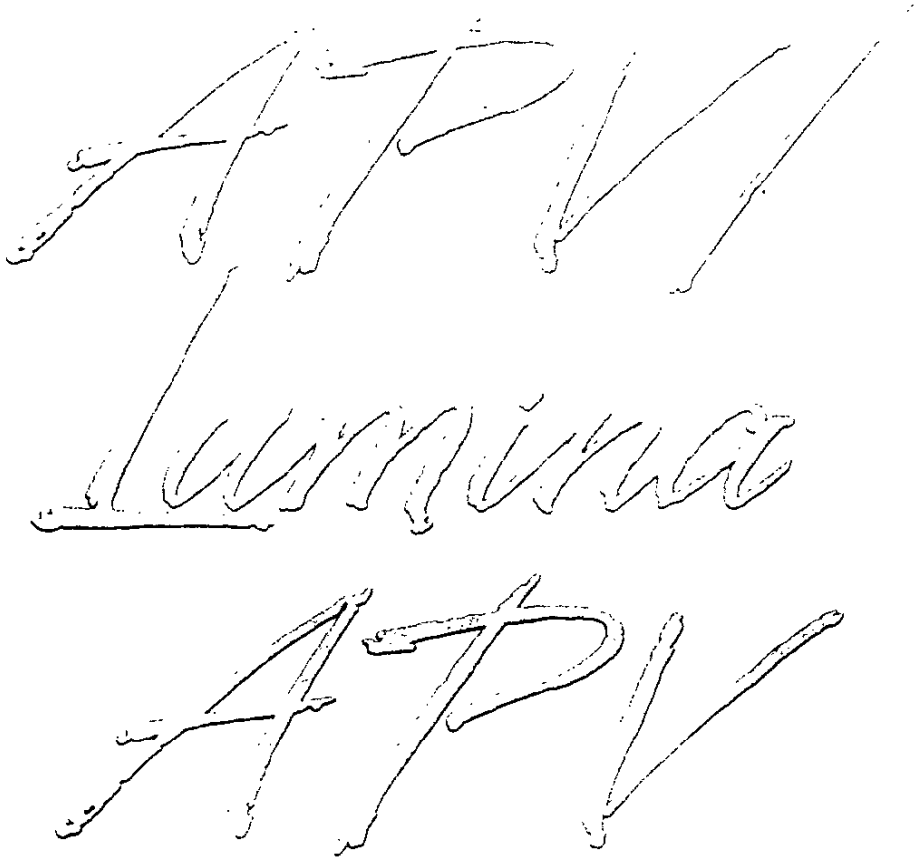
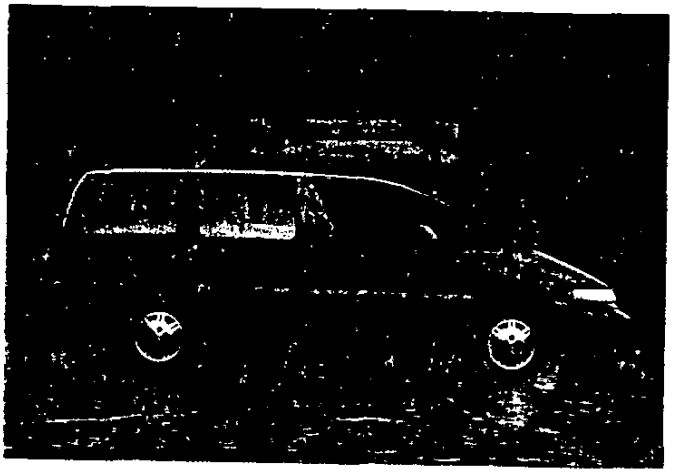
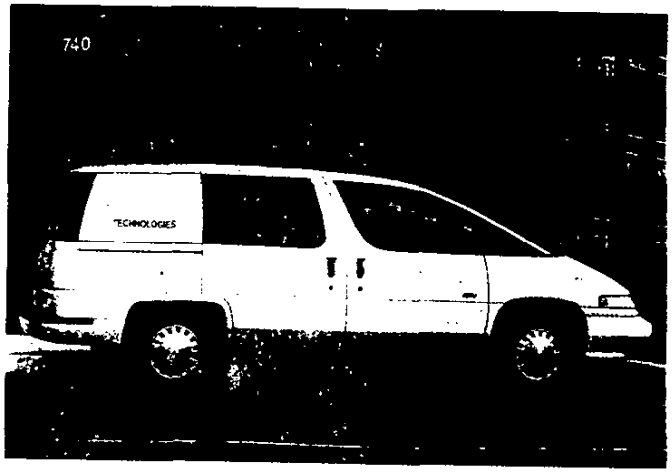


APV/LUMINA APV





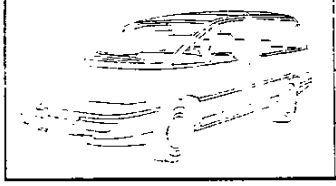
CONTENTS

APV (CARGO)

MODEL NUMBER	WB (IN.)	GVWR (LBS.)	MAX' PAYLOAD (LBS.)	PASS. CAP.	STD ENGINE/ TRANS	OPT ENGINE/ TRANS
1UM05	109.8	4935	1357	2	3.1L V6/A3	—

APV (CARGO)
The APV (Cargo) model is offered in one standard model.

LUMINA APV



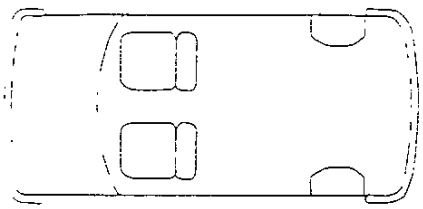
MODEL NUMBER	WB (IN.)	GVWR (LBS.)	MAX' PAYLOAD (LBS.)	PASS. CAP. (STD OPT)	STD ENGINE/ TRANS	OPT ENGINE/ TRANS
1UM06	109.8	4935	—	5/6/7	3.1L V6/A3	—
1UM06/ Y91	109.8	4935	—	5/7	3.1L V6/A3	—

LUMINA APV
The Lumina APV is offered in a standard model and an optional CL (RPO Y91) version.

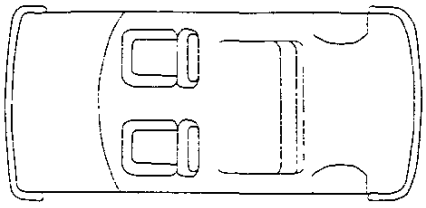
Based on Curb Weight.

APV/LUMINA APV SEATING ARRANGEMENTS

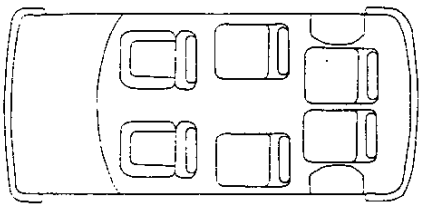
APV (CARGO) MODEL
STANDARD: 2-PASSENGER SEATING (RPO A51)



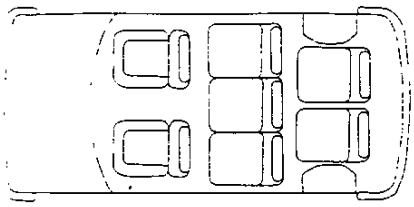
LUMINA APV MODEL
STANDARD w/BASE:
5-PASSENGER SEATING (RPO ZP5)



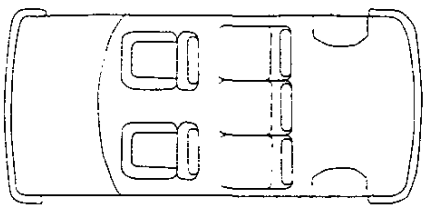
LUMINA APV MODEL
OPTIONAL w/BASE:
6-PASSENGER SEATING (RPO AB3)



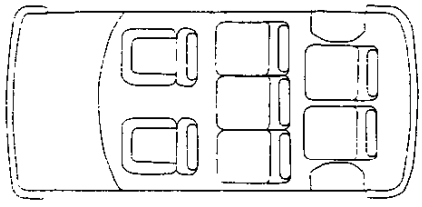
LUMINA APV MODEL
OPTIONAL w/BASE:
7-PASSENGER SEATING (RPO ZP7)



LUMINA APV CL MODEL
STANDARD w/CL (RPO Y91):
5-PASSENGER SEATING (RPO AB4)



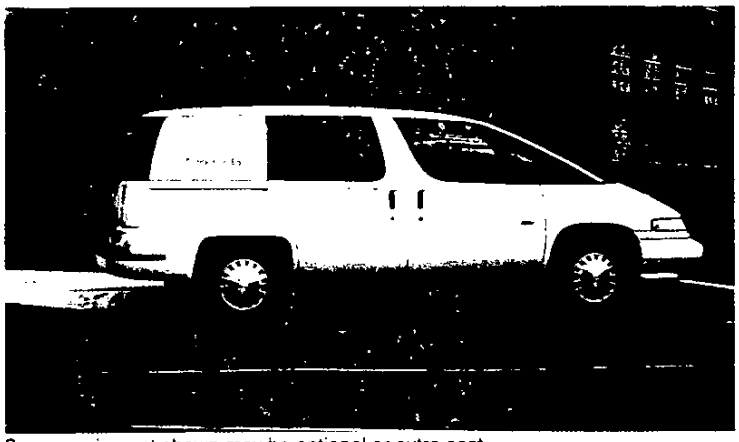
LUMINA APV CL MODEL
OPTIONAL w/CL (RPO Y91):
7-PASSENGER SEATING (RPO ZP7)



APV (CARGO)

The APV (Cargo) Van is designed to offer buyers a high level of standard comfort and several convenience features.

The following features are standard.



Some equipment shown may be optional or extra cost.

POWERTRAIN/CHASSIS

- ALTERNATOR: 100 Amp Delcotron.
- BATTERY: 12 volt, neg. ground; 525 Cold Cranking Amps @ 0 degrees F.
- BRAKES: Power; vacuum. Front—disc. Rear—drum.
- ENGINE: 3.1L V6 (LG6) EFI. Net Horsepower—120 @ 4400 RPM. Net Torque—175 lb. ft. @ 2200 RPM.
- EXHAUST: Single—Stainless Steel.
- FRAME: Space frame construction.
- FUEL TANK: 20-gallon (approx.) capacity.
- REAR AXLE: Twist Type.
- SHOCK ABSORBERS: Front—32 mm piston diameter. Rear—25 mm piston diameter.
- STABILIZER BAR: Front—1.1 inch diameter. Rear—1.0 inch diameter.
- STEERING: Integral Power. Ratio: 17.6:1.
- SUSPENSION: Front—Independent with MacPherson Struts and coil springs. Rear—Trailing Twist axle design with coil springs.
- TRANSAXLE: 3-speed automatic. Ratio: 3.18:1.

EXTERIOR

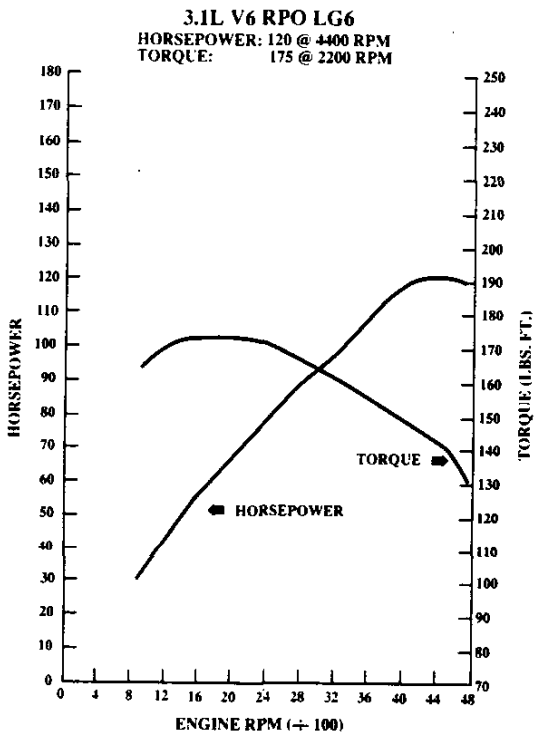
- BUMPER: Front and rear painted lower body color.
- COLORS: Choice of four exterior colors in a solid paint scheme. See Color and Trim Specifications for details.
- DOORS: Sliding side and one-piece rear liftgate.
- FUEL FILLER DOOR: Remote.
- GRILLE: Molded plastic painted black.
- HEADLAMPS: Composite halogen.
- HORN: Dual.
- MIRRORS: Remote LH and manual RH black-painted rearview sport. Head size is 4.5" x 6.5".
- MOLDINGS: Black front bumper fascia with chrome accent.
- NAMEPLATE: APV.
- SPARE TIRE: Compact with underbody spare tire carrier.
- TIRES: Four P205/70R14 BW all-season steel-belted radial tires.
- WHEELS: Four 14.0" x 5.5" steel with 14.0" full wheel covers.
- WINDSHIELD WIPERS: Intermittent with rear window wiper/washer.

INTERIOR

- ARMREST: RH and LH front door.
- CIGARETTE LIGHTER/ASHTRAY: Located on center console and includes ashtray lamp.
- COAT HOOKS: RH and LH.
- COLOR: Gray.
- CUP HOLDERS: Located on center console.
- DOOR PANELS: Front - Color-keyed with cloth upper and carpeted lower panels. Sliding door and liftgate - flat gray hardboard.
- FLOOR COVERING: Rubber front floor mat. Also rubber floor mat behind seats.
- GAGES: Include speedometer, odometer, trip odometer, enlarged fuel level gage, oil pressure gage, coolant temperature gage and additional telltale lights.
- GLOVE BOX: Includes lamp.
- HEADLINER: Full-length color-keyed.
- HEATER: Deluxe-air heater and defogger.
- INSTRUMENT PANEL: Color-keyed, padded. Includes courtesy lamp and carpeted dash panel.
- MIRRORS: 10-inch rearview.
- RADIO: Delco electronically-tuned AM/FM stereo with two 4" x 10" front dash speakers. Also includes seek up/down, digital clock and mast antenna. (Refer to Delco Elecronics brochure in RPO Detail for further information.)
- SEATS: Two low-back front bucket seats in vinyl trim.
- SEAT BELTS: Color-keyed shoulder belts.
- STEERING WHEEL: Deluxe 3-spoke.
- STORAGE: Compartment on center console.
- SUNSHADES: RH and LH visors with covered mirrors and map straps.
- WINDOWS: Tinted. Flip-out LH and RH rear panels replace windows.
- WINDSHIELD: Solar.

MODEL	ENGINE	TRANSMISSION	AXLE	GVWR
		AUTOMATIC 3-SPEED	3.18	
APV/LUMINA APV	3.1L V6	S	S	4935

TRANSMISSION	AUTOMATIC
MODEL	AUTOMATIC 3-SPEED THM 3T40
RPO CODE	MX1
GEAR RATIOS	
First	2.84
Second	1.60
Third	1.00
Fourth	—
Reverse	2.07
GEAR TYPE	Planetary
TORQUE CONVERTER	
Element Types	Pump/Stator/Turbine
Lock-up Clutch	Automatic
LUBRICANT CAPACITY (pints)	
Dry Fill	12.7
Refill	—

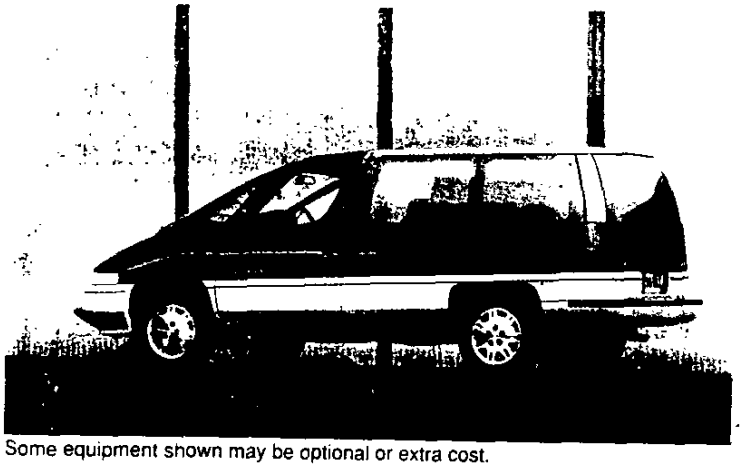


HORSEPOWER AND TORQUE RATINGS	
ENGINE	3.1L V6
RPO CODE	LG6
SAE NET HORSEPOWER	
Horsepower @ RPM	120 @ 4400
SAE NET TORQUE	
Lb. Ft. @ RPM	175 @ 2200
FUEL SYSTEM	EFI
CLUTCH SIZE (in.)	—
STD. BATTERY	
(Cold Cranking Amps @ 0 °F)	525

LUMINA APV CL

The Lumina APV can seat up to 7 passengers, and is available in two trim levels. The uplevel CL trim is designed to offer buyers an increased level of comfort and convenience features compared to the standard Lumina APV.

The following features are standard. Bold type denotes equipment in addition to or replacing that of the Lumina APV.



Some equipment shown may be optional or extra cost.

POWERTRAIN/CHASSIS

- ALTERNATOR: 100 Amp Delcotron.
- BATTERY: 12 volt, neg. ground; 525 Cold Cranking Amps @ 0 degrees F.
- BRAKES. Power; vacuum. Front—disc. Rear—drum.
- ENGINE: 3.1L V6 (LG6) EFI. Net Horsepower—120 @ 4400 RPM. Net Torque—175 lb. ft. @ 2200 RPM.
- EXHAUST: Single—Stainless Steel.
- FRAME: Space frame construction.
- FUEL TANK: 20-gallon (approx.) capacity.
- REAR AXLE: Twist Type.
- SHOCK ABSORBERS: Front—32 mm piston diameter. Rear—25 mm piston diameter.
- STABILIZER BAR: Front—1.1 inch diameter. Rear—1.0 inch diameter.
- STEERING: Integral Power. Ratio: 17.6:1.
- SUSPENSION: Front—Independent with MacPherson Struts and coil springs. Rear—Trailing Twist axle design with coil springs.
- TRANSAXLE: 3-speed automatic. Ratio: 3.18:1.

EXTERIOR

- BUMPER: Front and rear painted lower body color.
- COLORS: Choice of eight exterior colors in a solid paint scheme. See Color and Trim Specifications for details.
- DOORS: Sliding side and one-piece rear liftgate.
- FUEL FILLER DOOR: Remote.
- GRILLE: Molded plastic painted black.
- HEADLAMPS: Composite halogen.
- HORN: Dual.
- MIRRORS: Remote LH and manual RH black-painted rearview sport. Head size is 4.5" x 6.5".
- MOLDINGS: **Black body side with bright inserts.**
- NAMEPLATE: Lumina APV.
- SPARE TIRE: Compact with underbody spare tire carrier.
- TIRES: Four P205/70R14 BW all-season steel-belted radial tires.
- WHEELS: Four 14.0" x 5.5" steel with 14.0" full wheel covers.
- WINDSHIELD WIPERS: Intermittent with rear window wiper/washer.

INTERIOR

- **AIR CONDITIONING: Electronically controlled.**
- ARMREST: RH and LH front door.
- AUXILIARY POWER SOCKET: Located in the left lower wheelhousing stowage compartment behind the wheelhouse cover.
- **AUXILIARY LIGHTS: Map lights in the mini-console, a dome override switch, a rear dome reading lamp and an underhood lamp.**
- CIGARETTE LIGHTER/ASHTRAY: Located on center console and includes ashtray lamp.
- COAT HOOKS: RH and LH.
- COLORS: Choice of four. Dark Blue, Light Brown, Gray, and Maroon.
- CUP HOLDERS: Located on center console and on rear of seats.
- DOOR PANELS: Color-keyed with **Custom Cloth** upper and carpeted lower panels.
- FLOOR COVERING: Fully carpeted.
- GAGES: Include speedometer, odometer, trip odometer, enlarged fuel level gage, oil pressure gage, coolant temperature gage and additional telltale lights.
- GLOVE BOX: Includes lamp.
- HEADLINER: Full-length color-keyed.
- HEATER: Deluxe-air heater and defogger.
- INSTRUMENT PANEL: Color-keyed, padded. Includes courtesy lamp and carpeted dash panel.
- MIRRORS: 10-inch rearview.
- RADIO: Delco electronically-tuned AM/FM stereo with two 4" x 10" coaxial front dash speakers and two 6" round high sensitivity rear speakers. Also includes seek up/down, digital clock, and mast antenna. Refer to Delco Electronics brochure in RPO Detail for further information.
- SEATS: Custom Cloth front bucket-seats with integral adjustable head restraints, reclining seatbacks, in-board armrests, and net storage pockets in back. **Custom Cloth three-passenger modular seats in the center position (modular seats fold for easy removal and storage).** All seats protected by Scotchgard fabric protector.
- SEAT BELTS: Color-keyed shoulder belts on all outboard seating positions
- STEERING WHEEL: Deluxe 3-spoke **with tilt.**
- STORAGE: Compartment on center console.
- SUNSHADES: RH and LH visors with covered mirrors and map straps.
- WINDOWS: Tinted. Flip-out glass on LH middle, RH sliding door, and LH and RH quarter windows.
- WINDSHIELD: Solar.

APV/LUMINA APV

	CARGO MODEL	PASSENGER MODELS	
MODEL	APV	LUMINA APV	LUMINA APV CL
MODEL NUMBER	1UM05	1UM06	1UM06/Y91
STEERING			
Type	Power Rack & Pinion	Power Rack & Pinion	Power Rack & Pinion
Steering Ratio On Center/At Lock	17.6:1	17.6:1	17.6:1
Turning Diameter Curb-To-Curb (ft.)(outside front)	43.1	43.1	43.1
Wall-To-Wall (ft.)(outside front)	45.4	45.4	45.4
BRAKES			
GVWR (lbs.)	4935	4935	4935
Type	Vac. Power	Vac. Power	Vac. Power
Booster (Diaphragm Diameter) (in.)	9.45	9.45	9.45
Front Rotor Size (Diameter x Thickness) (in.)	10.2 x 1.02	10.2 x 1.02	10.2 x 1.02
Front Facing Contact Per Axle (sq. in.)	33.4	33.4	33.4
Rear Drum Size (Diameter x Width) (in.)	8.86 x 1.77	8.86 x 1.77	8.86 x 1.77
Rear Facing Contact Per Axle (sq. in.)	52.4	52.4	52.4
Parking Brake Type	Cable Activated Integral w/Rear Brakes	Cable Activated Integral w/Rear Brakes	Cable Activated Integral w/Rear Brakes

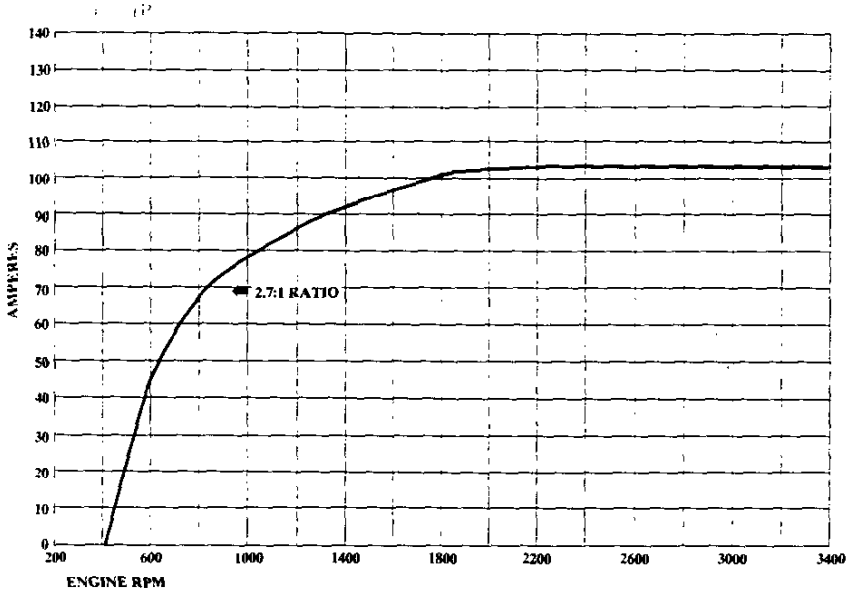
	CARGO MODEL	PASSENGER MODELS				
MODEL	APV	LUMINA APV			LUMINA APV CL	
MODEL NUMBER	1UM05	1UM06			1UM06/Y91	
STANDARD SUSPENSION						
SEATING CAPACITY	2	5	6	7	5	7
PAYLOAD (Max. lbs.)*	1357	—			—	
GVWR (lbs.)	4935	4935			4935	
GAWR (lbs.) Front	2527	2527			2527	
Rear	2527	2527			2527	
FRONT SUSPENSION Type	Ind. MacPherson Strut	Ind. MacPherson Strut			Ind. MacPherson Strut	
Standard Spring Capacity (Total lbs.)	2640	2640			2640	
Front Shock Absorbers Piston Diameter (mm)	32	32			32	
Front Stabilizer Bar Diameter (in.)	1.1	1.1			1.1	
REAR SUSPENSION Type	Trailing Twist Axle w/2020 Coil Springs	Trailing Twist Axle w/2020 Coil Springs			Trailing Twist Axle w/2020 Coil Springs	
Standard Spring Capacity (Total lbs.)						
Rear Shock Absorbers Piston Diameter (mm)	25	25			25	
Rear Stabilizer Bar Diameter (in.)	1.0	1.0			1.0	
FRONT AXLE Type	—	—			—	
Make	—	—			—	
Max. Capacity (lbs.)	2527	2527			2527	
Standard Hub Locks	—	—			—	
Pinion/Ring Gear Type	—	—			—	
REAR AXLE Type	Twist	Twist			Twist	
Make	A.O. Smith	A.O. Smith			A.O. Smith	
Max. Capacity (lbs.)	3080	3080			3080	
Pinion/Ring Gear Type	—	—			—	
STANDARD TIRES	Tubeless SBR P205/70R14	Tubeless SBR P205/70R14			Tubeless SBR P205/70R14	
Capacity (lbs.) Front/Rear	1302	1302			1302	
Inflation (psi) max.	35	35			35	
Revolutions per mile @ 45 mph	822	822			822	
WHEELS Size (in.) Front/Rear	14.0 x 5.5	14.0 x 5.5			14.0 x 5.5	
Capacity (lbs.)	1272	1272			1272	
Bolt Holes	5	5			5	
Bolt Circle Dia. (in.)	4.5	4.5			4.5	
Offset (mm)	42	42			42	

*Based on Curb Weight.

	CARGO MODEL	PASSENGER MODELS	
MODEL	APV	LUMINA APV	LUMINA APV CL
MODEL NUMBER	1UM05	1UM06	1UM06/Y91
STANDARD COOLING SYSTEM			
ENGINE	3.1L V6	3.1L V6	3.1L V6
Radiator Thickness (in.)	1.0	1.0	1.0
System Capacity (gal.)	3.25	3.25	3.25
Fan-No. Blades x Diameter (mm) x Pitch (degrees)	5 x 415 x 14°	5 x 415 x 14°	5 x 415 x 14°
OPTIONAL COOLING SYSTEM			
ENGINE	3.1L V6	3.1L V6	3.1 V6
OPT. AIR CONDITIONING	C67	C67	C67
Radiator Thickness (in.)	1.58	1.58	1.58
System Capacity (gal.)	3.30	3.30	3.30
Fan-No. Blades x Diameter (mm) x Pitch (degrees)	5 x 415 x 14°	5 x 415 x 14°	5 x 415 x 14°

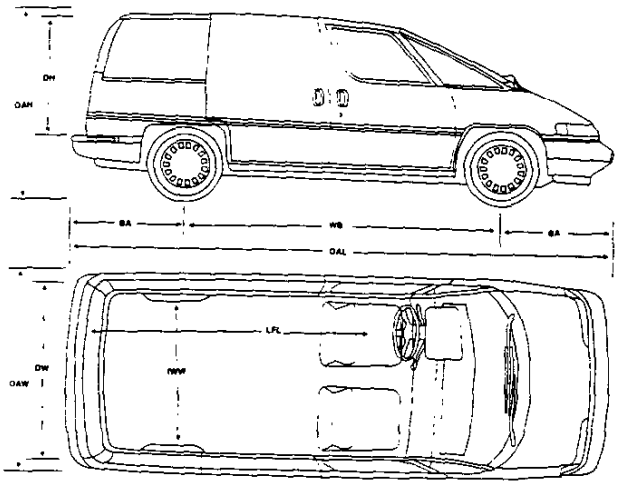
CARGO MODEL	PASSENGER MODELS		
MODEL	APV	LUMINA APV	LUMINA APV CL CL
MODEL NUMBER	1UM05	1UM06	1UM06/Y91
ELECTRICAL			
ENGINE	3.1L V6	3.1L V6	3.1L V6
STANDARD BATTERY			
Cold Cranking Amps			
@ 0 °F	525	525	525
@ - 20 °F	390	390	390
Reserve Capacity			
Minutes @ 80 °F	90	90	90
STANDARD ALTERNATOR			
Max. Capacity (Amps)	100	100	100
Max. Watts @ 12 Volts	1020	1020	1020
Nominal Amp @ Idle			
approx.	36	36	36
Drive Pulley Ratio	2.7:1	2.7:1	2.7:1
Model Number	CS130	CS130	CS130

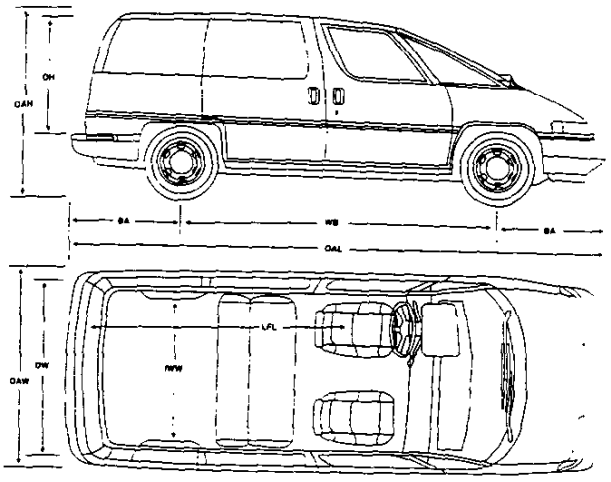
ALTERNATOR CURVE



		CARGO MODEL	PASSENGER MODELS	
MODEL		APV (CARGO)	LUMINA APV PASSENGER VAN	LUMINA APV CL PASSENGER VAN
MODEL NUMBER		1UM05	1UM06	1UM06/Y91
INTERIOR DIMENSIONS				
Headroom (in.)				
Front	HR	35.7	35.7	35.7
Middle	HR	—	35.6	35.6
Rear	HR	—	34.0	34.0
Leg Room (in.)				
Front	LR	40.7	40.7	40.7
Middle	LR	—	33.1	33.1
Rear	LR	—	34.0	34.0
Shoulder Room (in.)				
Front	SR	60.6	60.6	60.6
Middle	SR	—	62.3	62.3
Rear	SR	—	62.2	62.2
Hip Room (in.)				
Front	HP	55.5	55.5	55.5
Middle	HP	—	55.2	55.2
Rear	HP	—	41.7	41.7
Load Floor Length (in. at floor)				
w/Front Seat	LFL	83.1	83.1	83.1
w/Middle Seat	LFL	—	53.2	53.2
w/Rear Seat	LFL	—	12.3	12.3
Interior Height (in.)	IH	45.3	45.3	45.3
Interior Width Beltline (in) Between Wheelhousings	IWW	42.5	40.2	40.2
Cargo Capacity (cu. ft.)				
w/Front Seat	CV	115.4	112.6	112.6
w/Center Rear Seat (Max.)	CV	—	64.9	64.9
w/Rear Seat (Max.)	CV	—	18.4	18.4
FUEL TANK				
Std. Tank Nominal (gal.)		20.0	20.0	20.0
Location of Tank		Inboard RH Frame Rail	Inboard RH Frame Rail	Inboard RH Frame Rail
Location of Filler		Left Side	Left Side	Left Side

		CARGO MODEL	PASSENGER MODELS	
MODEL		APV	LUMINA APV VAN	LUMINA APV CL VAN
MODEL NUMBER		1UM05	1UM06	1UM06/Y91
EXTERIOR DIMENSIONS				
BODY				
Wheelbase (in.)	WB	109.8	109.8	109.8
Overall Length (in.)	OAL	194.2	194.2	194.2
Overall Height (in.)	OAH	65.2	65.2	65.2
Maximum Width (in.)	OAW	73.9	73.9	73.9
Bumper To Axle— Front/ Rear (in.)	BA	42.5/42.0	42.5/42.0	42.5/42.0
Ground To Top of Load Floor (in.)	—	22.4	22.4	22.4
Ground Clearance				
Front (in.)	—	9.0	9.0	9.0
Rear (in.)	—	12.8	12.8	12.8
SIDE LOAD DOOR				
Opening Height (in.)	—	41.3	41.3	41.3
Opening Width (in.)	—	27.6	27.6	27.6
REAR LOAD DOOR				
Opening Height (in.)	DH	41.3	41.3	41.3
Opening Width Above Belt (in.)	DW	43.0	43.0	43.0
Opening Width At Belt (in.)	—	50.5	50.5	50.5
Cargo Width At Wheelhouse (in.)	—	42.5	40.2	40.2
SIGN PANEL AREA				
Side Panel (in.) Front Door (in.)	Shaded Area	—	—	—

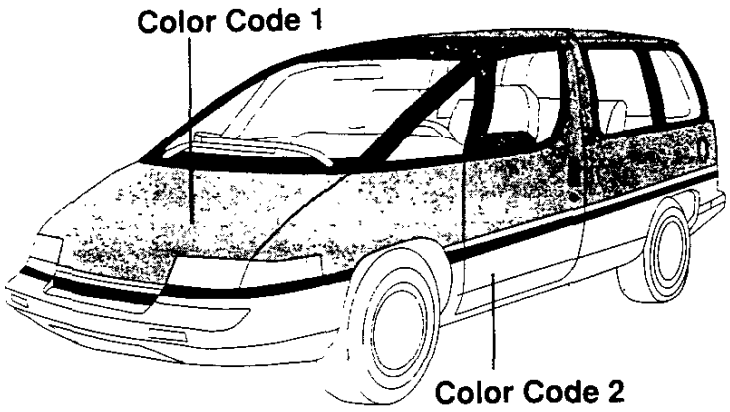




CUSTOM TWO-TONE

(D84)

Custom Two-Tone is optional with the Lumina APV and Lumina APV CL models. Color Code 1 is applied above the body feature line to the rear roof panel, top of the doors, and the door pillars (see illustration). Color Code 2 is applied to the area below the body feature line. The bodyside molding is black with red inserts on the base trim and chrome inserts on the CL trim. The only available Color Code 1/Color Code 2 exterior paint combinations are those displayed in the chart below. Recommended interior trim colors are indicated by the symbol ●. For further information, refer to Seats and Interior Trim pages as well as the Truck Order Guide.



KEY: ●—Recommended Blank—Not Available

EXTERIOR COLORS		STRIPE COLORS	INTERIOR COLORS			
COLOR CODE 1	COLOR CODE 2		Dk. Blue	Lt. Brown	Gray	Maroon
13 Silver Metallic	87 Medium Gray Metallic	—	●		●	●
27 Med. Sapphire Blue Met.	13 Silver Metallic	—	●		●	
27 Med. Sapphire Blue Met.	28 Dark Sapphire Blue Met.	—	●			
40 White	67 Light Gold			●		
40 White	87 Medium Gray Metallic	—	●		●	●
41 Black	87 Medium Gray Metallic	—			●	
72 Med. Maroon Metallic	13 Silver Metallic	—			●	●

KEY S - Standard
O - Optional
— Not Available

1. APV (Cargo) Model (1UM05)
2. Lumina APV (1UM06)
3. Lumina APV CL (1UM06/Y91)

NOTE: Refer to Dealer Order Guide for Updated Availability.

OPTION	CODE	DESCRIPTION	RESTRICTIONS	MODELS 1	2	3
AIR CONDITIONING						
Front	C67	Incls 100 amp Alternator		O	O	S
BRACKET, LICENSE PLATE	VK3			O	O	O
CARRIER, LUGGAGE	V54	Roof, Painted Black		—	O	O
DEFOGGER, REAR WINDOW	C49	Electric		O	O	O
COLOR COMBINATIONS		Solid Color	(See Color and Trim Specifications for Further Details)	S	S	S
	D84	Custom Two-tone		—	O	O
COVERING, FLOOR						
Aux. Floor Mats	B32	Front		—	O	O
Aux. Floor Mats	B33	Rear		—	O	O
COMFORTILT STEERING WHEEL	N33			—	O	S
DOOR LOCK SYSTEM, POWER	AB5	Incls sliding door powerlock delay and liftgate		O	O	O
HEATER	K05	Engine Block		O	O	O
LAMP PACKAGE, INTERIOR	TR9	Incls Mini Console with Map Lights, Middle and Rear Dome Lights, Underhood Light		—	O	S
MIRRORS, OUTSIDE LH and RH Remote	D68	Head Size 4.5" x 6.5"		—	O	O
RADIO EQUIPMENT Electronically-Tuned AM/FM Stereo Radio w/Seek-up/down, and Digital Clock	UM7			S	S	S
Electronically-Tuned AM/FM Stereo Radio w/Seek-up/down, Stereo Cassette and Digital Clock	UM6			—	O	O
Electronically-Tuned AM/FM Stereo Radio w/Seek-up/down, Compact Disc Player and Digital Clock	U1C			—	O	O
SEATING, DRIVER AND PASSENGER	AR9	Reclining Front Bucket		O	S	S
SEAT, DRIVER'S 6-WAY POWER	AG9			—	O	O

APV/LUMINA APV

KEY S - Standard
O - Optional
— Not Available

1. **APV (Cargo) Model (1UM05)**
2. **Lumina APV (1UM06)**
3. **Lumina APV CL (1UM06/Y91)**

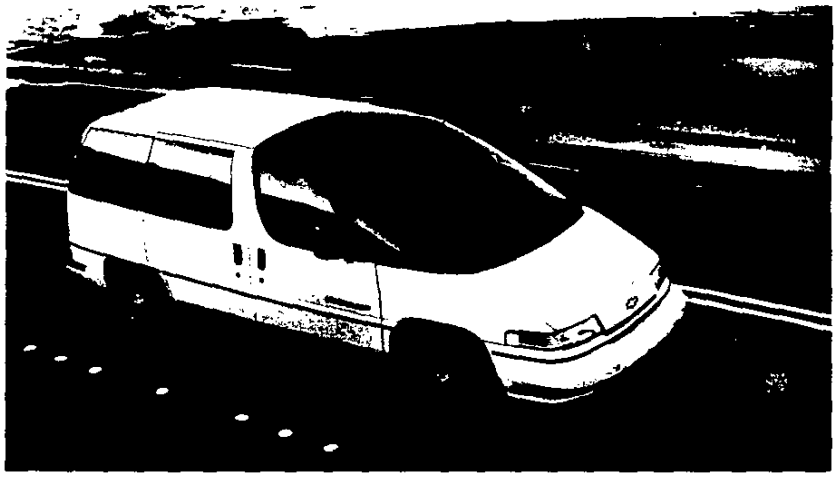
NOTE Refer to Dealer Order Guide for Updated Availability

OPTION	CODE	DESCRIPTION	RESTRICTIONS	MODELS 1	2	3
SEATING ARRANGEMENTS						
2-Passenger	A51	2 Front Bucket Seats		S	—	—
5-Passenger	ZP5	2 Front Buckets and Removable Rear Bench		—	S	—
5-Passenger	AB4	2 Front Buckets and 3-Passenger Rear Modular Seat		—	—	S
6-Passenger	AB3	2 Front Buckets, 2 Center Modular Seats and 2 Rear Modular Seats. Includes rear air distribution system		—	O	—
7-Passenger	ZP7	2 Front Buckets, 3 Center Modular Seats and 2 Rear Modular Seats. Includes rear air distribution system		—	O	O
SIDE WINDOWS, POWER OPERATED	A31		Reqs Power Door Locks	—	O	O
SPEED CONTROL, ELECTRONIC	K34	w/Resume Speed Feature		—	O	O
SUNROOF, REMOVABLE[1]	CF3	Transparent	Reqs TR9 Lamp Group	—	O	O
SUSPENSION, LOAD LEVELING	G67	Inflator incl w/electronic level control. Inflator located in left lower wheelhousing storage compartment, behind wheelhouse cover	Reqs PH3 Wheels Steering ratio - 15.7:1	—	O	O
TIRES						
All-Season Steel-Belted Radials		Front and Rear				
P205/70R14	XHX YHX			S	S	S
P205/65R15	XMR YMR	Touring	Reqs PH3 Wheels	—	O	O
WHEELS						
Cast Aluminum	PH3	15.0" x 6.0" Incls PB4 Lock		—	O	O
Cast Aluminum	PD7	14.0" x 6.5" Incls PB4 Lock		—	O	O
WINDOWS						
Deep Tint	AJ1	All except Windshield and Driver's Side		O	O	O

[1] Interim Availability Only. Please Check Your Order Guide for Availability.

SPECIAL TRAILERING PACKAGES

If you intend to tow a light trailer (up to 2000 lbs. gross weight) with your new APV/Lumina APV, an optional Special Trailering Package is not required. However, an optional Electronic Speed Control (RPO K34) and inflatable rear shock absorbers (RPO G67) are recommended (RPO G67 is not available on APV Cargo). A deadweight trailer hitch, 1 7/8"-diameter trailer hitch ball and 5-wire wiring harness are available from outside suppliers. The wiring harness will splice into the APV/Lumina APV's electrical system. This allows the electrical system to activate trailer lights and other electrical systems.



See the chart below for trailering options in addition to Special Trailering Packages.

The chart below indicates, in **bold type**, the trailering equipment recommended for an APV/Lumina APV for light trailer towing. To help you in ordering, each column lists Regular Production Option (RPO) numbers.

Note: The maximum Gross Trailer Weight for APV/Lumina APV is based upon a Gross Combined Weight (GCW) of 6150 lbs. **The GCW equals the weight of the towing vehicle including passengers and the cargo and the loaded trailer.** The Gross Axle Weight Ratings (GAWR) and Gross Vehicle Weight Ratings (GVWR) must not be exceeded, and trailer tongue weight must be included in the total vehicle weight.

REQUIRED/RECOMMENDED TRAILERING EQUIPMENT

Trailer Classification	Light
Maximum Gross Trailer Weight (lbs.)[1]	2000/1400[2]
Maximum Tongue Load	200
Deadweight Trailer Hitch	AOS[3]
Trailer Hitch Ball (1 7/8"-dia.)	AOS[3]
Light-Duty 5-Wire Wiring Harness	AOS[3]
Std. Engine	3.1L V6
Std. Transmissions	3-Spd. Auto.
Std. Axle Ratio (to1)	3.18
Std. Tire Size	P205/70R14
Std. Alternator	100 Amp
Std. Steering	Power
Std. Brakes	Power
Optional Inflatable Rear Shock Absorbers[4]	**RPO G67**
Optional Electronic Speed Control	**RPO K34**

[1] Maximum gross trailer weight includes all passengers and cargo in the APV/Lumina APV.
[2] Maximum 2000-lb. trailer weight applies with no more than two people in the Lumina APV. Maximum 1400-lb. trailer weight applies with up to six people in the Lumina APV.
[3] AOS = Available from outside suppliers
[4] Not available on APV (Cargo).

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1991

Manufacturer	CHEVROLET MOTOR DIVISION GENERAL MOTORS CORPORATION	Vehicle Line	LUMINA APV
Mailing Address	CHEVROLET-PONTIAC-CANADA GROUP ENGINEERING CENTER GENERAL MOTORS CORPORATION 30003 VAN DYKE WARREN, MICHIGAN 48090-9060	Issued	JUNE, 1990
		Revised	SEPTEMBER, 1990

Direct questions concerning these specifications to the manufacturer listed above.

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

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

Motor Vehicle Manufacturers Association of the United States, Inc.

Blank Forms Provided by Technical Affairs Division

FORM MVMA-91

MVMA Specifications

METRIC (U.S. Customary)

Table of Contents

O **Indicates Format Change From Previous Year**

NOTE:

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

FORM MVMA-91

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

Vehicle Origin

Design & development (company)	Chevrolet-Pontiac-Canada
Where built (country)	U.S.A.
Authorized U.S. Sales marketing representative	Chevrolet Motor Division

Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Make, Vehicle Models, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)	EPA Fuel Economy (City/Hwy)
LUMINA APV				
3-Door Cargo Van	1UM05	2 (2/-)		18/23
3-Door Van	1UM06	5 (2/3)		18/23
		6 (2/2/2)		
		7 (2/3/2)		

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

MVMA Specifications

Vehicle Line: LUMINA APV
Model Year: 1991 Issued: 6-90 Revised(*): 9-90

METRIC (U.S. Customary)
Power Teams

SAE J1349 Net bhp (brake hrspwr) and Net Torque corrected to 77 deg. F / 25 deg. C and 29.61 in. Hg/100 kPA atmos. press.

			A	B	C	D
ENGINE	Engine Code		LG8			
	Displacement Liters (cu. in.)		3.1 (191)			
	Induction system (FI, Carb, etc.)		Electronic Fuel Injection			
	Compression ratio		8.5:1			
	SAE Net at RPM	Power kW(bhp)	90 (120) @ 4400			
		Torque Newton meters (lb.ft.)	237 (175) @ 2200			
	Exhaust Single, dual		Single			
TRANS	Transmission/ Transaxle		MD9 Auto Transaxle 3-Speed			
	Axle Ratio (std. first)		3.18			

Series Availability		Power Teams (A – B – C – D)	
Model	Code	Standard	Optional
LUMINA APV			
3-Dr. Cargo Van	1UM05	A	-
3-Dr. Van	1UM06	A	-

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LG6

O ENGINE – GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		60 deg. V, Front, Transverse
Manufacturer		General Motors Engine Division
No. of cylinders		6
Bore		89.0 mm (3.50 in.)
Stroke		84 mm (3.3 in.)
Bore spacing (C/L to C/L)		111.8 mm (4.40 in.)
Cyl blck matl & mass kg(lbs.)(machined)		Cast Iron, 53.12 (117)
Cylinder block deck height		224 mm (8.8 in.)
Cylinder block length		435.5 mm (17.1 in.)
Deck clearance (minimum) (above or below block)		0.12mm (.005 in.) Below Deck, Nominal
Cyl. head material & mass kg (lbs.)		Cast Iron, 11.227 (24.8)
Cylinder head volume cu. cm. (cu. in.)		51.346 (3.13)
Cylinder liner material		Not Applicable
Head gasket thickness (compressed)		1.0 mm (.039 in.)
Minimum combustion chamber total volume cm. cu. (cu. in.)		50.346 (3.07)
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 matl & mass kg(lbs.) **		Cast Aluminum, 6.0 (13.2)
Exh. manifold matl & mass kg (lbs) **		Cast Iron, 3.610 (8.0) RH, 2.425 (5.3) LH
Knock sensor (yes/no)		Yes
Fuel required unleaded, diesel, etc.		Unleaded
Fuel antiknock index (R + M) / 2		87
Engine mounts	Quantity	2
	Matl and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Elastomeric
	Added isolation (sub-frame, crossmember, etc.)	
Total dressed engine mass (wt) dry***		195.7 kg (431 lbs.) Auto, 206.9 kg (456 lbs.) Man.

Engine – Pistons

Material & mass, g (weight, oz.) – piston only	Aluminum Alloy, 365 (12.8)

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	19.4/60.9

*Rear of engine – drive takeoff. View from drive takeoff end to determine left & right side of engine.
**Finished state.
***Dressed engine mass (weight)-includes the following:

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LG6

Engine – Valve System

Hydraulic lifters (std., opt., n.a.)		Standard
Valves	Number intake/exhaust	6/6
	Head O.D. intake/exhaust	43.64 mm (1.72 in.)/36.20 mm (1.43 in.)

Engine – Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged Steel, .592 (1.30)
Length(axes centerline to centerline)	144.78 mm (5.79 in.)

Engine – Crankshaft

Material & mass kg., (weight, lbs.)*		Nodular Cast Iron, 17.9 (39.5)
End thrust taken by bearing (no.)		3
Length & number of main bearings		4
Seal (material, one, two piece design, etc.)	Front	Fluoroelastomer, One-Piece, Lip Seal
	Rear	Fluoroelastomer, One-Piece, Lip Seal

Engine – Lubrication System

Normal oil pressure kPa(psi) @ eng rpm	345-448 (50-65) @ 1200
Type oil intake (floating, stationary)	Stationary
Oil filter sys. (full flow,part, other)	Full Flow
Capacity of c/case,less filter-refill-L (qt.)	3.8 (4.0)

Engine – Diesel Information (NOT APPLICABLE)

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

Engine – Intake System (NOT APPLICABLE)

Turbo charger – manufacturer	
Super charger – manufacturer	
Intercooler	

* Finished State

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)

Engine Description 3.1 LITER V6 (191 CID)
Engine Code ELECTRONIC FUEL INJECTION RPO LG8

Engine - Cooling System

Coolant recovery system (std, opt, n.a.)		Standard	
Coolant fill location (rad., bottle)		Bottle, Coolant Recovery	
Radiator cap relief valve pressure kPa (psi)			
Circulation thermostat	Type (choke, bypass)	Bypass	
	Starts to open @ deg's C(F)	91 (195)	
Water Pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	15.5	
	Number of pumps	1	
	Drive (V-belt, other)	Single Belt Poly 'V' Accessory Drive (Serpentine)	
	Bearing type	Sealed Ball-Roller	
	Impeller material	Cast Iron	
	Housing material	Aluminum	
By-pass recirculation type (inter., ext.)		Internal	
Cooling system capacity	With heater - L (qt.)	12.3 (13.0)	
	With air conditioner-L(qt.)	12.5 (13.2)	
	Opt. equip. 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)		Yes	
Radiator core	Std., A/C, HD	Standard	A/C
	Type (cross-flow, etc.)	Cross-Flow	
	Construction (fin & tube mechanical, braze, etc.)	Tube & Fin, Soldered	
	Matl., mass kg (wgt., lbs.)	6.35 (14.0)	8.62 (19.0)
	Width	668 mm (26.3 in.)	799 mm (31.5 in.)
	Height	429 mm (16.9 in.)	475 mm (18.7 in.)
	Thickness	25 mm (1.0 in.)	40.2 mm (1.58 in.)
	Fins per inch	12.7	17.0
Radiator end tank material		Copper - Brass	
Fan	Std., elec., opt.	Standard, Electric	
	Number of blades & type (flex, solid, material)	5, Solid	
	Diameter & projected width	415 (16.3)	
	Ratio(fan to crnkshft,rev.)	--	
	Fan cutout type	None	
	Drive type (direct, remote)	Direct	
	RPM at idle (elec.)	1750 - 1800	
	Motor rating(wattage)(elec)	150	
	Motor switch (type & location/elec.)	Remote, Behind Radiator	
	Switch point (temp./ pressure/elec.)	230 deg. F/200 PSI	
	Fan shroud (material)	Plastic	

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Engine Description 3.1 LITER V6 (191 CID)
Engine Code ELECTRONIC FUEL INJECTION RPO LG6

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

Induction type: carburetor, fuel injection system, etc.		Fuel Injection
Manufacturer		AC/Rochester Products
Carburetor no. of barrels		Not Applicable
Idle A/F mix.		Preset - No Adjustment Provided
Fuel injection	Point of inj. (no.)	Throttle Body, 2
	Constant, pulse, flow	Pulse
	Control (elec., mech.)	ECM
	Sys. press. kPa (psi)	76 (11)
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	Not Applicable
	Automatic	Drive: A/C Off 650/AC On 800
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water
Air cleaner type		Replaceable Paper Element Single Snorkel
Fuel filter (type/location)		--
Fuel pump	Type (elec. or mech.)	Electric
	Location (eng., tank)	Fuel Tank
	Press. range kPa (psi)	81-85
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	19 @ 83

Fuel Tank

Capacity refill L (gallons)		75.7 (20.0)
Location (describe)		Left Center Of Vehicle Between Rails
Attachment		Steel Straps - Cross Car
Material & Mass kg (weight lbs.)		High Density Polyethylene
Filler pipe	Location & material	Behind Left Rear Wheel - Steel
	Connection to tank	Hose And Clamp
Fuel line (material)		Nylon
Fuel hose (material)		
Return line (material)		Nylon
Vapor line (material)		Steel
Extended range tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	"
	Location & material	"
	Attachment	"
Auxiliary tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	"
	Location & material	"
	Attachment	"
	Sletr switch or valve	"
	Separate fill	"

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)

Engine Description
Engine Code

3.1 LITER V6 (191 CID)
ELECTRONIC FUEL INJECTION RPO LG6

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Computer Command Control
	Air injection	Pump or pulse	Not Applicable
		Driven by	"
		Air distribution (head, manifold, etc.,)	"
		Point of entry	"
	Exhaust Gas Recircu-lation	Type (controlled flow, open orifice, other)	Controlled Flow
		Exhaust source Point of exh.inj. (spacer, carb., manifold, other)	Manifold Exhaust Crossover Inlet Manifold
	Catalytic Converter	Type	Single Bed, Oxidizing & Reducing
		Number of	1
		Location(s)	Beneath RF Underbody
		Volume L (cu.in)	2.78 (170)
		Substrate type	Monolith
		Noble metal type	Platinum (Pt), Palladium (Pd), Rhodium (Rh)
		Noble metal concentration (g/cu. cm.)	.00836
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed Induction System
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum
	Discharges to (intake manifold, other)		Inlet Manifold
	Air inlt/breather cap,other)		Air Cleaner
Evapora-tive Emission Control	Vapor vented to (crankcase, canister,other)	Fuel tank	Fuel Tank To Canister To TBI Port
		Carburetor	--
	Vapor storage provision		Canister
Electron-ic System	Closed loop (yes/no)		No
	Open loop (yes/no)		No

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Single W/Cross Over
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs.)		1, Reverse Flow
Resonator no. & type		None
Exhaust pipe	Branch o.d., wall thickness	
	Main o.d., wall thickness	50.8 x 1.52 mm (2.0 x .060 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel
Inter-mediate pipe	o.d. & wall thickness	63.5 x 1.22 mm (2.5 x .048 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel
Tail pipe	o.d. & wall thickness	50.8 x 1.40 mm (2.0 x .055 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Engine Description 3.1 LITER V6 (191 CID)
Engine Code ELECTRONIC FUEL INJECTION RPO LG6

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

Manual 3-speed (manufacturer/country)	Not Applicable
Manual 4-speed (manufacturer/country)	"
Manual 5-speed (manufacturer/country)	"
Automatic (manufacturer/country)	Hydra-Matic, Canada
Auto. overdrive (manufacturer/country)	Not Applicable
	3 1 Shoulder Se

Manual Transmission/Transaxle (NOT APPLICABLE)

Number of forward speeds		
Gear ratios	1st	
	2nd	
	3rd	
	4th	
	5th	
	Reverse	
Synchronous meshing (specify gears)		
Shift lever location		
Trans. case mat'l. & mass kg (lbs)*		
Lubricant	Capacity L (pt.)	
	Type recommended	

Clutch (Manual Transmission) (NOT APPLICABLE)

Clutch manufacturer		
Clutch type (dry, wet; single, multiple disc)		
Linkage (hyd., cable, rod, lever, other)		
Max. pedal effort (nom. spring load) N (lbs.)	Depressed	
	Released	
Assist (spring, power/percent, nominal)		
Type pressure plate springs		
Total spring load (nominal) N (lbs.)		
Clutch facing	Facing mfgr. & matl. coding	
	Facing matl. & construction	
	Rivets per facing	
	Outside x inside dia. (nom.)	
	Total eff.area sq cm (sq in)	
	Thickness (pressure plate side/fly wheel side)	
	Rivet depth (pressure plate side/fly wheel side)	
	Engagement cushion method	
Release bearing type & method lub.		
Torsional damping method, springs, hysteresis		

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

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 12-89 Revised(*) 9-90

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LG6

Automatic Transmission/Transaxle

Trade Name		THM-125C (3T40)
Type and special features (describe)		3-Speed Automatic
Gear selector	Location (column, floor, other)	Column
	Ltr./No. designation (e.g. PRND21)	P-R-N-D-2-1
	Shift interlock (yes, no, describe)	
Gear ratios	1st	2.84
	2nd	1.60
	3rd	1.00
	4th	Not Applicable
	Reverse	2.07
Max. upshift speed - drive range km/h (mph)		1 - 2 = 56 (35) 2 - 3 = 109 (68)
Max. kickdown speed - drive range km/h (mph)		3 - 2 = 103 (64) 2 - 1 = 52 (32)
Min. overdrive speed km/h (mph)		Not Applicable
Torque converter	Number of elements	3
	Max. ratio at stall	2.22
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 mm (9.65 in.)
	Capacity factor "K"*	177
Lubricant	Capacity refill L (pt.)	
	Type recommended	Dexron II
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard - Liquid
Trans. mass kg (lbs.) & case matl.**		Cast Iron

All Wheel / 4 Wheel Drive (NOT APPLICABLE)

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

* Input speed / square root of torque.
** Dry weight including torque converter. If other, specify.

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LG6

Axle Ratio and Tooth Combinations

(See 'Power Teams' for axle ratio usage) - Automatic Trans (MD9)

Effective final drive ratio (or overall top gear ratio)			3.18
Trnsfr ratio and method(chain,gear,etc)			1.12, Chain
Front drive unit	Ring gear o.d.		Not Applicable
	No. of teeth	Pinion	"
		Ring gear	"

Front Drive Unit

Description (integral to trans., etc.)		Planetary Final Drive Integral With Transmission
Limited slip differential (type)		Not Applicable
Drive pinion	Type	"
	Offset	"
No. of differential pinions		2
Pinion/ differential	Adjustment (shim, etc.)	Not Applicable
	Bearing adjustment	"
Driving wheel bearing (type)		
Lubricant	Capacity L (pt.)	See Automatic Trans Specs
	Type recommended	See Automatic Trans Specs

Axle Shafts - Front Wheel Drive

Manufacturer and number used			Saginaw Division (2)
Type (straight, solid bar, tubular, etc.)		Left	Straight, Solid
		Right	Straight, Solid
Outer diam. x length* x wall thickness	Manual transaxle	Left	Not Applicable
		Right	"
	Automatic transaxle	Left	27.1 x 300.0 mm (1.07 x 11.81 in.)
		Right	27.1 x 416.0 mm (1.07 x 16.46 in.)
	Optional transaxle	Left	Not Applicable
		Right	"
Slip yoke	Type		Not Applicable
	Number of teeth		"
	Spline o.d.		"
Universal joints	Make and mfg. no.	Inner	Saginaw Division
		Outer	Saginaw Division
	Number used		Inbrd. & Outbrd. On Each Axle
	Type, size, plunge	Inner	Tripot - 66.0 mm Stroke
		Outer	Rzeppa - Fixed Center
	Attach (u-bolt, clamp, etc.)		Retaining Ring
	Bearing: Type (plain, anti-friction)		Inner - Ball & Needle Outer - Ball
	Bearing: Lubrication (fitting, prepack)		Prepacked
Drive taken through (torque tube, arms or springs)			
Torque taken through (torque tube, arms or springs)			

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

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement: ALL

Suspension – General Including Electronic Controls

Car leveling	Std./opt./not avail.		Optional
	Manual/automatic control		Automatic
	Type (air/hydraulic)		Air
	Primary/assist spring		Assist
	Rear only/4 wheel leveling		Rear Only
	Single/dual rate spring		Single
	Single/dual ride heights		Single
	Provision for jacking		No
Shock absorber damping controls	Standard/option/not avail.		Not Available
	Manual/automatic control		
	Number of damping rates		
	Type of actuation (manual/electric motor/air, etc.)		
	sensors	Lateral acceleration	
		Deceleration	
		Acceleration	
		Road surface	
Shock absorber (front & rear)	Type		Front: MacPherson Strut; Rear; Direct, Double Action
	Make		Delco Products
	Piston diameter		Frt. 32 (1.26); Rear 25 (1.00)
	Rod diameter		Frt. 20 (.80); Rear 12.5 (.50)

Suspension – Front

Type and description		MacPherson Strut With Coil Springs, Stamped Lower Control Arms, And Nodular Iron Steering Knuckles
Travel*	Full jounce	79 From Curb
	Full rebound	111 From Curb
Spring	Type,(coil,leaf,other&matl)	Coil, Steel
	Insulators (type & matl)	Upper, Natural Rubber
	Size (coil design height & i.d.)	245.5 mm (9.65 in.) Design Ht. 165.0 mm (6.50 in.) I.D.
	Spring rate N/mm (lb./in.)	23.5 (134)
	Rate @ wheel N/mm (lb./in)	23.0 (131)
Stabilizer	Type (link,linkless,frmless)	Linkless
	Material & bar diameter	Steel, 28 mm (1.10 in.)

Suspension – Rear

Type and description			Trailing Arm With Stamped Control Arms And Open Section Transverse Beam
Travel*	Full jounce		88 From Curb
	Full rebound		125 From Curb
Spring	Type(coil,leaf,other&matl)		Coil, Steel
	Size (length x width, coil design height & i.d.)		254 mm (10.0 in.) Design Ht. 108 mm (4.25 in.) I.D.
	Spring rate N/mm (lb/in)		48.3 (275)
	Rate @ wheel N/mm (lb/in)		28.5 (162)
	Insulators(type & material)		Upper & Lower, Natural Rubber
	If leaf	No. of leaves	Not Applicable
		Shackle(comp or tens)	"
Stabilizer	Type(link,linkless,frmless)		Linkless
	Material & bar diameter		Steel, 25.4 mm (1.0 in.)
Track bar (type)			Transverse Link - Open Section

* Define load condition:

MVMA Specifications

Vehicle Line LUMINA APV

Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or

Engine Displacement

ALL

Brakes – Service

Description			Single Caliper Disc Front; Duo-Servo drum Rear
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)		Disc
	Rear (disc or drum)		Drum
Valving type(prop.,delay,metering,other)			Proportioning
Power brake (std., opt., n.a.)			Standard
Booster type(rmt,intgrl,vac.,hyd.,etc.)			Vacuum
Vacuum	Source (inline, pump, etc.)		Inline
	Reservoir (volume cu. in.)		None
	Pump-type		None
Traction Control	Operational speed range		Not Applicable
	Type engine intervention		"
Anti-lock device	Front/rear (std., opt., n.a)		"
	Manufacturer		"
	Type (electronic, mech.)		"
	Number sensors or circuits		"
	No. anti-lock hyd. circuits		"
	Integral or add-on system		"
	Yaw control (yes, no)		"
	Hydraulic power source		"
Effective area sq. cm. (sq. in.)*			F 215.5 (33.4)/ R 325 (50.4)
Gross Lng area sq. cm. (sq. in.)**(F/R)			F 215.5 (33.4)/ R 338 (52.4)
Swept area sq. cm. (sq. in.)*** (F/R)			F 1174 (182)/ R 636 (98.5)
Rotor	Outer working diameter	F/R	F 260 mm (10.2 in.)
	Inner working diameter	F/R	F 179.2 mm (7.1 in.)
	Thickness	F/R	F 26 mm (1.02 in.)
	Matl & type (vented/sld)	F/R	F Cast Iron, Vented
Drum	Diameter & width	F/R	R 225 x 45 mm (8.86 x 1.77 in.)
	Type and material	F/R	R Composite Cast Iron, Finned
Wheel cylinder bore			F 64 mm (2.52 in.)/ R 19.0 mm (.75 in.)
Master cylinder	Bore/stroke	F/R	24.0 mm (.94 in.)/ R 35.7 mm (1.4 in.)
Pedal arc ratio			3.4:1
Line pressure at 445 N (100 lb.) pedal load kPa (psi)			12366 (1793 psi)
Lining clearance		F/R	Self-Adjusting 0/.381 mm
Brake lining — Front wheel	Bonded or riveted		Integrally Molded
	Rivet size		Not Applicable
	Manufacturer		Delco Moraine
	Lining code ****		DM 130 EE
	Material		Semi-Metallic
	**** Pri.or out-brd		142 mm x 40 mm x 8 mm (5.59 in. x 1.57 in. x .31 in.)
	Size Sec. or in-brd		122 mm x 46 mm x 11 mm (4.80 in. x 1.81 in. x .43 in.)
	Shoe thickns.(no lng)		Inboard 5 mm (.197 in.); Outboard 3 mm (.118 in.)
Brake lining — Rear wheel	Bonded or riveted		Riveted (6)
	Manufacturer		Inland
	Lining code ****		DM 235 FE
	Material		Organic
	**** Pri. or out-brd		176 mm x 44 mm x 6 mm (6.93 x 1.73 x .236 in.)
	Size Sec. or in-brd		208 mm x 44 mm x 7.6 mm (8.19 x 1.73 x .299 in.)
	Shoe thickns (no lng)		2 mm (.079 in.)

* 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 circum.)
(Disc brake: Square of Outer Working Dia. - Square of Inner Working Dia. X Pi/2 for each brake.)

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

***** Manufacturer I.D., catalog for formulation designation and coefficient of friction classification.

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	ALL

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P205/70R14
	Type (bias, radial, etc.)		Steel Belted Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	240 (35)
		Rear kPa (psi)	240 (35)
	Rev/mile–at 70 km/h(45mph)		
Wheels	Type & material		Steel
	Rim (size & flange type)		14 x 5.5
	Wheel offset		42
	Attachment	Type(bolt,stud)	Stud
		Circle diameter	115 mm (4.53 in.)
		Number & size	5, M12 x 1.5
Spare	Tire and wheel		T125/70D15 B.W. Compact Spare, Bias Ply Nylon, Wheel Dia. x Width 15 x 4, Inflation Pressure (60 psi/415 kPa)
	Storage position & location (describe)		Horizontal, Under Floor

Tires And Wheels (Optional)

Tire size (load range, ply)	P205/70R14
Type (bias, radial, steel, nylon, etc.)	Steel Belted Radial
Wheel (type & material)	Cast Aluminum
Rim (size, flange type and offset)	14 x 6.5 34mm O.S.
Tire size (load range, ply)	P205/65R15
Type (bias, radial, steel, nylon, etc.)	Steel Belted Radial
Wheel (type & material)	Cast Aluminum
Rim (size, flange type and offset)	15 x 6 36mm O.S.
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Spare tire and wheel size (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	T125/70R15 BW. Compact Spare, Radial Ply - With P205/65R15

Brakes – Parking

Type of control		Foot Pedal Application, 'T'-Handle Release
Location of control		Under Instrument Panel, Left Of Steering Column
Operates on		Rear Service Brakes
If separate from service brakes	Type(internal or external)	--
	Drum diameter	--
	Lining size (length x width x thickness)	--

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement: ALL

Steering

Manual (std., opt., n.a.)					Not Applicable
Power (std., opt., n.a.)					Standard
Adjustable steering wheel/column (tilt, telescope, other)		Type			Tilt Column
		Manufacturer			Saginaw Division
		(std., opt., n.a.)			Optional
Wheel diameter ** (W8) SAE J1100		Manual			
		Power			355.6 mm (14.0 in.)
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)			13.79 (45.2) / 13.90 (45.6)
		Curb to curb (l. & r.)			13.1 (43.0) / 13.2 (43.3)
	Inside rear	Wall to wall (l. & r.)			8.24 (27.0) / 8.30 (27.2)
		Curb to curb (l. & r.)			8.32 (27.3) / 8.40 (27.6)
Scrub Radius *					2.0 mm (.079 in.)
Manual	Gear	Type			Not Applicable
		Manufacturer			
		Ratios	Gear		
			Overall		
	No. wheel turns(stop to stop)				
Power	Type (coaxial, elec. hyd., etc.)				Hydraulic
	Manufacturer				Saginaw Division
	Gear	Type			Rack And Pinion With Integral Power Unit
		Ratios	Gear		49.90 mm / REV 45.13 mm / REV
			Overall		15.70:1/2.74 17.56:1/On Center
	Pump (drive)				Belt Off Crankshaft Pulley
	No. wheel turns(stop to stop)				15.70:1/2.74 17.56:1/3.05
Linkage	Type				End Take-Off Tie Rods
	Location (front or rear of wheels, other)				Rear Of Front Wheel Centerline
	Tie Rods (one or two)				2
Steering axis	Inclination at camber (deg.)				14.6
	Bearings (type)	Upper			Ball Bearing
		Lower			Ball Joint
		Thrust			Ball Bearing
Steering spindle/knuckle & joint type					MacPherson Strut With Lower Ball Joint

* The horizontal distance in the front elevation between wheel centerline and kingpin (ball joint) axis at ground.
** See Page 22.

o MVMA Specifications

Vehicle Line LUMINA APV

Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	ALL

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1.7 (+/-) .7 Left And Right Should Be Equal Within .7
		Camber (deg.)	0.0 (+/-) 1.0 Left And Right Should Be Equal Within 1
		Toe-in outside track - mm (in.)	0.0 (+/-) 0.4
	Service reset*	Caster (deg.)	Not Adjustable
		Camber (deg.)	0.0 (+/-) .5 Left And Right Should Be Equal Within .7
		Toe-in - mm(in.)	0.0 (+/-) 0.2 Total
	Periodic M.V. inspection	Caster (deg.)	Not Adjustable
		Camber (deg.)	0.0 (+/) 1.00
		Toe-in - mm(in.)	0.0 (+/-) 0.40 Total
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	Not Adjustable
		Toe-in outside track - mm (in.)	"
	Service reset*	Camber (deg.)	"
		Toe-in - mm(in.)	"
	Periodic M.V. inspection	Camber (deg.)	"
		Toe-in - mm(in.)	"

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

o Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)		Analog
	Trip odometer (std., opt., n.a.)		Standard
Head-up display	Std., opt., not avail.		Not Available
	Type - Secondary, Opto-electronic		"
	Speedometer	Digital	"
	Status/warn. indicators - Turn signals, high beam, low fuel, check gauges		"
	Brightness control	Day/night mode, adj.	"
EGR maintenance indicator			
Charge indicator	Type		Light
	Warning device (light, audible)		Not Available
Temperature indicator	Type		Analog
	Warning device		Not Available
Oil pressure indicator	Type		Analog
	Warning device		Not Available
Fuel indicator	Type		Analog
	Warning device		Not Available
Windshield wiper	Type (standard)		Pulse Wipe NDP
	Type (optional)		--
	Blade length		24 in.
	Swept area sq cm (sq in)		9111 sq. cm.
Windshield washer	Type (standard)		Wet-Arm System
	Type (optional)		Not Available
	Fluid level indicator		Not Available
Rear window wiper, wiper/washer (std., opt., n.a.)			Standard
Horn	Type		Air Tone
	Number used		2
Other			Standard Mechanical Standard Stepper Motor

MVMA Specifications

Vehicle Line: LUMINA APV
Model Year: 1991 Issued: 6-90 Revised(*): 9-90

METRIC (U.S. Customary)

Engine Description: 3.1 LITER V6 (191 CID)
ELECTRONIC FUEL INJECTION RPO LG6
Engine Code:

Electrical – Supply System

Battery	Manufacturer	Delco Remy
	Model, std., (opt.)	75-525
	Voltage	12
	Amps at 0 deg F cold crnk	52[illegible]
	Minutes–reserve capacity	[illegible]
	Amps/hrs. - 20 hr. rate	--
	Location	Engine Co[illegible]
Alternator	Manufacturer	Delco Remy
	Rating (idle/max. rpm)	36 /100
	Ratio (alt. crank/rev.)	2.65:1
	Output at idle (rpm, park)	21[illegible]
	Optional (type & rating)	36/10[illegible] RHVAC (C34)/RR. Htr. (C36)
Regulator	Type	Integral

Electrical – Starting System

Motor	Manufacturer	Delco Remy
	Current drain deg C (F)	340 Amps
	Power rating kw (hp)	1.5
Motor drive	Engagement type	Solenoid Operated Shift Lever
	Pinion engages from (front, rear)	Front

Electrical – Ignition System

Type	Electronic (std, opt,n.a.)		Electronic
	Other (specify)		--
Coil	Manufacturer		Delco Remy
	Model		High Efficiency (H.E.I) Remote Mount
	Current	Engine stopped-A	100 ma (Approximate)
		Engine idling - A	6 Amps Peak
Spark plug	Manufacturer		AC
	Model		.R43TS
	Thread (mm)		14 x 1.25
	Tightening torque Newton meters (lb. ft.)		9 - 20 (7-15)
	Gap		1.4mm (.045 in.)
	Number per cylinder		1
Distributor	Manufacturer		Delco Remy
	Model		6-89mm

Electrical – Suppression

Locations & type	Internal Alternator Capacitor, Non-Metallic High Tension Ignition Cables, Resistor Spark Plugs, Ignition Coil By-Pass Capacitor, Internal AC Blower Motor By-pass Capacitor & A/C Compressor Diode, Internal Capacitors For Cooling Fan And Windshield Wiper Motor

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Body Type	ALL

Body

Structure	Full Unitized Steel Spaceframe Construction. Roof, Body Sides And Rear Surround SMC Panels Are Adhesively Attached To Form Body Shell. Doors, Hood And Liftgate Features Double Panel Construction.
Bumper System Front - Rear	Delco Energy Absorbers, 'Adzel' Polypropylene Impact Bar, And R.R.I.M. Fascia - Front & Rear.
Anti-Corrosion Treatment	Galvanized Metals, Zinc Rich Primers And Wax Coatings Used Throughout

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)			
Hood	Material & mass		SMC
	Hinge location (front, rear)		Rear
	Type (counterbalance, prop)		Four Bar Link With A Prop Rod At The Front
	Release control (int., ext.)		Body Interior Release Of Primary Latch With Lever Operation Secondary
Trunk lid	Material & mass		
	Type (counterbalance, other)		Not Applicable
	Internal release control (elec., mech., n.a.)		
Hatch-back lid	Material & mass		
	Type (counterbalance, other)		Not Applicable
	Internal release control elec., mech., n.a.)		
Tailgate	Material & mass		SMC
	Type (drop, lift, door)		Liftgate One Piece With Fixed Glass
	Internal release control (elec., mech., n.a.)		External Key Operated Unlatch
Vent window control (crank, friction, pivot, power)		Front	
		Rear	
Window regulator type (cable, tape, flex drive, etc.)		Front	Single Arm Crank Type
		Rear	Rear Side Glass Is Flip Out Hinged At The Front Over Center Latch At Rear
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam, etc.)		Front	Buckets With Full Foam Cushions
	*	Rear	Buckets With Full Foam Cushions Flip Up Or Easy Remove For Stowage; Bench W/Full Foam Cushion Easy Removal
	*	3rd seat	Same As Rear
Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.)		Front	Bucket Full Foam
	*	Rear	Bucket Full Foam; Bench Full Foam
	*	3rd seat	Bucket Full Foam

* No Second/Third Row Seats In Cargo Van

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)

Body Type ALL

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat	Lap & Shoulder Belt		Lap & Shoulder Belt
		Second seat	Lap & Shoulder Belt	Lap Belt	Lap & Shoulder Belt
	Standard/ optional	Third seat	Lap & Shoulder Belt		Lap & Shoulder Belt
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt)	First seat			
		Second seat			
	Standard/ optional	Third seat			

Glass	SAE Ref No	
Windshield glass exposed surface area sq. cm. (sq. in.)	S1	16165.13 (2505.60)
Side glass exposed surface area sq. cm. (sq. in. - total 2- sides	S2	26774.66 (4150.08)
Backlight glass exposed surface area sq. cm. (sq. in.)	S3	6977.02 (1081.44)
Total glass exposed surface area sq. cm. (sq. in.)	S4	49916.80 (7737.12)
Windshield glass (type)		Laminated Glass
Side glass (type)		Tempered Glass
Backlight glass (type)		Tempered Glass

Headlamps

Description - sealed beam, halogen, replaceable bulb, etc.	Halogen Replaceable Bulb: 9005-9006
Shape	Rectangular 100 x 330 mm one each side
Lo-beam type (2A1, 2B1, 2C1, etc.)	9006 Bulb
Quantity	2 - 1 On Each Side (Outboard)
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	9005 Bulb
Quantity	2 - 1 On Each Side (Inboard C/C)

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Unitized Space Frame. Separate Engine/Front Suspension Cradle.

MVMA Specifications

Vehicle Line LUMINA APV

Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)

Body Type | ALL

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

Air conditioning (manual, auto, temp control)		Manual System - Optional
Clock (digital, analog)		Digital Standard, Included W/Standard Radio
Compass / thermometer		Not Available
Console (floor, overhead)		Overhead Included W/Optional Lighting Package
Defroster, elec. backlight		Optional
Electronic	Diagnostic monitor (integrated, individual)	Not Available
	Instrument cluster (list instruments)	Not Available
	Keyless entry	Not Available
	Tripminder (avg. spd. fuel)	"
	Voice alert (list items)	"
	Other	
Fuel door lock (remote, key, electric)		Remote Cable Release Standard
Lamps	Auto head on/off delay, dimming	Not Available
	Cornering	"
	Courtesy (map, reading)	Included With Optional Lighting Package
	Door lock, ignition	Interior Door Lock Switches Lighted
	Engine compartment	Included With Optional Lighting Package
	Fog	Not Available
	Glove compartment	Standard
	Trunk	Not Applicable
	Illuminated entry system (list lamps, activation)	Standard -- I/P Courtesy (2), Center Dome, Sliding Door Stepwell. Roof - Console Map Lamps (2) W/Optional Lighting Package.
	Other	Rear Area Dome Lamp Standard
Mirrors	Day / night (auto. man.)	Standard - Manual
	L.H. (remote, pwr., heated)	Cable Remote, Standard
	R.H.(convex, rmt, pwr, htd)	Standard - Convex; Cable Remote, Optional
	Visor vanity (RH/LH illum.)	RH/LH Non-Illum., Standard
Navigation system (describe)		Not Available
Prkg. brake-auto release (warn. light)		Warning Light Standard; Auto Release Not Available

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)

Engine Description
Engine Code ALL

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

Power equipment	Deck lid(release, pull down)		Not Applicable
	Door locks (manual, auto., delay system)		Optional System Provides Automatic Unlock Of All Doors Via Manual Unlock Of Front Doors W/Key Outside And Switch Inside
	Seats	2 - 4 - 6 way, etc.	6-Way Power Optional For Driver Seat
		Reclining(R.H., L.H.)	Not Available
		Memory (R.H., L.H., preset, recline)	"
		Support (lumbar, hip, thigh, etc.)	"
		Heated (R.H., L.H., other)	"
	Side windows		Optional - Front Door Windows Only
	Vent windows		Not Available
	Rear windows		Not Available
Radio systems	Antenna (location, whip, w/shield, power)		Whip, Mounted In RH Cowl Area
	Stan.	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM/FM Stereo/Clock
	Opt.		AM/FM/Stereo/Cassette AM/FM/Stereo/Digital Disc
	Speaker (number, location)		2-4 x 6 Front - Standard 2-6 in. Round - Rear - Standard No Optional Speakers Available
Roof: open air or fixed (flip-up, sliding, "T")			Manual Flip-Up Optional - Interim Introduction
Speed control device			Optional, Includes Resume Speed And Acceleration Feature
Speed warn. dev. (light, buzzer, etc.)			Not Available
Tachometer (rpm)			Not Available
Telephone system (describe)			Not Available
Theft deterrent system			Not Available

o Trailer Towing

Towing capable	Yes / No	Yes
Engine/transmission/axle	Std / Opt	Std. Only - No Options
Tow class (I, II, III)*	Std / Opt	I
Max. gross trailer wgt. (lbs.)	Std / Opt	2000 lbs. (Limited By Max. GCW Of 6050 lbs.)
Max. trailer tongue load (lbs.)	Std / Opt	200 lbs.
Towing package available	Yes / No	No

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

MVMA Specifications

Vehicle Line LUMINA APV

Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for definitions

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

Body Type		ALL
Width	**SAE Ref. No.**	
Tread (front)	W101	1491.4 (58.7)
Tread (rear)	W102	1547.0 (60.9)
Vehicle width	W103	1878 (73.9)
Body width at Sg RP (front)	W117	1874 (73.8)
Vehicle width (front doors open)	W120	3364 (132.4)
Vehicle width (rear doors open)	W121	Not Required With Sliding Door
Tumble-home (deg.)	W122	19.5
Outside mirror width	W410	2116 (83.3)
Length		
Wheelbase	L101	2768 (109.8)
Vehicle length	L103	4933 (194.2)
Overhang (front)	L104	1079 (42.5)
Overhang (rear)	L105	1066 (42.0)
Upper structure length	L123	--
Rear wheel C/L 'X' coordinate	L127	--
Height **		
Passenger distribution (front/rear)	PD1,2,3	**
Trunk/cargo load		**
Vehicle height	H101	1657.0 (65.2)
Cowl point to ground	H114	1083.2 (42.6)
Deck point to ground	H138	No Deck
Rocker panel-front to ground	H112	273.5 (10.8)
Rocker panel-rear to ground	H111	288 (11.3)
Windshield slope angle (deg.)	H122	58
Backlight slope angle (deg.)	H121	22
Ground Clearance **		
Front bumper to ground	H102	228 (9.0)
Rear bumper to ground	H104	324 (12.8)
Bumper to ground front at curb mass (wt.)	H103	Not Available
Bumper to ground rear at curb mass (wt.)	H105	"
Angle of approach (deg.)	H106	"
Angle of departure (deg.)	H107	"
Ramp breakover angle (deg.)	H147	"
Axle differential to ground (front/rear)	H153	"
Min. running ground clearance	H156	"
Location of min. run. grd. clear.		"

** All Vehicle Height And Ground Clearance 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.

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)
Vehicle Dimensions

See Key Sheets for Definitions

Body Type	PASSENGER VAN	CARGO VAN

o Front Compartment

	SAE Ref. No.	
SgRP front, "X" coordinate	L31	Height = 912 (35.9), Fore & Aft = 3077.5 (121.16)
Effective head room	H61	906 (35.7)
Max. eff. leg room (accelerator)	L34	1033 (40.7)
SgRP to heel point	H30	390 (15.4)
SgRP to heel point	L53	762 (30.0)
Back angle (deg.)	L40	24.0
Hip angle (deg.)	L42	101.5
Knee angle (deg.)	L44	118.0
Foot angle (deg.)	L46	87.0
Design H-point front travel	L17	181 (7.1)
Normal driving & riding seat track trvl.	L23	
Shoulder room	W3	1540 (60.6)
Hip room	W5	1410 (55.5)
*** Upper body opening to ground	H50	1535 (60.4)
Steering wheel maximum diameter*	W9	381 (15.0)
Steering wheel angle (deg.)	H18	28
Accel. heel pt. to steer. whl. cntr	L11	395 (15.6)
Accel. heel pt. to steer. whl. cntr	H17	851 (33.5)
Undepressed floor covering thickness	H67	10.5 (0.4)

o Rear Compartment

		Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt. (SgRP) mm Forward And mm Upward of Rearmost Position.
SgRP point couple distance	L50	901.5 (35.5) Not Applicable
Effective head room	H63	903 (35.6) "
Min. effective leg room	L51	841.5 (33.1) "
SgRP (second to heel)	H31	293 (11.5) "
Knee clearance	L48	98 (3.9) "
Shoulder room	W4	1582 (62.3) "
Hip room	W6	1402 (55.2) "
*** Upper body opening to ground	H51	1517.5 (59.7) "
Back angle (deg.)	L41	24.0 "
Hip angle (deg.)	L43	82.0 "
Knee angle (deg.)	L45	79.5 "
Foot angle (deg.)	L47	119.5 "
Depressed floor covering thickness	H73	10 (0.4) "

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	
*** Liftover height	H195	570 (22.4)

Interior Volumes (EPA Classification) (NOT APPLICABLE)

Vehicle class		
Interior volume index (cu. ft.)**		
Trunk / cargo index (cu. ft.)		

* See page 14.
** Includes passenger and trunk / cargo index – see definition page 32.

*** EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

METRIC (U.S. Customary)
Vehicle Dimensions

See Key Sheets for Definitions

Body Type		PASSENGER VAN	CARGO VAN
Station Wagon – Third Seat	**SAE Ref. No.**		
Seat facing direction	SD1	FWD	Not Applicable
SgRP couple distance	L65	792 (31.2)	"
Shoulder room	W65	1580 (62.2)	"
Hip Room	W66	1060 (41.7)	"
Effective leg room	L66	864.5 (34.0)	"
Effective head room	H66	863 (33.98)	"
SgRP to heel point	H67	294.5 (11.6)	"
Knee clearance	L67	2.5 (0.10)	"
Back angle (deg.)	L68	24.0	"
Hip angle (deg.)	L69	83.5	"
Knee angle (deg.)	L90	84.0	"
Foot angle (deg.)	L91	122.0	"
Station Wagon – Cargo Space			
Cargo length (open front)	L200	Not Required For Lift Gate	
Cargo length (open second)	L201	Not Required For Lift Gate	
Cargo length (closed front)	L202	2110 (83.1)	
Cargo length (closed second)	L203	1351 (53.2)	
Cargo length at belt (front)	L204	1855 (73.0)	
Cargo length at belt (second)	L205	1025 (40.35)	
Cargo width (wheelhouse)	W201	1022 (40.2)	1079 (42.5)
Rear opening width at floor	W203	1314 (51.7)	
Opening width at belt	W204	1282 (50.5)	
Min. rear opening width above belt	W205	1092 (43.0)	
Cargo height	H201	1150 (45.3)	
Rear opening height	H202	1050 (41.3)	
*Tailgate to ground height	H250	Not Required For Lift Gate	
Front seat back to load floor height	H197	710 (28.0)	
Cargo volume index cu. m. (cu. ft.)	V2	3188 L (112.6 cu.ft.)	3267 L (115.4 cu.ft.)
Hidden cargo vol. index cu. m. (cu. ft.)	V4		
Cargo volume index-rear of 2-seat	V10	(64.9) Max.	Not Applicable
Hatchback – Cargo Space			
Cargo length at front seatback height	L208	1790 (70.5)	
Cargo length at floor (front)	L209	2107 (83.0)	
Cargo length at second seatback height	L210	1002 (39.4)	
Cargo length at floor (second)	L211	557 (21.9)	
Front seatback to load floor height	H197	720 (28.3)	
Second seatback to load floor height	H198	695 (27.4)	
Cargo volume index cu. m. (cu. ft.)	V3		
Hidden cargo vol. index cu. m. (cu. ft.)	V4		
Cargo volume index-rear of 2-seat	V11		

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

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line LUMINA APV
Model Year 1991 Issued 8-90 Revised(*)

METRIC (U.S. Customary)

Body Type	ALL

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
Front		X - Fiducial Mark To Vertical Zero Grid Line - Front Measured Horizontally, From The Zero Grid Line To The Front Fiducial Mark Located On Top Of The Front Seat Adjuster Mounting Bolt Y - Fiducial Mark To Centerline Of Car - Front, Width Measurement Made From Centerline Car To Fiducial Mark Located On Top Of The front Seat Adjuster Mounting Bolt. Z - Fiducial Mark To Horizontal Zero Grid Line - Front, Measured Vertically From Zero Grid Line To To Front Fiducial Mark Located On Top Of The Front Seat Adjuster Mounting Bolt.
Rear		X - Fiducial Mark To Vertical Zero Grid Line - Rear, Measured Horizontally From The Zero 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 Zero Grid Line - Rear, Measured Vertically From The Zero Grid Line To Rear Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal).
Fiducial Mark Number		
Front	W21*	Not Available
	L54*	
	H81*	
	H161*	
***	H183*	
Rear	W22*	Not Available
	L55*	
	H82*	
	H162*	
***	H184*	

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

*** EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

o MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) 9-90

Code / Model	VEHICLE MASS (weight)					% PASS MASS DISTRIBUTION			
	CURB MASS, kg. (lb.)*			SHIPPING MASS kg (lb) **	ETWC** Code	PASS IN FRONT		PASS IN REAR	
	Front	Rear	Total			Front	Rear	Front	Rear
LUMINA APV (1UM05) 3-Dr. Cargo Van	923.1 (2035)	571.3 (1260)	1494.4 (3295)	1452.8 (3203)	1631.3 (3625)	50.9	49.1	-	
(1UM06) 3-Door Van	970.4 (2139)	599.8 (1323)	1570.2 (3462)	1528.6 (3370)	1743.8 (3875)	50.9	49.1	22.9	77.1

* Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.
** ETWC - Equivalent Test Weight Class - basis for U.S. Environmental Protection Agency emission certifications. Refer to ETWC code legend below for test weight class.

ETWC LEGEND

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

** Shipping Mass (weight) = Curb Weight Less:
41.6 (91.7)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*) _____

Code	Equipment	Optional Equipment Differential Mass (weight)* MASS, kg. (lb.) Front	Rear	Total	Remarks Restrictions, Requirements
AB3	6-Pass. Seating	-2.8 (-6.2)	27.6 (61.3)	24.8 (55.1)	
AB4	5-Pass. Seating	2.0 (4.4)	8.0 (17.8)	10.0 (22.2)	
AB5	EEC. Dr. Lock	1.0 (2.2)	1.4 (3.1)	2.4 (5.3)	
AG9	6-Way Power Adj.	1.6 (3.6)	1.1 (2.4)	2.7 (6.0)	
A31	Power Window	1.4 (3.1)	.6 (1.3)	2.0 (4.4)	
B33	RR Floor Mat	.8 (1.7)	1.0 (2.2)	1.8 (4.0)	With AB4/ZP5
B33	RR Floor Mat	1.0 (2.2)	2.6 (5.8)	3.6 (8.0)	With AB3/ZP7
C34	RHVAC	7.6 (16.8)	16.6 (36.6)	24.2 (53.4)	
C49	RR Window Defogger	-.1 (-.2)	.4 (.8)	.3 (.6)	
C57	Aux Air (Vent)	-.4 (-.9)	4.2 (9.3)	3.8 (8.4)	
C67	Air Conditioning	23.0 (51.0)	-2.6 (-5.8)	20.4 (45.2)	
D68	O/S Mirror LH & RH	.2 (.4)	0 (0)	.2 (.4)	

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

MVMA Specifications

METRIC (U.S. Customary)

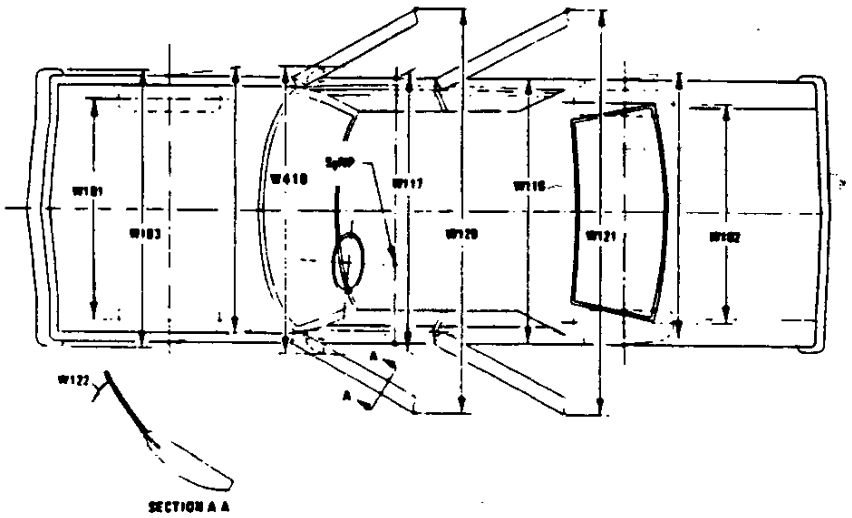
Vehicle Line LUMINA APV
Model Year 1991 Issued 6-90 Revised(*)

Code	Equipment	Optional Equipment Differential Mass (weight)* MASS, kg. (lb.) Front	Rear	Total	Remarks Restrictions, Requirements
G67	Auto Level Control	.2 (.4)	5.6 (12.4)	5.8 (12.8)	
K34	Cruise Control	1.0 (2.2)	.4 (.8)	1.4 (3.1)	
PD7	14 x 6.5 Cast Alum. Wheel	.6 (1.3)	.6 (1.3)	1.2 (2.6)	
PH3	15 x 6 Aluminum Wheel	3.2 (7.1)	3.2 (7.1)	6.4 (14.2)	
PO2	Trim Discs	.2 (.4)	.2 (.4)	.4 (.8)	
TR9	Lamp Group	1.0 (2.2)	0 (0)	1.0 (2.2)	
UM6	AM/FM Stereo	.5 (1.1)	.2 (.4)	.7 (1.5)	
U1C	AM/FM; Seek & Scan	.7 (1.6)	.2 (.4)	.9 (2.0)	
VK3	Lic. Plt. - Frt. Mtg. Pkg.	.6 (1.3)	-.2 (-.4)	.4 (.9)	
V54	Luggage Rack/Spoiler	.6 (1.3)	8.6 (19.0)	9.2 (20.3)	
XMR	15" Tires Front	.6 (1.7)	0 (0)	.6 (1.7)	
YMR	15" Tires Rear	0 (0)	.6 (1.7)	.6 (1.7)	

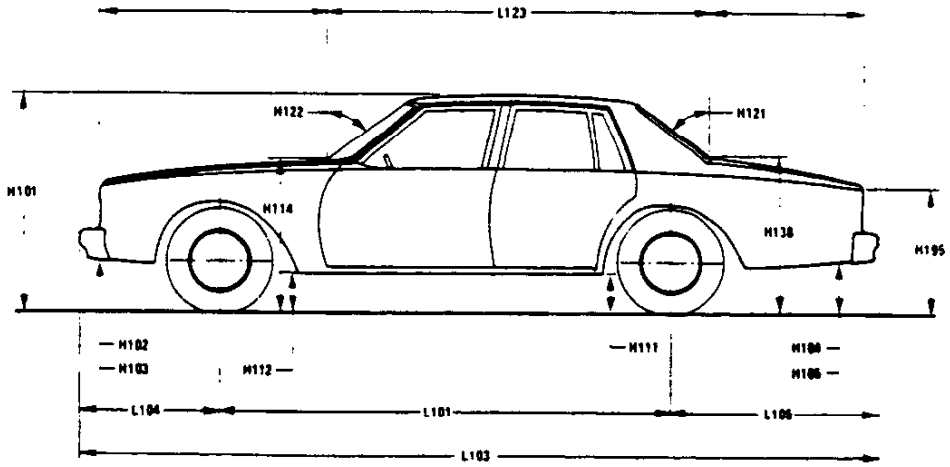
* Also see Engine - General Section for dressed engine mass (weight).

Exterior Vehicle And Body Dimensions – Key Sheet

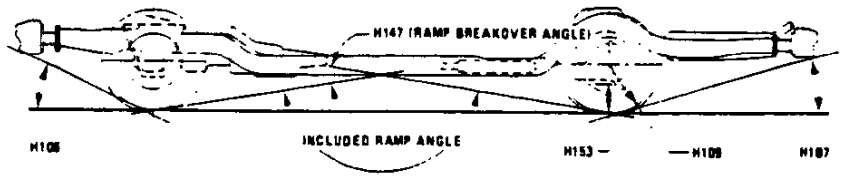
Exterior Width



Exterior Length & Height



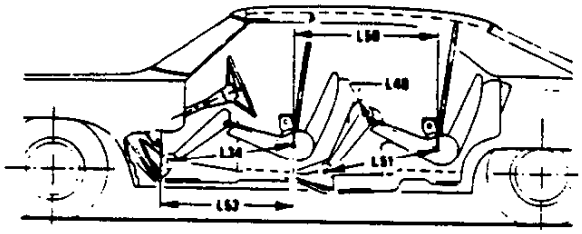
Exterior Ground Clearance

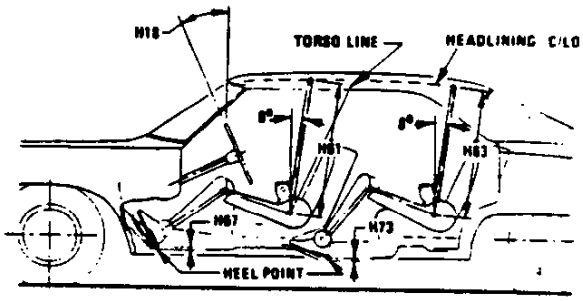


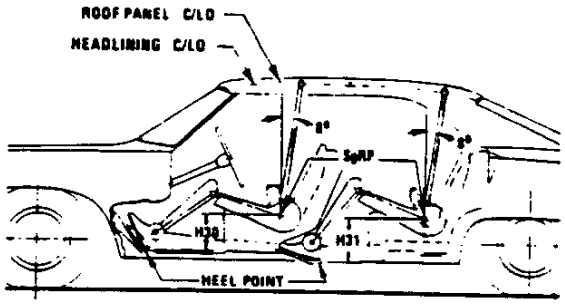
MVMA Specifications Form

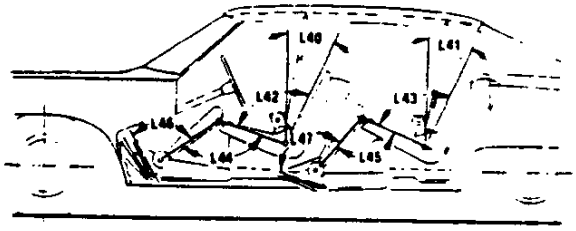
METRIC (U.S. Customary)

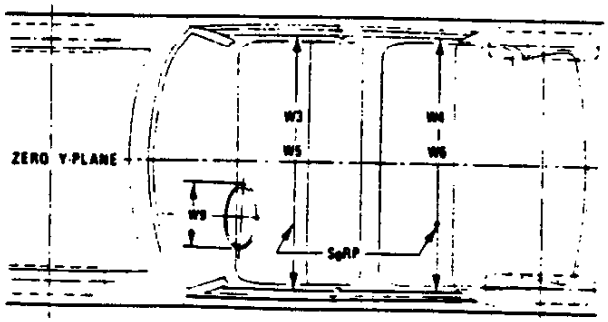
Interior Vehicle And Body Dimensions – Key Sheet

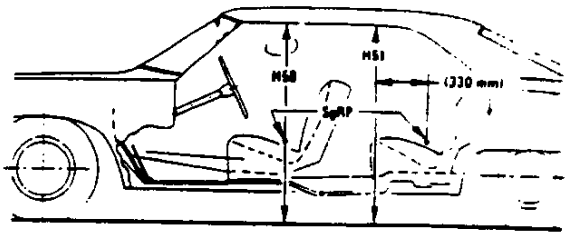






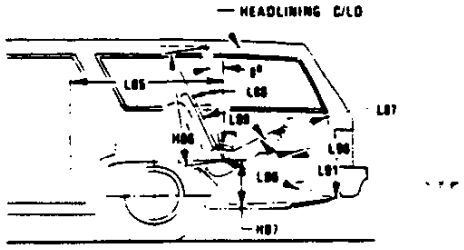


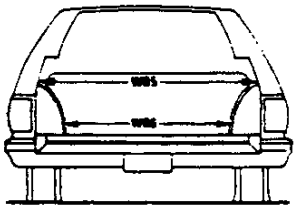




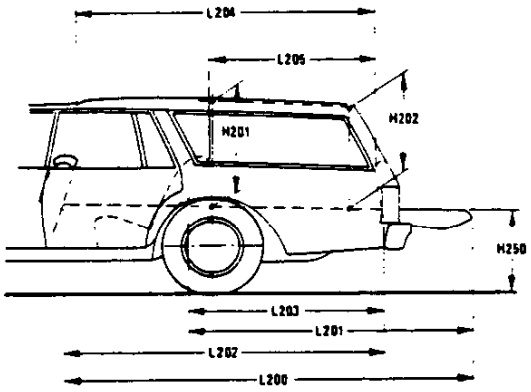
Interior Vehicle And Body Dimensions – Key Sheet

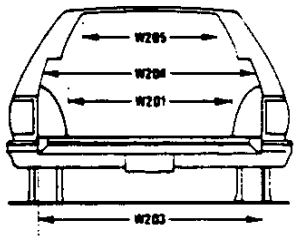
Third Seat



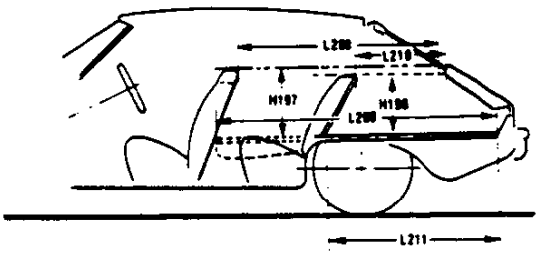


Cargo Space





Station Wagon



Hatchback

Exterior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Seating Reference Point

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

Width Dimensions

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

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

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

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

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

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

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

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

Length Dimensions

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

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

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

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

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

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

Height Dimensions

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

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

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

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

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

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

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

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

Ground Clearance Dimensions

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

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

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

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

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

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

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

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

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

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Glass Areas

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

Fiducial Mark Dimensions

Fiducial Mark – Number 1

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

Fiducial Mark – Number 2

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

Front Compartment Dimensions

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

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

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

L31 SgRP – FRONT. "X" COORDINATED.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Rear Compartment Dimensions

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

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

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

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

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

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

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

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

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

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

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

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

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

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Luggage Compartment Dimensions

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

Interior Volumes (EPA Classification)

The Interior Volume Index is listed for each body style except two seaters. The Interior Volume Index estiamtes 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 to the SgRP – third.

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

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

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

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

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

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

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

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

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

H87 SgRP – THIRD TO HEEL POINT.

SD1 SEAT FACING DIRECTION – THIRD.

Station Wagon – Cargo Space Dimensions

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

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

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

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

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

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

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

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

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

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

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:

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

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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

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

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

Measured in mm:

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

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

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

Measured in mm:

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

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

V10 STATION WAGON CARGO VOLUME INDEX.
Measured in inches:

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

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 electronically adjusted seats, see the manufacturer's specifications for Design "H" Point).

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

L209 CARGO LENGTH AT FLOOR – FRONT – 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 "X" 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 seatback to the undepressed floor covering.

V3 HATCHBACK.
Measured in inches:

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

Measured in mm:

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

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

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

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

Measured in mm:

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

MVMA Specifications

METRIC (U.S. Customary)

Index

MVMA Specifications

METRIC (U.S. Customary)
SUPPLEMENTAL PAGE

Vehicle Line _____
Model Year _____ Issued _____ Revised (•) _____