (48.8)	1252(49.3)	
Back angle	L41	25.0	26.0	25.0	25.0
Hip angle	L43	78.0	83.0	81.0	78.0
Knee angle	L45	78.5	85.0	86.0	81.0
Foot angle	L47	115.5	118.0	121.0	116.5
Headlining to roof panel (second)	H38	9 (0.4)	8 (0.4)	13 (.5)	10.(0.4)
Depressed floor covering thickness	H73	18 (0.7)	18 (0.7)	20 (.8)	18 (0.7)

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	356.3 (12.581)	381.5 (13.5)		
** Liftover height	H195	758 (29.8)	758 (29.8)		

Interior Volumes (EPA Classification)

Vehicle class (subcompact, compact, etc.)			SMALL		
Interior volume index (cu. ft.)		97.5	104.7	125.2	98.2
Trunk/cargo index (cu. ft.)		12.581	13.469	34.23	14.8

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 SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK,WAGON

Model Year 1986 Issued 10-31-85 Revised (•) _____

Body Type	SAE Ref. No.	COUPE	SEDAN	WAGON	HATCHBACK
Station Wagon – Third Seat					
Sg RP couple distance	L85				
Shoulder room	W85				
Hip room	W86				
Effective leg room	L86				
Effective head room	H86				
Sg RP to heel point	H87				
Knee clearance	L87				
Seat facing direction	SD1				
Back angle	L88				
Hip angle	L89				
Knee angle	L90				
Foot angle	L91				
Station Wagon – Cargo Space					
Cargo length (open front)	L200				
Cargo length (open second)	L201				
Cargo length (closed front)	L202			1709 (67.3)	
Cargo length (closed second)	L203			980 (38.6)	
Cargo length at belt (front)	L204			1581 (62.2)	
Cargo length at belt (second)	L205			837 (33.0)	
Cargo width (wheelhouse)	W201			944 (37.2)	
Rear opening width at floor	W203			1226 (48.3)	
Opening width at belt	W204			1206 (47.3)	
Max. rear opening width above belt	W205			970 (38.2)	
Cargo height	H201			846 (33.3)	
Rear opening height	H202			764 (30.1)	
Tailgate to ground height	H250				542 (21.3)
Front seat back to load floor height	H197				
Cargo volume index [m^3($ft.^3$)]	V2			1824 (64.5)	
Hidden cargo volume [m^3($ft.^3$)]	V4				
Cargo volume. index-rear of 2-seat	V10			966	
Hatchback – Cargo Space					
Cargo length at front seatback height	L208				1410 (55.5)
Cargo length at floor (front)	L209				1654 (65.1)
Cargo length at second seatback height	L210				745 (29.3)
Cargo length at floor (second)	L211				906 (35.7)
Front seatback to load floor height	H197				542 (21.3)
Second seatback to load floor height	H198				384 (15.1)
Cargo volume index [m^3($ft.^3$)]	V3				1098 (38.8)
Hidden cargo volume [m^3($ft.^3$)]	V4				
Cargo volume index-rear of 2-seat	V11				419 (14.8)

Aerodynamics*	
Wheel lip to ground, front	
Wheel lip to ground, rear	
Frontal area [m^2(ft^2)]	1.93 (.076)
Drag coefficient (Cd)	

* EPA Loaded Vehicle Weight, Loading Conditions

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

Car Line SKYHAWK CUSTOM, LIMITED, T. TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Body Type	COUPE	SEDAN	WAGON	HATCHBACK

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location
Front	X - FIDUCIAL MARK TO VERTICAL BASE GRID LINE - FRONT, MEASURED HORIZONTALLY FROM BASE GRID 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		
Front	W21	504 (19.8)	
	L54	2746 (108.1)	
	H81	246 (9.7)	
	H161		
**	H163		
Rear	W22	440 (17.3)	
	L55	4900 (192.9)	4951 (194.9)
	H82	362 (14.3)	
	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 SKYHAWK CUSTOM, LIMITIED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Body Type	COUPE	SEDAN	WAGON	HATCHBACK

Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (SAE - H127)	Highest**	675.9 (26.6)	674.7 (26.6)	
		Lowest			
	Taillamp (SAE - H128)	Highest**	651.1 (25.6)	670.3 (26.4)	
		Lowest			
	Sidemarker	Front	521.5 (20.5)	539.5 (21.2)	
		Rear			
Distance from C'L of car to center of bulb	Headlamp	Inside			
		Outside**			
	Taillamp	Inside			
		Outside**			
	Directional	Front			
		Rear			
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 SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON

Model Year 1986 Issued 10-31-85 Revised (•) _____

Model	Vehicle Mass (weight)							
	CURB MASS, kg. (weight, lb.)*			% PASS. MASS DISTRIBUTION				SHIPPING MASS, kg (weight, lb.)**
				Pass In Front		Pass In Rear		
	Front	Rear	Total	Front	Rear	Front	Rear	
SKYHAWK CUSTOM:								
4JS27 2-DR COUPE	682.0	381.0	1063.0	65.2	70.8	40.8	163.2	1032.5
			(2343)					(2276.2)
4JS69 4-DR SEDAN	688.0	397.0	1085.0	65.2	70.8	37.8	166.2	1054.5
			(2392)					(2324.7)
4JS35 WAGON	683.0	437.0	1120.0	65.2	70.8	37.8	166.2	1089.5
			(2469)					(2401.8)
4JS77 3-DR HATCHBACK	687.0	403.0	1090.0	65.2	70.8	40.8	163.2	1059.5
			(2403)					(2335.7)
SKYHAWK LIMITED:								
4JT27 2-DR COUPE	682.4	366.5	1048.9	65.2	70.8	40.8	163.2	1048.9
			(2310)					(2312.3)
4JT69 4-DR SEDAN	694.4	404.6	1099.0	65.2	70.8	37.8	166.2	1068.5
			(2423)					(2355.5)
4JT35 WAGON	688.4	443.7	1132.1	65.2	70.8	37.8	166.2	1101.6
			(2496)					(2428.5)
SKYHAWK T TYPE:								
4JE27 2-DR COUPE	682.4	361.1	1043.5	65.2	70.8	40.8	163.2	1043.5
			(2299)					(2300.4)
4JE77 3-DR HATCHBACK	687.0	383.1	1070.1	65.2	70.8	40.8	163.2	1070.1
			(2359)					(2359.1)

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

MVMA Specifications Form
Passenger Car

METRIC (U.S. Customary)

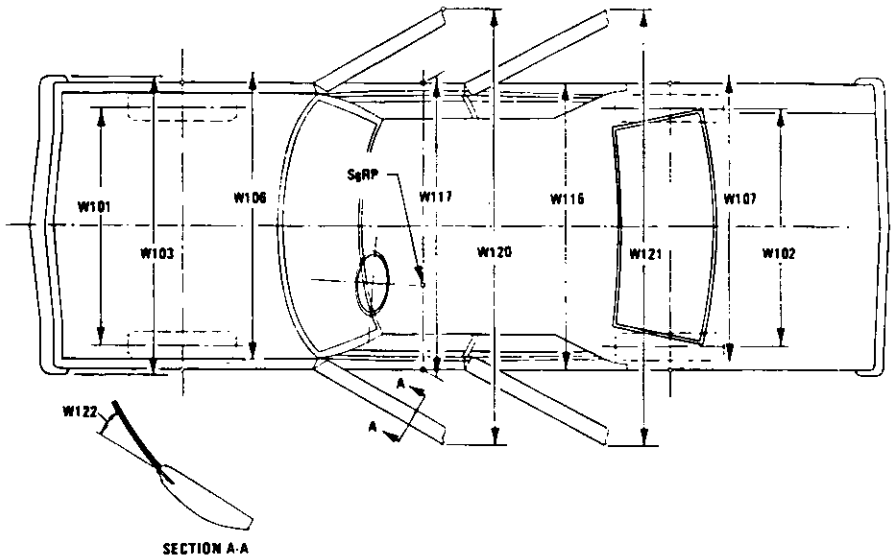
Car Line SKYHAWK CUSTOM, LIMITED, T TYPE, HATCHBACK, WAGON
Model Year 1986 Issued 10-31-85 Revised (•) _____

Equipment	Optional Equipment Differential Mass (weight)*			Remarks
	MASS, kg. (weight, lb.)			
	Front	Rear	Total	
Frt & RR Pass. Load-G.V.W.R.	106.2	230.0	340.2	JS27.77
	(234.1)	(507.0)	(750.0)	
Frt & RR Pass. Load-G.V.W.R.	103.4	236.8	240.2	JS35-69
	(227.9)	(522.0)	(750.0)	
Frt. & RR Pass. Load-G.V.W.R.	32.6	35.4	68.0	JA00
	(71.8)	(78.0)	(149.9)	
Luggage Load G. V. W. R.	-9.7	70.5	60.8	JS27-69-77
	(21.3)	(155.4)	(134.0)	
Luggage Load G. V. W. R.	-4.0	44.0	40.0	JS35
	(8.8)	(97.0)	(88.1)	
Glass-Roof Window - Hinged	3.2	4.0	7.2	JA00
	(8.5)	(11.4)	(20.0)	
Insulation - Spec Acoustical	3.9	5.2	9.1	JA27-77
	(8.5)	(11.4)	(20.0)	
Insulation-Spec Acoustical	3.8	4.9	8.7	JS69
	(8.3)	(10.8)	(19.1)	
Insulation-Spec Acoustical	3.2	4.0	7.2	JS35
	(7.0)	(8.8)	(15.8)	
Air conditioning-Manual	24.6	-2.0	22.6	JA00&LH8
	(54.2)	(4.8)	(49.8)	
Air Conditioning-Manual	28.0	-2.2	25.8	JA00-LH8
	(61.7)	(4.8)	(56.8)	
Air Cond- Electronic Climate	25.6	-2.0	23.8	JA00-LH8
	(56.4)	(4.4)	(52.4)	
Eng-L4-1.8L-EFI-Turbo OHC	26.6	.0	26.6	JS27-77
	(58.6)	(.0)	(58.6)	
Trans -3 SPD AUto-THM 125	21.2	.0	21.2	JA00-LH8
	(46.7)	(0.)	(46.7)	
Trans-3 SPD Auto- THM 125	23.5	.0	23.5	JA00&LHB.
	(51.8)	(0.)	(51.8)	
Steering - Power	6.0	1.5	7.5	JA00 OLH8.
	(13.2)	(3.30)	(16.5)	
Tire - P205/60R-14 W/L TR SBR	3.6	4.0	7.6	JS27-77
	(7.9)	(8.8)	(16.5)	

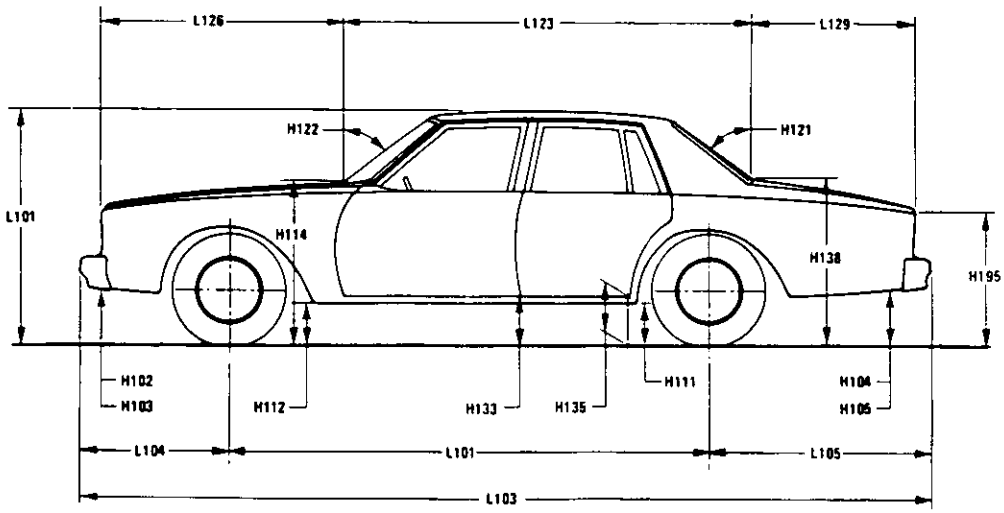
*Also see Engine - General Section for dressed engine mass (weight).
* * OPTIONAL WEIGHTS OVER 3 POUNDS

Exterior Car And Body Dimensions – Key Sheet

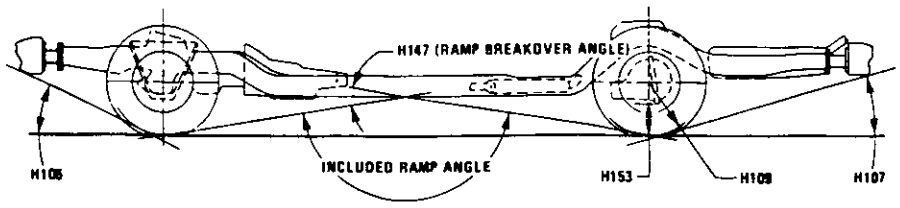
Exterior Width



Exterior Length & Height

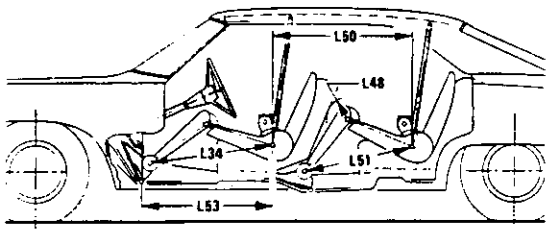


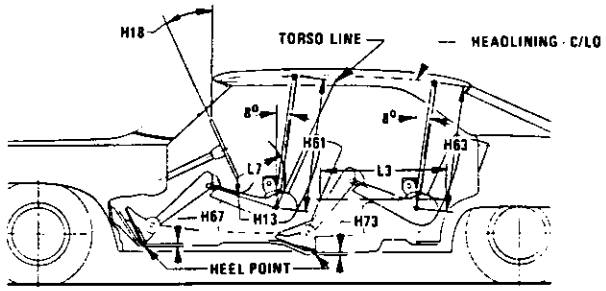
Exterior Ground Clearance

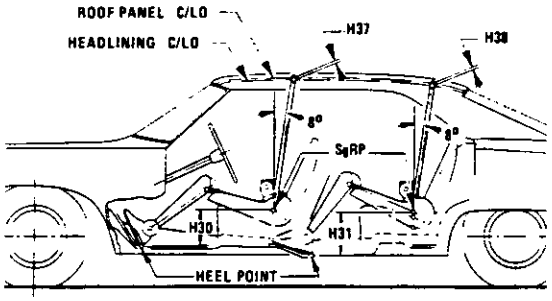


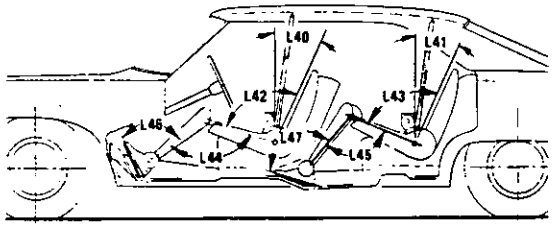
MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

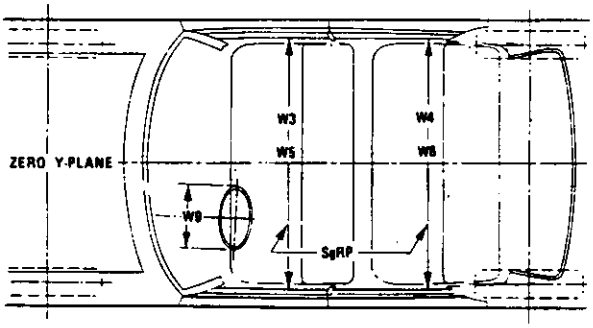
Interior Car And Body Dimensions – Key Sheet

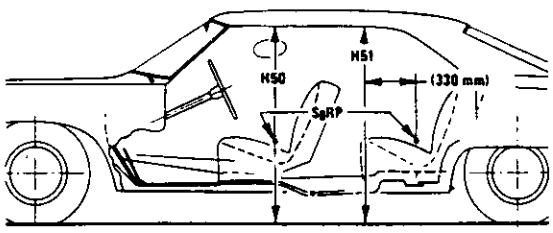






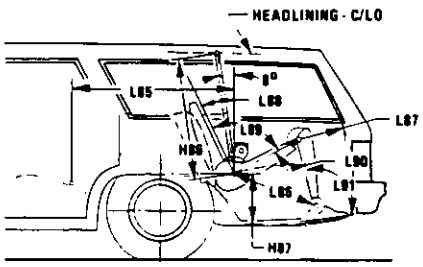


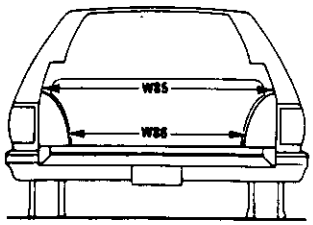




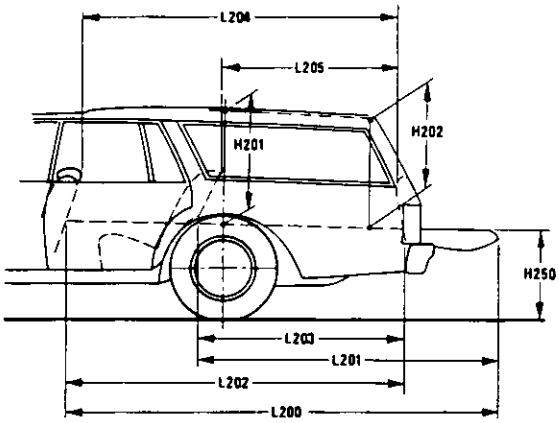
Interior Car And Body Dimensions – Key Sheet

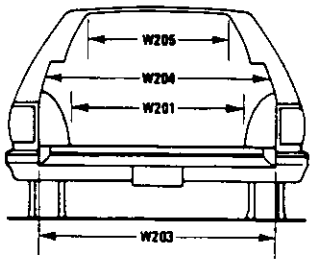
Third Seat



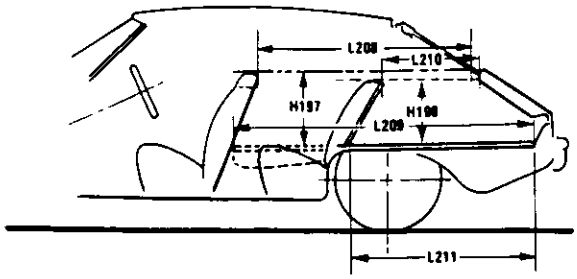


Cargo Space





Station Wagon



Hatchback

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.

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.

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