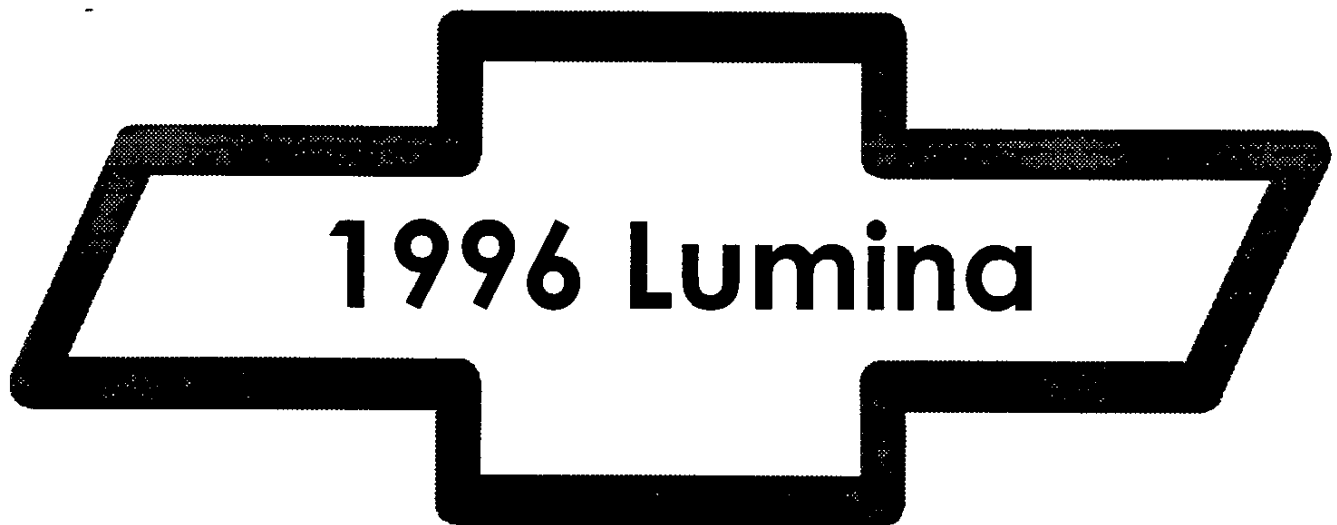


GENUINE CHEVROLET





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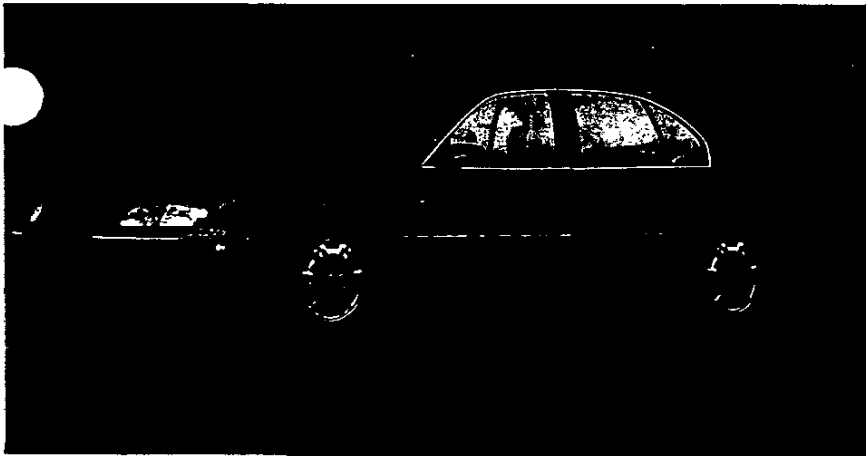
Dealer Order Guide

Lumina



Feature Vehicle

for 1996 is the Lumina LS Sedan. This well-equipped, contemporary sedan offers such standard features as 4-wheel anti-lock brakes, power windows and a 4-wheel independent suspension.



Focus Vehicle

for 1996 is the Lumina Sedan. This attractive family sedan, when equipped with the recommended PEG 1 (ISA), represents the best opportunity for Lumina high-volume sales at your dealership.

S.P.A.C.E. BLUE = New '96 feature.



SAFETY

- DRIVER AND FRONT-PASSENGER AIR BAGS — help reduce the chance of injury in certain moderate to severe frontal collisions. Always wear safety belts, even with air bags.
- OPTIONAL 4-WHEEL ANTI-LOCK BRAKE SYSTEM (ABS) STANDARD ON LS SEDAN — helps reduce wheel lockup and helps driver maintain steering control during severe braking, even on slippery surfaces.
- SAFETY-CAGE CONSTRUCTION — surrounds the entire passenger compartment. Lumina meets 1997 Federal side-impact standards today.
- PASS-KEY II THEFT-DETERRENT SYSTEM — consists of a small, resistance-coded pellet in the ignition key, which must match a measurement circuit in the steering column to enable the engine to start.

- CHILD SECURITY REAR-DOOR LOCKS — manually lock to prevent a child from opening rear doors from the inside.
- AVAILABLE INTEGRAL REAR CHILD SAFETY SEAT — helps protect child in back seat in the event of an accident.



PERFORMANCE

- 3100 V6 ENGINE WITH SFI AND 4-SPEED ELECTRONICALLY CONTROLLED AUTOMATIC TRANSMISSION — delivers smooth, effortless power for passing and merging. Shifts are virtually seamless.
- PLATINUM-TIP SPARK PLUGS — designed to last up to 100,000 miles.*
- COMPUTER-CALIBRATED FOUR-WHEEL INDEPENDENT SUSPENSION — provides an excellent combination of ride and response.
- AVAILABLE ENHANCED 3.4 LITER DOHC V6 (LS MODEL ONLY) — this four-valves-per-cylinder engine delivers 215 hp at 5200 rpm, for truly impressive performance.
- WORLD-CLASS BODY STRUCTURE — provides an exceptionally smooth ride and a feeling of a solid, stable and well-built automobile.



APPEARANCE

- BASE-COAT/CLEAR-COAT PAINT — not only provides a more durable, lustrous finish, but also reduces the severity of water-spotting and etching from acid rain.
- THREE NEW EXTERIOR COLORS — Granite Metallic, Dark Carmine Red Metallic and Medium Lichen Green Metallic.
- TWO-SIDE-GALVANIZED STEEL — on all exterior body panels (except the roof), for excellent protection against corrosion.
- IMPACT-ABSORBING 5-MPH FRONT AND REAR BUMPERS — with resilient body-color covers to resist minor dents and dings.
- BOLT-ON FULL WHEEL COVERS — add a distinctive styling touch, and reduce chance of loss or theft.



COMFORT AND CONVENIENCE

- TILT-WHEEL™ ADJUSTABLE STEERING COLUMN — a "more-than-expected" standard feature.
- OPTIONAL POWER WINDOWS WITH DRIVER'S EXPRESS-DOWN FEATURE AND POWER LOCKOUT FEATURE — allow easy operation of all windows and one-touch operation to lower driver's window (standard on Lumina LS Sedan).
- LONG-LIFE COOLANT — increases life of engine coolant.
- OPTIONAL INDIVIDUAL DRIVER AND FRONT-PASSENGER TEMPERATURE CONTROL — creates more comfortable environment for driver and front-seat passenger.
- OPTIONAL LEATHER SEATS (LS MODEL ONLY) — increases interior comfort and style.
- INTERMITTENT WIPERS — allow driver to match wiper speed to weather conditions.
- AMPLE INTERIOR ROOM AND TRUNK SPACE — more than Honda Accord or Toyota Camry Sedan.



EASY TO-OWN

- SCOTCHGARD™ FABRIC PROTECTOR — on seats, door panels, carpeting and floor mats. Resists stains and makes cleanup easy.
- LOW-OIL-LEVEL INDICATOR — warns driver of low-oil level, to help prevent engine damage.
- DEXRON III AUTOMATIC TRANSMISSION FLUID — never needs changing under normal driving conditions.
- STAINLESS-STEEL EXHAUST SYSTEM — includes all pipes, catalytic converter and muffler to resist corrosion, for a long service life.
- LONG-LIFE COOLANT — increases life of engine coolant.
- OBD II — makes diagnostics easier.
- LUBED-FOR-LIFE SUSPENSION — sealed components never require lubrication.
- GENUINE CUSTOMER CARE — a no-deductible, 3-year/36,000-mile limited warranty, 24-hour assistance via toll-free hot line, and courtesy transportation if your vehicle ever needs warranty work, at participating dealers.

*Maintenance needs vary with use and driving conditions.

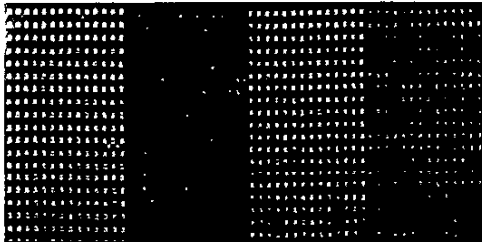
Lumina



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Trim Color/Seat Style Availability



Cloth available in Neutral, Medium Blue, Medium Gray and Ruby Red.



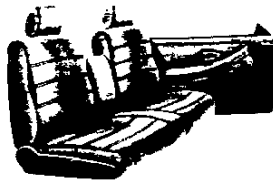
Custom Cloth available in Neutral, Medium Blue, Medium Gray and Ruby Red.



Custom Cloth available in Neutral, Medium Blue, Medium Gray and Ruby Red.



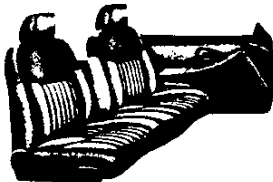
Leather available in Neutral and Medium Gray.



Cloth 60/40 seats
(standard on Lumina Sedan).



Custom Cloth
60/40 seats
(standard on Lumina LS, optional
on Lumina Sedan).



Custom Cloth 60/40 front bucket seats
with storage console and cup holder
(optional on Lumina LS).



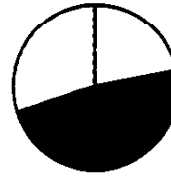
Leather 60/40 front seats
(optional on Lumina LS).



Leather front bucket seats with
storage console and cup holder
(optional on Lumina LS).

Most Popular Exterior Color by Percentage

Clockwise below are the anticipated four most popular Lumina colors for 1996, based on national sales volume. They are listed for reference only. To identify the top-selling colors in your area, by model, use the Retail Sales Analysis (RSA).



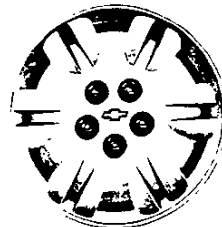
Bright White	22%
Sherwood Green Metallic	19%
Medium Adriatic Blue Metallic	17%
Dark Carmine Red Metallic	12%
Other colors	30%

Most Popular Exterior Colors with Corresponding Interior Color Availability

Interior Material Colors

	Neutral	Medium Blue	Medium Gray	Ruby Red
Exterior Colors				
Bright White	■	■	■	■
Medium Adriatic Blue Metallic		■	■	
Dark Carmine Red Metallic	■		■	■
Sherwood Green Metallic			■	

Wheels



Lumina standard 15" silver bolt-on
wheel cover. Also available in
chrome.



Lumina and Lumina LS optional
16" aluminum wheel (requires
Goodyear P225/60R-16 tires).



Lumina LS standard 15" Deluxe
silver bolt-on full wheel cover.

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Lumina

Feature Vehicle

Lumina LS Sedan

Feature vehicle for 1996 is the Lumina LS Sedan. It gives you all the contemporary styling and roomy interior of the Lumina Sedan, plus a long list of desirable features, including:

- Four-Wheel Anti-Lock Brake System (ABS) — helps reduce wheel lockup and helps driver maintain steering control during severe braking, even on slippery surfaces
- Available 3.4 Liter DOHC V6
- Choice of Custom Cloth or Leather 60/40 Seat with Center Storage Armrest or Custom Cloth or Leather Front Bucket Seats and Center Console and Cup Holders
- Power Windows with Driver's Express-Down Feature and Power Window Lockout
- Tachometer and Trip Odometer
- Dual Body-Color Twin Remote Electric Mirrors
- Covered, Illuminated Passenger-Side Visor Mirror
- Child Safety Features include standard Security Rear-Door Locks, an available Integral Child Safety Seat, a Power Window Lock-Out, and Rear-Seat Safety Belt Child Comfort Guides.

Focus Vehicle

Lumina Sedan

Ordering Recommendations:
Recommended Lumina Sedan content, based on anticipated national sales volume, is listed below to assist your dealership in ordering.

Lumina Sedan with Preferred Equipment Group 1SA includes standard equipment only (see page 4 for details).

- Evaluate option on an as-needed basis:
- Rear-Window Defogger (C49)
 - Anti-Lock Brake System (1M4)
 - Integral Child Safety Seat (AN2).

Colors: Sherwood Green Metallic, Dark Carmine Red Metallic, White, Medium Adriatic Blue Metallic.

NOTE: Model, PEG and optional content may vary in your locality. Use the Retail Sales Analysis (RSA) to verify or select your dealership's Lumina Focus vehicle content.

Product Positioning

Lumina is positioned as the smart, contemporary, well-equipped sedan designed, engineered and built to impressive standards of quality. The 1996 Chevy Lumina is a value you can always depend on.

Competitive Vehicles

- Ford Taurus
- Toyota Camry
- Honda Accord
- Dodge Intrepid.

Lumina

Buyer Demographics

- Lumina Sedan and LS Sedan: Median age is 49 years.
- Median household income of \$44,000.
- Half of Sedan drivers are female.
- 72% of Sedan buyers are married.



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Dealer Order Guide

Lumina

Feature Availability

	LUMINA SEDAN	LUMINA LS SEDAN
Air Bag — Driver and Front-Passenger	S	S
Air Conditioning — with R-134a	S	S
Brakes — 4-Wheel Anti-Lock	0	S ¹
— Power, Front Disc/Rear Drum	S	NA
Child Safety Features — Child Security Rear-Door Locks	S	S
— Integral Child Seat	0 ²	0 ²
— Power Window Lock-Out	0	S
— Rear-Seat Safety Belt Child Comfort Guides	S	S
Convenience Net — Luggage-Area	0	S
Defoggers — Rear-Window	0	0
— Side-Window	S	S
Door Locks — Power	S	S
Engine — 3100 V6 with SFI	S	S
— 3.4 Liter V6 with SFI	NA	0
Exhaust System — Stainless-Steel	S	S
Floor Mats — Carpeted, Front and Rear, Color-Keyed	0	0
Lights, Interior — Sustained Illumination	S	S
Low-Oil-Level Indicator	S	S
Map Pockets — Front Door	S	S
Mirrors — Dual Body-Color Twin Remote Electric	0	S
PASS-Key II Theft-Deterrent System	S	S
Remote Keyless Entry System	0	0
Scotchgard™ Fabric Protector	S	S
Seats — 6-Way Power, Driver's	0	0
— 60/40 Cloth, Front	S	NA
— 60/40 Custom Cloth, Front	0	S
— Custom Cloth Bucket with Console, Front	NA	0
— 60/40 Leather, Front	NA	0
— Leather Bucket with Console, Front	NA	0
— Center Armrest, Rear	0	S
Speed Control — Electronic with Resume Speed	0	0
Steering Column — Tilt-Wheel™ Adjustable	S	S
Stereo — AM/FM	S	NA
— AM/FM w/Cassette Tape Player	0	S
— AM/FM w/CD Player	0	0
Suspension — 4-Wheel Independent	S	S
Temperature Controls — Driver and Front-Passenger	0	0
Tires — P205/70R-15 Blackwall Touring	S	S
— P225/60R-16 Blackwall Touring	0	0
— P225/60R-16 Blackwall Eagle RS-A	NA	0
Transmission — 4-Speed Electronically Controlled Automatic	S	S
Trunk — Power Opener	0	0
Wheels — 16" Aluminum	0	0
Wheel Covers — 15" Bolt-On	S	NA
— 15" Deluxe Bolt-On	NA	S
Windows — Power with Driver's Express-Down Feature	0	S
Wipers — Intermittent Variable	S	S

S—Standard; 0—Optional (some options may be available only as part of a Preferred Equipment Group. See your Order Guide for feature availability).
NA—Not available. 1—Front disc/rear disc with 3.4 Liter engine. 2—Requires Custom Cloth interior.

Additional Information on Significant Features

- The 3100 V6 engine with SFI (L82), standard in Lumina and Lumina LS, boasts 160 horsepower for spirited performance. Sequential-Port Fuel Injection (SFI) precisely matches fuel delivery to each cylinder's in-take stroke for a smoother idle, lower emissions and better driveability. An additional feature includes a "high-resolution" 24X ignition system, which allows finer calibration below 1200 rpm, a critical range for both driveability and emissions control. Roller valve lifters reduce valve train friction, contributing to the 3100 V6's impressive fuel economy.
- Lumina has a 4-wheel independent suspension which provides a comfortable ride with responsive, predictable handling. Tuned to take advantage of the rigid body structure, it features MacPherson Struts with front and rear stabilizer bars. Variable-rate coil springs help provide a smooth, comfortable ride, and adjust to load conditions.
- The Lumina features a truly world-class body structure for impressive rigidity, minimized squeaks and rattles and outstanding quiet.
- New long-life coolant, Dexron III transmission fluid and platinum-tip spark greatly reduce owner maintenance for both engines.

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LUMINA

REVISED: 1-29-96

1996 ORDER GUIDE

LUMINA
Page 1

Prices Shown Are Manufacturer's Suggested Retail Prices (MSRP) At The Time Of Publication. These Prices Are To Be Used Only As An Aid To Inventory Management Since MSRP Figures Change Periodically. The Vehicle Price Schedule Is The Official Pricing Documentation Of Chevrolet Motor Division And Should Be Used In Discussing Vehicle Prices With Potential Buyers. The Model Prices Shown In The Order Guide Include The Destination Freight Charges.

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LUMINA EQUIPMENT SUMMARY

STANDARD INTERIOR FEATURES		1WL69	1WN69
AIR CONDITIONING:		S	S
GAGES:	TACHOMETER	--	S
	TRIP ODOMETER	S	S
GLASS:	TINTED	S	S
LIGHTING:	AUXILIARY	S	S
	INTERIOR, SUSTAINED ILLUMINATION	S	S
LOCKS:	CHILD SECURITY, REAR	S	S
	POWER	S	S
PASS KEY:	THEFT DETERRENT SYSTEM	S	S
RADIO:	ELECTRONICALLY TUNED AM/FM STEREO RADIO W/SEEK-SCAN, DIGITAL CLOCK, AND EXTENDED RANGE FRONT AND REAR SPEAKERS	S	--
	ELECTRONICALLY TUNED AM/FM STEREO RADIO W/SEEK-SCAN, W/AUTOMATIC TONE CONTROL, DIGITAL CLOCK, CASSETTE TAPE, THEFT LOCK AND SPEED COMPENSATED VOLUME (INCLS PREMIUM FRONT AND REAR COAXIAL SPEAKERS	--	S
RESTRAINT SYSTEM:	DRIVER AND PASSENGER SIDE AIR BAG	S	S
SCOTCHGARD:	FABRIC PROTECTOR INCLUDES SEATS, DOOR TRIM AND FLOOR COVERING	S	S
STEERING WHEEL:	ADJUSTABLE STEERING COLUMN	S	S
WINDOWS:	POWER WITH DRIVER'S SIDE EXPRESS DOWN AND POWER WINDOW LOCKOUT	--	S

STANDARD EXTERIOR FEATURES

PAINT:	ACCENT PAINT, GRAY LOWER	--	S
	BASE COAT/CLEAR COAT	S	S
TIRES:	P205/70R-15 BLACKWALL TOURING	S	S
CONVENIENCE NET:	CARGO AREA	--	S
WIPERS:	INTERMITTENT	S	S

STANDARD CHASSIS FEATURES

BRAKES:	POWER FRONT DISC, REAR DRUM	S	--
	4-WHEEL ANTI-LOCK FRONT DISC, REAR DRUM	--	S
ENGINE:	3.1 LITER V6 SFI	S	S
EXHAUST SYS:	STAINLESS STEEL	S	S
FUEL TANK:	16.6 GALLON CAPACITY (w/L82 ENG)	S	S
	17.1 GALLON CAPACITY (w/LQ1 ENG)	S	S
STABILIZER BAR:	FRONT AND REAR	S	S
STEERING:	POWER	S	S
SUSPENSION:	4-WHEEL INDEPENDENT	S	S
TRANSMISSION:	4-SPEED AUTOMATIC, ELECTRONICALLY CONTROLLED	S	S



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**LUMINA
TRIM DEFINITION & OPTION SUMMARY**

INTERIOR TRIM

1WL69 1WN69

MIRRORS:	VISOR, LH AND RH	S	S
	VISOR RH ILLUMINATED	--	S
SEATS:	CLOTH 60/40 SEAT WITH CENTER STORAGE ARMREST WITH CUPHOLDER AND 4-WAY MANUAL DRIVER'S SEAT ADJUSTER AND FIXED REAR BENCH SEAT	S	--
	CUSTOM CLOTH 60/40 SEAT WITH CENTRAL ARMREST WITH CUPHOLDER, 4-WAY MANUAL DRIVER'S SEAT ADJUSTER AND FIXED REAR BENCH SEAT	S	S
STORAGE POCKET:	SEAT BACK STORAGE POCKET	S	S

EXTERIOR TRIM

MIRRORS:	DUAL BLACK SPORT (LH REMOTE)	S	--
	DUAL BODY COLOR TWIN REMOTE, ELECTRIC	--	S
MOLDINGS:	BODYSIDE, COLOR- KEYED	S	S
WHEELS:	15" DELUXE BOLT-ON COVERS (SILVER)	--	S
	15" BOLT-ON COVERS (SILVER)	S	--



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LUMINA SEDAN

Model 1WL69 Lumina Sedan

*Includes Destination and Handling Charges

MUST SPECIFY: EMISSION, ENGINE, TRANSMISSION MUST ORDER ONE GROUP -- NO DELETIONS ALLOWED

N.C.	Base Preferred Equipment Group (Refer Standard Equipment Summary Page)	1SA	1SB
		x	x
Preferred Equipment Group 1			
	Floor Mats, Front, Carpeted, Color-Keyed		x
	Floor Mats, Rear, Carpeted, Color-Keyed		x
	Cargo Retaining Net, Luggage Area		x
	Mirrors: Twin Remote, Electric		x
	Power Trunk Opener		x
	Power Windows with Driver's Express Down and Power Lockout		x
	Speed Control: Electronic, w/Resume Speed		x

ADDITIONAL OPTIONS

N.C.	R8S	ACKNOWLEDGEMENTS	V.P.S.	UL0	RADIO EQUIPMENT:
V.P.S.	R8T	Multiple Order Numbers			Electronically Tuned AM /FM
N.C.	VK3	Preliminary Invoice			Stereo Radio w/Seek-Scan,
	JM4	BRACKET: License Plate, Front			w/Automatic Tone Control,
		BRAKES: 4-Wheel Anti-Lock			Digital Clock, Cassette Tape, Theft
		DEFOGGER:(One of the Following			Lock and Speed Compensated
		Options Must Be Specified)			Volume (Includes Premium Front
		Rear Window: Electric			and Rear Coaxial Speakers)
N.C.	C49	Rear Window not Desired	V.P.S.	UN0	SEATS:
	R9W				WG1 Power (Driver's Side Only)
N.C.	FE9	EMISSIONS			AN2 Child, Integral (Reqs **C Trim)
N.C.	NG1	Federal Emission Requirement			SEAT TRIM:
		Massachusetts/NY Emission			N.C. AM6 Cloth 60/40 (Base)
		Requirement			AM6 Custom Cloth 60/40
N.C.	YF5	California Emission Requirement			K34 SPEED CONTROL: Electronic
N.C.	NB8	California Emission Override			w/Resume Speed (Incl w/1SB)
		(Reqs FE9 Emission)			CF5 SUNROOF: Sliding, Electric (Reqs
N.C.	NC7	Federal Emission Override (Reqs			1SB) (Incls RH Illuminated Mirror)
		YF5/NG1 Emission)			CJ3 TEMPERATURE CONTROLS:
		FLOOR MATS:			Driver and Passenger
	B34	Front, Carpeted, Color-Keyed			QNX TIRES: P225/60 R16 B/W Touring
		(Incl w/1SB)			Radial (Reqs NW0 Wheels)
	B35	Rear, Carpeted, Color-Keyed			TRANSMISSION
		(Incl w/1SB)			N.C. MX0 4-Speed Automatic Electronic (Base)
	K05	HEATER: Engine Block			WHEELS/COVERS
		ENGINE			PB1 15" Bolt-on Full Wheel Cover (Chrome)
N.C.	L82	3.1 Liter SFI V6 (Base)			NW0 16" Aluminum Wheel (Reqs QNX Tires)
	AU0	KEYLESS ENTRY: Remote (Reqs			
		1SB)			



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LUMINA SEDAN

COLOR AND TRIM SELECTION

PLEASE NOTE: The Exterior Paint and Interior Trim Combinations Shown Below are the Only Combinations that are Available.

Interior Trim Color	Med Gray	Med Blue	Ruby Red	Neutral
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MODEL	SEAT TYPE	SEAT OPTION**				
1WL69	Cloth 60/40	AM6	14B	30B	79B	52B
	Custom Cloth 60/40	AM6	14C	30C	79C	52C

**Seat Option AM6 Must Be Specified

SOLID PAINT APPLICATION

Exterior Paint Color	Color Code	Med Gray	Med Blue	Ruby Red	Neutral
Black	41U	x		x	x
Blue, Med Adriatic (Met)	30U	x	x		
Blue, Lt Adriatic (Met)	36U		x		
Granite (Met)	03U	x	x	x	x
Green, Med Lichen (Met)	47U				x
Green, Sherwood (Met)	19U	x			
Purple, Pearl (Met)	91U	x			
Red, Dk Carmine (Met)	51U	x		x	x
White, Bright	16U	x	x	x	x

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO
L82 MX0	Std



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LUMINA LS SEDAN

Model 1WN69 Lumina LS Sedan

*Includes Destination and Handling Charges

MUST SPECIFY : EMISSION, ENGINE, TRANSMISSION

MUST ORDER ONE GROUP – NO DELETIONS ALLOWED

N.C.	Base Preferred Equipment Group (Refer Standard Equipment Summary Page)	1SC	1SD
		X	X
	Preferred Equipment Group 1		
	Floor Mats, Front, Carpeted, Color-Keyed		X
	Floor Mats, Rear, Carpeted, Color-Keyed		X
	Power Trunk Opener		X
	Remote Keyless Entry		X
	Speed Control: Electronic, with Resume Speed		X
	Temperature Control: Driver and Passenger		X

ADDITIONAL OPTIONS

	ACKNOWLEDGEMENTS				RADIO EQUIPMENT
N.C.	R8S	Multiple Order Numbers	V.P.S.	UN0	Electronically Tuned AM/FM Stereo Radio, w/Automatic Tone Control, Compact Disc Player, Digital Clock, Theft Lock and Speed Compensated Volume (Includes Premium Front and Rear Coaxial Speakers)
V.P.S.	R8T	Preliminary Invoice			
N.C.	VK3	BRACKET: License Plate, Front			
		DEFOGGER:			
	C49	Rear Window: Electric			
N.C.	R9W	Rear Window not Desired			
	D83	DELETE: Accent, Lower		AN2	Child, Integral
		EMISSIONS		WG1	Power (Drivers Side Only)
N.C.	FE9	Federal Emission Requirement			SEAT TRIM
N.C.	NG1	Massachusetts/NY Emission Requirement	N.C.	AM6	Custom Cloth 60/40 (Base)
				AR9	Custom Cloth Bucket (Reqs 1SD)
N.C.	YF5	California Emission Requirement		AM6	Leather 60/40
N.C.	NB8	California Override (Reqs FE9 Emissions)		AR9	Leather Bucket (Reqs 1SD)
N.C.	NC7	Federal Emission Override (Reqs YF5/NG1 Emission)		K34	SPEED CONTROL: Electronic, with Resume Speed (Incl w/1SD)
		ENGINE		CF5	SUNROOF: Sliding, Electric
N.C.	L82	3.1 Liter SFI V6 (Base)		CJ3	TEMPERATURE CONTROLS: Driver and Passenger Side (Incl w/1SD)
	LQ1	3.4 Liter SFI V6 DOHC (Reqs QVG Tires) (N/A w/1SC) (Incls 4-Wheel Disc Brakes) (N/A AM6 Seat)			TIRES
		FLOOR MATS:		QNX	P225/60R16 B/W Touring (Radial) (Reqs L82 Eng and NW0 Wheels)
	B34	Front, Carpeted, Color-Keyed (Incl w/1SD)		QVG	P225/60R16 B/W Radial (Reqs LQ1 Eng and NW0 Wheels)
	B35	Rear, Carpeted, Color-Keyed (Incl w/1SD)	N.C.	MX0	TRANSMISSION: 4-Speed Automatic, Electronic (Base)
	K05	HEATER: Engine Block		NW0	WHEELS: 16" Aluminum (Reqs QNX or QVG Tires)



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LUMINA LS SEDAN

COLOR AND TRIM SELECTION

PLEASE NOTE: The Exterior Paint and Interior Trim Combinations Shown Below are the Only Combinations that are Available.

Interior Trim Color	Med Gray	Med Blue	Ruby Red	Neutral
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MODEL	SEAT TYPE	SEAT OPT**				
1WN69	#Custom Cloth 60/40	AM6	14C	30C	79C	52C
	*Custom Cloth Bucket	AR9	14C	30C	79C	52C
	#Leather 60/40	AM6	144			524
	*Leather Bucket	AR9	144			524

* Includes Console

** Seat Option AM6 or AR9 Must Be Specified

N/A LQ1 Eng

SOLID PAINT APPLICATION

Exterior Paint Color	Color Code	Med Gray	Med Blue	Ruby Red	Neutral
Black	41U	x		x	x
Blue, Lt Adriatic (Met)	36U		x\$		
Blue, Med Adriatic (Met)	30U	x	x		
Granite (Met)	03U	x\$		x\$	x\$
Green, Med Lichen (Met)	47U				x\$
Green, Sherwood (Met)	19U	x			
Purple, Pearl (Met)	91U	x			
Red, Dk Carmine (Met)	51U	x		x	x
White, Bright	16U	x	x	x	x

\$ Requires D83 Accent Delete

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO	
	3.33	3.43
L82 MX0	Std	----
LQ1 MX0	----	Std



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MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. CUSTOMARY)

1996

Manufacturer CHEVROLET MOTOR DIVISION GENERAL MOTORS CORPORATION	Vehicle Line LUMINA	
Mailing Address 30007 VAN DYKE WARREN, MI 48090-9065	Issued	Revised

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 American Automobile Manufacturers Association.

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.

AAMA

American Automobile Manufacturers Association

Blank Forms Provided by Technical Affairs Division

METRIC (U.S. Customary)

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NOTE:

1. This form uses both SI Metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary unit follows in parentheses.
2. UNLESS OTHERWISE INDICATED:
 - a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
 - b. Nominal design dimensions are used throughout these specifications.
 - c. All linear dimensions are in millimeters (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of 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.

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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (®) _____

METRIC (U.S. Customary)

Vehicle Origin

Design & development (company)	G.M., Midsize Car Division
Where built (country)	Canada
Authorized U.S. sales marketing representative	Chevrolet Motor Division

Vehicle Models

Model Description & Drive (FWD / RWD / AWD / 4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfr's Model Code)	No. of Designated Seating Positions (Front / Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)	EPA Fuel Economy (City/Hwy)
LUMINA 4-Door Notchback Sedan (FWD)		1WL69	6 (3/3)		19/29 - L82
LUMINA LS 4-Door Notchback Sedan (FWD)		1WN69	6 (3/3) 5 (2/3) Opt.		19/29 - L82 17/26 - LQ1

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



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 issued _____ Revised (*) _____

METRIC (U.S. Customary)

Power Teams

SAE J1349 Net bhp (brake horsepower) and Net Torque corrected to 77°F/25°C and 29.61 in. Hg/100 kPa atmospheric pressure.

		A	B	C	D	
E N G I N E	Engine Code	L82	LQ1			
	Displacement Liters (in ³)	3.1 (191)	3.4 (206)			
	Induction system (FI, Carb, etc.)	Sequential Fuel Injection	Sequential Fuel Injection			
	Compression ratio	9.6:1	9.7			
	SAE Net at RPM	Power kW (bhp)	119 (160) @ 5200	160 (215) @ 5200		
		Torque N • m (lb. ft.)	251 (185) @ 4000	298 (220) @ 4000		
	Exhaust single, dual	Single	Dual			
T R A N S	Transmission/ Transaxle	M13 Auto Transaxle 4-Speed	M13 Auto Transaxle 4-Speed			
	Effective Final Drive / Ade Ratio (std. first)	3.33	3.43			

Series Availability

Power Teams (A - B - C - D)

Model	Code	Standard	Optional
LUMINA			
4-Dr. Notchback Sedan	1WL69	A	-
LUMINA LS			
4-Dr. Notchback Sedan	1WN69	A	B



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

Engine - General

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)	60 Degree V, Transverse, OHV, Front-Wheel-Drive	
Manufacturer	General Motors Powertrain Division	
No. of cylinders	6	
Bore	89.0 mm (3.51 in.)	
Stroke	84.01 mm (3.31 in.)	
Bore Spacing (C/L to C/L)	111.76 mm (4.4 in.)	
Cylinder block material & mass kg. (lbs.) (machined)	Cast Iron, 55kg (121.25) Block, Bearing Caps, Bolts, & Cup Plug	
Cylinder block deck height	224.0 mm (9.0 in.)	
Cylinder block length	435.5 mm (17.4 in.)	
Deck clearance (minimum) (above or below block)	.58 Above TDC	
Cylinder head material & mass kg. (lbs.)	Cast Aluminum, (5.63 kg)	
Cylinder head volume cm ³ (inches ³)	26.59 cm ³	
Cylinder liner material	None	
Head gasket thickness (compressed)	1.55 mm	
Minimum combustion chamber total volume cm ³ (inches ³)	60.29 cm ³	
Cyl. no. system (front to rear)*	L. Bank	2-4-6
	R. Bank	1-3-5
Firing order	1-2-3-4-5-6	
Intake manifold material & mass kg. (lbs.)**	Cast Aluminum, 3.09 kg - Upper; 5.23 kg - Lower	
Exhaust manifold material & mass kg. (lbs.)**	Cast Iron, Rt: 3.46 kg; Lt: 2.38	
Knock sensor (number & location)	1, Left Side Center of Block	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) + 2	86	
Engine Mounts	Quantity	4
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	1 - Hydraulic, 1 - Elastomeric (3-Speed Trans.); 2 - Hydraulic (4-Speed Trans.); 2 - Torque Struts
	Added isolation (sub-frame, crossmember, etc.)	Isolated Cradle Supporting Left & Right Mounts
Total dressed engine mass (wt) dry***	162.763 kg - 3.7 kg oil = 159.063	

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum Alloy, .374g
--	-----------------------

Engine - Camshaft

Location	Above Crankshaft at Center of "V"	
Material & mass kg (weight, lbs.)	Assembled Steel, 2.26 kg	
Drive type	Chain / belt	Chain
	Width / pitch	16.18 mm Max width; 3/8 pitch inverted Tooth "Silent" Chain

- * 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: All those items necessary to make the engine a complete ready-to-run unit.



MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (®) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

Engine - General

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)	60 Deg., V6, Front, Transverse, DOHC	
Manufacturer	General Motors Powertrain Division	
No. of cylinders	6	
Bore	92.029 mm (3.623 in.)	
Stroke	84.0 mm (3.307 in.)	
Bore Spacing (C/L to C/L)	111.78 mm (4.4 in.)	
Cylinder block material & mass kg. (lbs.) (machined)	Cast Iron, 52.7 kg. (116.2 lbs.)	
Cylinder block deck height	224.0 mm (8.82 in.)	
Cylinder block length	435.5 mm (17.1 in.)	
Deck clearance (minimum) (above or below block)	.028 mm (.011 in.), Above Block, Nominal (± 0.24 mm)	
Cylinder head material & mass kg. (lbs.)	Aluminum, 7.7 kg. (17.0 lbs.)	
Cylinder head volume cm ³ (inches ³)	52.5 (3.2)	
Cylinder liner material	Not Applicable	
Head gasket thickness (compressed)	1.6 mm (0.063 in.)	
Minimum combustion chamber total volume cm ³ (inches ³)	67.7 (4.13)	
Cyl. no. system (front to rear)*	L. Bank	2-4-6
	R. Bank	1-3-5
Firing order	1-2-3-4-5-6	
Intake manifold material & mass kg. (lbs.)**	Upper - Aluminum Alloy, 6.01 (13.25); Lower - Aluminum Alloy, 3.353 (7.392) & Zip tube 1.629, (3.583)	
Exhaust manifold material & mass kg. (lbs.)**	High Silicon Molybdenum Nodular Iron; 4.0 (8.82), Firewall Side; 2.8 (6.17), Other	
Knock sensor (number & location)	2, Near Starter Motor Under Exhaust Manifold	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) + 2	87	
Engine Mounts	Quantity	4
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	1 - Elastomeric; 2 - Hydraulic; 1 - Torque Strut
	Added isolation (sub-frame, crossmember, etc.)	Isolated (Sub-frame) Supporting the Right & Left Hand Mounts
Total dressed engine mass (wt) dry***	202.92kg (447.36) As shipped dry	

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum Alloy, 415g (14.64 oz.)
--	----------------------------------

Engine - Camshaft

Location	(4) OHC in Carrier	
Material & mass kg (weight, lbs.)	Cast Iron - Left Bank Intake and Exhaust, 4.54 (10.0) Cast Iron - Right Bank Intake and Exhaust, 4.31 (9.5)	
Drive type	Chain / belt	Belt and Chain
	Width / pitch	Belt, 34.0/8.00 mm (1.34/0.315 in.) Chain, 18.05/9.53 mm (0.750/0.375 in.)

* 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: All those items necessary to make the engine a complete ready-to-run unit.



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

Engine - Valve System

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

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged Steel, .592 (1.31)
Length (axes CL to CL)	144.78 mm (5.79 in.)

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*	Cast Iron, 14.4 (31.7)
End thrust taken by bearing (no.)	3
Length & number of main bearings	4 Bearings: 29.5 (1.2), Bearings 1 & 4; 24.0 (.945), Bearings 2 & 3
Seal (material, one, two piece design, etc.)	Front
	Rear
	Viton/Steel, One Piece
	Viton/Steel, One Piece

Engine - Lubrication System

Normal oil pressure kPa (psi) at engine rpm	280 - 360 (40.6 - 52.2) @ 2400
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	3.8 (4.0)

Engine - Diesel Information

(NOT APPLICABLE)

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

Engine - Intake System

(NOT APPLICABLE)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished State



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (#) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)	Standard
Valves	Number intake / exhaust
	Head O.D. intake / exhaust

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged Steel, .592 (1.3)
Length (axes CL. to CL.)	144.78 mm (5.7 in.)

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*	Nodular Cast Iron, 17.2 (37.9)
End thrust taken by bearing (no.)	3
Length & number of main bearings	4 Bearings: 29.5 mm (1.16 in.), Bearings 1 & 4; 24.0 mm (0.94 in.), Bearings 2 & 3
Seal (material, one, two piece design, etc.)	Front
	Rear

Engine - Lubrication System

Normal oil pressure kPa (psi) at engine rpm	275 (40) @ 2000
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	With Optional Oil Cooler 4.73 (5.0), Without Filter

Engine - Diesel Information

(NOT APPLICABLE)

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

Engine - Intake System

(NOT APPLICABLE)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished State



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

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)		103.4 (15)		
Circulation thermostat	Type (choke, bypass)	Bypass		
	Starts to open at °C (°F)	90 (195)		
Water pump	Type (centrifugal, other)	Centrifugal		
	GMP 1000 pump rpm	12		
	Number of pumps	1		
	Drive (V-belt, other)	Serpentine		
	Bearing type	Ball-Roller		
	Impeller material	Cast Iron		
Housing material		Aluminum		
By-pass recirculation type (inter., ext.)		External, Bypass		
Cooling System capacity	With heater - L (qt.)	A/C is Standard		
	With air conditioner - L (qt.)	11.59 (12.2) - includes 0.5L Reservoir Reserve		
	Opt. equipment specify - L (qt.)	Not Applicable		
Water jackets full length of cyl. (yes, no)		No		
Water all around cylinder (yes, no)		Yes		
Water jackets open at head face (yes, no)		Yes		
Radiator core	Std., A/C, HD	A/C is Standard Equipment		
	Type (cross-flow, etc.)	Cross-Flow		
	Construction (fin & tube mechanical, braze, etc.)	High Efficiency Radiator (H.E.R.), Fin & Tube		
	Material, mass kg (wgt., lbs.)	Aluminum, 3.22 (7.16)		
	Width	774.0 mm (30.5 in.)		
	Height	382.4 mm (15.0 in.)		
	Thickness	16.0 mm (0.630 in.)		
Fins per inch		17, 2.5 mm		
Radiator end tank material		Plastic		
Fan	Std., elec., opt.	Electric	Electric	
	Number of blades & type (flex, solid, material)	7 Blades, Solid, Plastic	7 Blades, Solid, Plastic	
	Number & location (front, rear of radiator)	Rear	Rear	
	Diameter & projected width	360 mm (14.2 in.), Diameter	360 mm (14.2 in.), Diameter	
	Ratio (fan to crankshaft rev.)	Not Applicable	Not Applicable	
	Fan cutout type	ECM Controlled	ECM Controlled	
	Drive type (direct, remote)	Direct	Direct	
	RPM at idle (elec.)	1800 Primary	1650 Secondary	
	Motor rating (wattage/elec.)	150 W	90 W	
	Motor switch (type & location/elec.)	Engine Mounted Coolant Temp. Sensor, A/C Liquid Line Press. Switch or Transducer	(Same)	
	Switch point (temp./pressure/elec.)	(See Below)	(See Below)	
	Fan shroud (material)		Not Available	Not Available

PRIMARY FAN (LH)
 A/C Head Pressure or
 Engine Coolant

ON
 190 PSI
 223 deg. F.

OFF
 140 PSI
 216 deg. F.

SECONDARY FAN (RH)
 A/C Head Pressure or
 Engine Coolant

ON
 240 PSI
 235 deg. F.

OFF
 190 PSI
 228 deg. F.



MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

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)		103.4 (15)	
Circulation thermostat	Type (choke, bypass)	Bypass	
	Starts to open at °C (°F)	80 (194)	
Water pump	Type (centrifugal, other)	Centrifugal	
	GMP 1000 pump rpm	9.7	
	Number of pumps	1	
	Drive (V-belt, other)	Serpentine Poly V	
	Bearing type	Ball-Roller	
	Impeller material	Cast Iron	
Housing material		Aluminum	
By-pass recirculation type (inter., ext.)			
Cooling System capacity	With heater - L (qt.)	A/C is Standard	
	With air conditioner - L (qt.)	11.04 (12.35) - Includes 0.5L Reservoir Reserve	
	Opt. equipment specify - L (qt.)	Not Available	
Water jackets full length of cyl. (yes, no)		No	
Water all around cylinder (yes, no)		Yes	
Water jackets open at head face (yes, no)		Yes	
Radiator core	Std., A/C, HD	A/C is Standard Equipment	
	Type (cross-flow, etc.)	Cross-Flow	
	Construction (fin & tube mechanical, braze, etc.)	High Efficiency Radiator (H.E.R.), Fin & Tube	
	Material, mass kg (wgt., lbs.)	Aluminum, 5.46 (12.04)	
	Width	774.0 mm (30.5 in.)	
	Height	382.4 mm (15.0 in.)	
	Thickness	34 mm (1.3 in.)	
Fins per inch		17, 3.0 mm	
Radiator end tank material		Plastic	
Fan	Std., etc., opt.	Dual Electric Standard	
	Number of blades & type (flex, solid, material)	7 Blades, Solid, Plastic	7 Blades, Solid, Plastic
	Number & location (front, rear of radiator)	Rear	Rear
	Diameter & projected width	360 mm (14.2 in.), Diameter	360 mm (14.2 in.), Diameter
	Ratio (fan to crankshaft rev.)	Not Applicable	Not Applicable
	Fan cutout type	ECM Controlled	ECM Controlled
	Drive type (direct, remote)	Direct	Direct
	RPM at idle (elec.)	2100 Primary	1650 Secondary
	Motor rating (wattage/elec.)	240 W	80 W
	Motor switch (type & location/elec.)	Engine Mounted Coolant Temp. Sensor, A/C Liquid Line Press. Switch or Transducer	(Same)
	Switch point (temp./pressure/elec.)	(See Below)	(See Below)
	Fan shroud (material)		Not Available

PRIMARY FAN (LH)
 A/C Head Pressure or
 Engine Coolant

ON
 190 PSI
 223 deg. F.

OFF
 140 PSI
 216 deg. F.

SECONDARY FAN (RH)
 A/C Head Pressure or
 Engine Coolant

ON
 240 PSI
 235 deg. F.

OFF
 190 PSI
 228 deg. F.



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

Engine - Fuel System (See Supplemental page for details of Fuel Injection, Supercharger, Turbocharger, etc. if used.)

Induction type: carburetor, fuel injection system, etc.		Sequential Fuel Injection
Manufacturer		AC Rochester Products
Carburetor no. of barrels		Not Applicable
Idle A/F mix.		PCM Controlled
Fuel injection	Point of injection (no.)	Intake Port (6)
	Constant, pulse, flow	Pulse
	Control (electronic, mech.)	Electronic
	System pressure kPa (psi)	300 (43.5)
Idle speed-rpm (spec. neutral or drive and propane if used)	Manual	PCM Controlled
	Automatic	PCM Controlled
Intake manifold heat control (exhaust or water thermostatic or fixed)		Fixed
Air cleaner type		Replaceable Paper Element
Fuel filter (type/location)		Replaceable Enclosed Paper Element (Near Fuel Tank)
Fuel pump	Type (elec. or mech.)	Electrical
	Location (eng., tank)	Fuel Tank
	Pressure range kPa (psi)	250-300 (36-44)
	Flow rate at regulated pressure L (gal)/hr @ kPa (psi)	62.4 (16.51) @ 350 (50.8), Figures for Wide Open Throttle

Fuel Tank

Capacity refill L (gallons)		60.9 (16.1)
Location (describe)		Underbody, Forward of Rear Axle
Attachment		Two Steel Straps w/Four Vertical Fasteners
Material & Mass kg. (weight lbs.)		Stamped Steel Upper & Lower w/Perimeter Seam Weld, 9.634 (21.239)
Filter pipe	Location & material	Left Rear Quarter Panel-Steel
	Connection to tank	Flexible Hose
Fuel line (material)		Steel & Nylon
Fuel hose (material)		Nylon
Return line (material)		Steel & Nylon
Vapor line (material)		Steel & Nylon
Extended range tank	Opt., n.s.	Not Applicable
	Capacity L (gallons)	"
	Location & material	"
	Attachment	"
Auxiliary tank	Opt., n.s.	Not Applicable
	Capacity L (gallons)	"
	Location & material	"
	Attachment	"
	Selector switch or valve	"
	Separate fill	"



MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (#) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

Engine - Fuel System

(See Supplemental page for details of Fuel Injection, Supercharger, Turbocharger, etc. if used.)

Induction type: carburetor, fuel injection system, etc.		Sequential Fuel Injection
Manufacturer		AC Rochester Products
Carburetor no. of barrels		None
Idle A/F mix.		Computer Controlled
Fuel injection	Point of injection (no.)	At Inlet Ports (6)
	Constant, pulse, flow	Pulse
	Control (electronic, mech.)	Electronic
	System pressure kPa (psi)	300 (43.5)
Idle speed-rpm (spec. neutral or drive and propane if used)	Manual	Computer Controlled
	Automatic	Computer Controlled
Intake manifold heat control (exhaust or water thermostatic or fixed)		Throttle Body Water Heat, No Induction Air Heat
Air cleaner type		Single Snorkel, Replaceable Paper Element
Fuel filter (type/location)		Replaceable Enclosed Paper Element (Near Fuel Tank)
Fuel pump	Type (elec. or mech.)	Electrical
	Location (eng., tank)	Fuel Tank
	Pressure range kPa (psi)	250-300 (36-44)
	Flow rate at regulated pressure L (gal)/hr @ kPa (psi)	62.4 (16.51) @ 350 (50.8), Figures for Wide Open Throttle

Fuel Tank

Capacity refill L (gallons)		64.7 (17.1)
Location (describe)		Underbody, Forward of Rear Axle
Attachment		Two Steel Straps w/Four Vertical Fasteners
Material & Mass kg. (weight lbs.)		Stamped Steel Upper & Lower w/Perimeter Seam Weld, 9.634 (21.239)
Filter pipe	Location & material	Left Rear Quarter Panel-Steel
	Connection to tank	Flexible Hose
Fuel line (material)		Steel & Nylon
Fuel hose (material)		Nylon (No Coupled Hose)
Return line (material)		Steel & Nylon
Vapor line (material)		Steel & Nylon
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	"
	Selector switch or valve	"
	Separate fill	"



MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (#) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

Vehicle Emission Control

Type (air injection, engine modifications, other)		--		
Exhaust Emission Control	Air Injection	Pump or pulse	Not Used	
		Driven by	Not Used	
		Air distribution (head, manifold, etc.)	Not Used	
		Point of entry	Not Used	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled Flow, Digital	
		Exhaust source	Right Side Exhaust Manifold	
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake Manifold	
	Catalytic Converter	Type	Bed Monolith - 3 Way	
		Number of	One	
		Location(s)	Underbody	
Volume L (in ³)		2.67 (163)		
Substrate type		Monolith/Ceramic		
Noble metal type		Platinum (Pt) / Palladium (Pd) / Rhodium (Rh)		
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)	Induction System		
	Energy source (manifold vacuum, carburetor, other)	Manifold Vacuum		
	Discharges to (intake manifold, other)	Intake Manifold		
	Air inlet (breather cap, other)	Right Rear Rocker Arm Cover		
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel Tank	Canister	
		Carburetor	Not Applicable	
	Vapor storage provision	Charcoal		
Electronic system	Closed loop (yes/no)	Yes		
	Open loop (yes/no)	No		

Engine - Exhaust System

Type (single, single with cross-over, dual, other)	Single w/Crossover	
⊗ Muffler no. & type (reverse flow, straight thru, separate resonator), Muffler volume (liters), Material & Mass kg. (weight lbs.)	Reverse Flow	
⊗ Resonator no., type, & volume (liters)	88.9 mm O.D., Round Bottle, Straight Thru	
Exhaust pipe	Branch o.d., wall thickness	--
	Main o.d., wall thickness	--
	Material & Mass kg. (weight lbs.)	409 Stainless Steel (Airgap)
Intermediate pipe	o.d. & wall thickness	50.8 x 1.07 mm (2.0 x .042 in.)
	Material & Mass kg. (weight lbs.)	409 Stainless Steel
Tail pipe	o.d. & wall thickness	50.8 x 1.07 mm (2.0 x .042 in.)
	Material & Mass kg. (weight lbs.)	409 Stainless Steel - Painted Black



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

Vehicle Emission Control

Type (air injection, engine modifications, other)		-		
Exhaust Emission Control	Air Injection	Pump or pulse	Not Available	
		Driven by	"	
		Air distribution (head, manifold, etc.)	"	
		Point of entry	"	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	3 Sized Orifices Which are Opened or Closed Using Pintles and Solenoids. 8 Flow Combination.	
		Exhaust source		
		Point of exhaust injection (spacer, carburetor, manifold, other)	Plenum Near Throttle Body	
	Catalytic Converter	Type	Bed Monolith (Dual)	
		Number of	1	
		Locations(s)	Mounted To Underbody	
Volume L (in ³)		1.80 (110)		
Substrate type		Ceramic		
Noble metal type		Platinum (Pt), Rhodium (Rh)		
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction System	
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum	
	Discharges to (intake manifold, other)		Inlet Manifold	
	Air inlet (breather cap, other)		Duct Between Air Cleaner and Throttle Body	
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel Tank	Fuel Tank to Canister to Manifold	
		Carburetor	Not Applicable	
	Vapor storage provision		Charcoal	
Electronic system	Closed loop (yes/no)		Yes, Purge Solenoid Control	
	Open loop (yes/no)		No	

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Dual, w/Crossover	
Muffler no. & type (reverse flow, straight thru, separate resonator), Muffler volume (liters), Material & Mass kg. (weight lbs.)	Reverse Flow		
	Resonator no., type, & volume (liters)		
Exhaust pipe	Branch o.d., wall thickness		-
	Main o.d., wall thickness		63.5 x 1.77 mm (2.5 x 0.070 in.)
	Material & Mass kg. (weight lbs.)		Laminated 409 Stainless Steel
Intermediate pipe	o.d. & wall thickness		57.2 x 1.37 mm, Legs 50.8 x 1.37 mm
	Material & Mass kg. (weight lbs.)		409 Stainless Steel
Tail pipe	o.d. & wall thickness		57.2 x 1.37 mm, Tip 1.20 mm
	Material & Mass kg. (weight lbs.)		409 Stainless Steel - Painted Black



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (#) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

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

Manual 4-speed (manufacturer/country)	Not Available
Manual 5-speed (manufacturer/country)	"
Manual 6-speed (manufacturer/country)	"
Automatic (manufacturer/country)	"
Automatic overdrive (manufacturer/country)	Hydra-Matic/U.S.A., M13

Manual Transmission/Transaxle (NOT APPLICABLE)

Number of forward speeds		
Gear ratios	1st	
	2nd	
	3rd	
	4th	
	5th	
	6th	
	Reverse	
Synchronous meshing (specify gears)		
Shift lever location		
Trans. case material & mass kg. (lbs.)*		
Lubricant	Capacity L (pt.)	
	Type recommended	

Clutch (Manual Transmission) (NOT APPLICABLE)

Clutch manufacturer		
Clutch type (dry, wet; single, multiple disc)		
Linkage (hydraulic, 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 mfg. & material coding	
	Facing material & construction	
	Rivets per facing	
	Outside x inside dia. (nominal)	
	Total eff. area cm ² (in. ²)	
	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.



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

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

Manual 4-speed (manufacturer/country)	Not Available
Manual 5-speed (manufacturer/country)	"
Manual 6-speed (manufacturer/country)	"
Automatic (manufacturer/country)	"
Automatic overdrive (manufacturer/country)	Hydra-Matic/U.S.A., M13

Manual Transmission/Transaxle (NOT APPLICABLE)

Number of forward speeds		
Gear ratios	1st	
	2nd	
	3rd	
	4th	
	5th	
	6th	
	Reverse	
Synchronous meshing (specify gears)		
Shift lever location		
Trans. case material & mass kg. (lbs.)*		
Lubricant	Capacity L (pt.)	
	Type recommended	

Clutch (Manual Transmission) (NOT APPLICABLE)

Clutch manufacturer		
Clutch type (dry, wet; single, multiple disc)		
Linkage (hydraulic, 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 mfg. & material coding	
	Facing material & construction	
	Rivets per facing	
	Outside x inside dia. (nominal)	
	Total eff. area cm ² (in. ²)	
	Thickness (pressure plate side/ly wheel side)	
	Rivet depth (pressure plate side/ly wheel side)	
Engagement cushion method		
Release bearing type & method lub.		
Torsional damping method, springs, hysteretics		

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



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued Revised (e)

METRIC (U.S. Customary)

Engine Description 3.1 LITER V6 (191 CID)
 Engine Code SEQUENTIAL FUEL INJECTION RPO L82

Automatic Transmission/Transaxle

Trade Name		Hydra-Matic 4T60-E (M13) Transaxle
Type and special features (describe)		4-Speed Automatic w/Torque Converter Clutch
Shift mechanics		Hydraulic Clutches/Electronic Controls
Gear selector	Location (column, floor, other)	Column & Floor (Mechanical)
	Ltr./No. designation (e.g. PRND21)	P-R-N- (OD) -D-2-1
	Shift interlock (yes, no, describe)	Yes - Brakes, Ignition Key
Gear ratios	1st	2.92
	2nd	1.57
	3rd	1.00
	4th	.70
	5th	Not Applicable
	6th	Not Applicable
	Reverse	2.38
Final drive ratio		3.33
Max. upshift vehicle speed - drive range km/h (mph)		1 - 2 = 69 (43) 3 - 4 = 163 (101) 2 - 3 = 129 (80)
Max. upshift engine speed RPM		5600
Max. kickdown speed - drive range km/h (mph)		2 - 1 = 48 (30) 3 - 2 = 105 (65)
Min. overdrive speed km/h (mph)		52 (32)
Torque converter	Type	Lock-Up
	Torus design	Yes
	Number of elements	3
	Max. ratio at stall	1.95
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 mm (9.7 in.)
Capacity factor "K"		180
Pump type		Variable Displacement Vane
Lubricant	Capacity refill L (pt.)	12.7 (26.8), Dry Transmission
	Type recommended	Dexron III
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard, Integral with Radiator
Transmission mass kg (lbs.) & case material**		81.0 (178.50), Cast Aluminum

All Wheel / 4 Wheel Drive (NOT APPLICABLE)

Description & type (part-time, full-time, 2/4 shift while moving, mechanical, 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 (% front/rear)	

* Input speed + $\sqrt{\text{torque}}$

** Dry weight including torque converter. If other, specify.



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (e) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

Automatic Transmission/Transaxle

Trade Name		Hydra-Matic 4T60E (M13) Transaxle
Type and special features (describe)		4-Speed Automatic w/Torque Converter Clutch
Shift mechanics		Hydraulic Clutches/Electronic Controls
Gear selector	Location (column, floor, other)	Floor (Mechanical)
	Ltr./No. designation (e.g. PRND21)	P-R-N-(OD)-D-2-1
	Shift interlock (yes, no, describe)	Yes - Brake, Ignition Key
Gear ratios	1st	2.92
	2nd	1.57
	3rd	1.00
	4th	.70
	5th	Not Applicable
	6th	Not Applicable
	Reverse	2.38
Final drive ratio		3.43
Max. upshift vehicle speed - drive range km/h (mph)		1 - 2 = 74 (46) 3 - 4 = 185 (115) 2 - 3 = 138 (86)
Max. upshift engine speed RPM		6250
Max. kickdown speed - drive range km/h (mph)		2 - 1 = 56 (35) 3 - 2 = 122 (76)
Min. overdrive speed km/h (mph)		68 (42)
Torque converter	Type	ECCC
	Torus design	Yes
	Number of elements	3
	Max. ratio at stall	2.29
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 mm (9.7 in.)
Capacity factor "K"		177
Pump type		Variable Displacement Vane
Lubricant	Capacity refill L (pt.)	12.7 (26.8), Dry Transmission
	Type recommended	Dexron III
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard, Integral with Radiator
Transmission mass kg (lbs.) & case material**		81.0 (178.50), Cast Aluminum

All Wheel / 4 Wheel Drive (NOT APPLICABLE)

Description & type (part-time, full-time, 2/4 shift while moving, mechanical, 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 (% front/rear)	

* Input speed $\propto \sqrt{\text{torque}}$

** Dry weight including torque converter. If other, specify.

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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (®) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

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

(AUTOMATIC TRANS - M13)

Effective final drive ratio (or overall top gear ratio)		3.33 (2.35)
Transfer ratio and method (chain, gear, etc.)		1.00 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.)	8.0 (16.9)
	Type recommended	Dexron II

Axle Shafts - Front Wheel Drive

Manufacturer and number used		2 Per Car		
Type (straight, solid bar, tubular, etc.)	Left	Straight Solid Bar		
	Right	Straight Solid Bar		
Outer diam. x length* x wall thickness	Manual Transaxle	Left	Not Applicable	
		Right		
	Automatic transaxle	Left	--	
		Right	--	
	Optional transaxle	Left	27.1 x 326.0 mm (1.07 x 12.83 in.)	
		Right	27.1 x 360.0 mm (1.07 x 14.17 in.)	
Slip yoke	Type	--		
	Number of teeth	--		
	Spline o.d.	--		
Universal joints	Make and mfg. no.	Inner	Saginaw Division	
		Outer	Saginaw Division	
	Number used		4, 2 on Each Shaft	
	Type, size, plunge	Inner	Tripot Joint, 27 Size 66 mm Plunge	
		Outer	Rzeppa Joint, Fixed, 27 Size	
	Attach (u-bolt, clamp, etc.)		Inboard Joint - Snap Ring, Outboard Joint (Nut/Washer - Clamping)	
Bearing	Type (plain, anti-friction)	Inboard Joint: Ball Bearing, Needle Roller Bearing (Anti-Friction Bearing) Outboard Joint: Ball Bearing		
	Lubrication (fitting, prepack)	Prepacked		
Drive taken through (torque tube, arms or springs)		Wishbone Lower Control Arm, Upper MacPherson Strut		
Torque taken through (torque tube, arms or springs)		Engine Mounting System		

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



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (#) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

Axle Ratio and Tooth Combinations (See 'Power Teams' for axle ratio usage) (AUTOMATIC TRANS - M13)

Effective final drive ratio (or overall top gear ratio)		3.43 (2.41)
Transfer ratio and method (chain, gear, etc.)		
Front drive unit	Ring gear o.d.	
	No. of teeth	
	Pinion	
	Ring gear	

Front Drive Unit

Description (integral to trans., etc.)		Integral to 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)		Sealed Ball Bearing
Lubricant	Capacity L (pt.)	
	Type recommended	

Axle Shafts - Front Wheel Drive

Manufacturer and number used		Saginaw Division, 2	
Type (straight, solid bar, tubular, etc.)	Left	Saginaw Division	
	Right	Saginaw Division	
Outer diam. x length* x wall thickness	Manual Transaxle	Left	Not Applicable
		Right	"
	Automatic transaxle	Left	27.1 x 326 mm (1.07 x 12.83 in.)
		Right	27.1 x 360 mm (1.07 x 14.17 in.)
	Optional transaxle	Left	Not Available
		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		Inboard & Outboard on Each Shaft Assembly
	Type, size, plunge	Inner	Tripot Joint, 27 Size 66 mm Plunge
		Outer	Rzeppa Joint, Fixed Center, 27 Size
	Attach (u-bolt, clamp, etc.)		Retaining Ring
	Bearing	Type (plain, anti-friction)	Inner - Ball & Roller Outer - Ball
Lubrication (fitting, prepack)		Prepacked	
Drive taken through (torque tube, arms or springs)		Wishbone Lower Control Arm, Upper MacPherson Strut	
Torque taken through (torque tube, arms or springs)		Engine Mounting System	

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



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (e) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

SEDAN (EXCEPT 3.4L ENGINE) (FE1 SUSPENSION)

Suspension - General Including Electronic Controls

Car leveling	Standard/optional/not available		Not Available	
	Manual/automatic control		"	
	Type (air/hydraulic)		"	
	Primary/assist spring		"	
	Rear only/4 wheel leveling		"	
	Single/dual rate spring		"	
	Single/dual ride heights		"	
	Provision for jacking		Body Rails, Under Rocker Panels; Jack Pad at Center of Rear Crossmember	
Shock absorber damping controls	Standard/option/not available		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		MacPherson Strut Front, MacPherson Strut Rear	
	Make		Delco Chassis Division	
	Piston diameter		35.0 mm (1.38 in.)	
	Rod diameter		25.0 mm (1.00 in.)	

Suspension - Front

Type and description		MacPherson Strut with Coil Springs, One-Piece "A" Configuration Lower Control Arms
Travel	Full jounce (define load condition)	78 mm (3.07 in.)
	Full rebound	95 mm (3.74 in.)
Spring	Type (coil, leaf, other & material)	Coil
	Insulators (type & material)	Rubber
	Size (Leaf: length & width; Coil: design height & I.d.; Bar: length & diameter)	Coil: 200.3 mm (7.89 in.); 173 mm (6.81 in.)
	Spring rate N/mm (lb./in.)	19.5 (111.4)
	Rate at wheel N/mm (lb./in.)	24.0 (137.1)
Stabilizer	Type (link, linkless, frameless)	Linkless
	Material & O.D. bar/tube, wall thickness	Steel, 30 mm (1.18 in.) - Solid

Suspension - Rear

Type and description		Tri-Link Independent MacPherson Strut with Coil Springs, Lateral Links Attached to Body Cross Member, Trailing Arms	
Travel	Full jounce (define load condition)	102 mm (4.02 in.)	
	Full rebound	105 mm (4.13 in.)	
Spring	Type (coil, leaf, other & material)	Coil	
	Size (Leaf: length & width; Coil: design height & I.d.; Bar: length & diameter)	Coil: 224.0 (8.8 in.); 137.0 mm (5.4 in.)	
	Spring rate N/mm (lb./in.)	16.0 / 40.5 Variable Rate	
	Rate at wheel N/mm (lb./in.)	TBD	
	Insulators (type & material)	Rubber	
	If leaf	No. of leaves	-
		Shackle (comp. or tens.)	-
Stabilizer	Type (link, linkless, frameless)	Link	
	Material & O.D. bar/tube, wall thickness	Steel, 20 mm (.767 in.) Solid	
Track bar (type)		Not Applicable	



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

SEDAN (3.4L DOHC ENGINE) (F41 SUSPENSION)

Suspension - General Including Electronic Controls

Car leveling	Standard/optional/not available		Not Available	
	Manual/automatic control		"	
	Type (air/hydraulic)		"	
	Primary/assist spring		"	
	Rear only/4 wheel leveling		"	
	Single/dual rate spring		"	
	Single/dual ride heights		"	
	Provision for jacking		Body Rails, Under Rocker Panels; Jack Pad at Center of Rear Crossmember	
Shock absorber damping controls	Standard/option/not available		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		MacPherson Strut Front, MacPherson Strut Rear	
	Make		Delco Chassis Division	
	Piston diameter		35.0 mm (1.38 in.)	
	Rod diameter		25.0 mm (1.00 in.)	

Suspension - Front

Type and description		MacPherson Strut with Coil Springs, One-Piece "A" Configuration Lower Control Arms	
Travel	Full jounce (define load condition)	78 mm (3.07 in.)	
	Full rebound	95 mm (3.74 in.)	
Spring	Type (coil, leaf, other & material)		Coil
	Insulators (type & material)		Rubber
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)		Coil: 200.3 mm (7.89 in.); 173 mm (6.81 in.)
	Spring rate N/mm (lb./in.)		23.5 (134.2)
	Rate at wheel N/mm (lb./in.)		26.8 (153.0)
Stabilizer	Type (link, linkless, frameless)		Linkless
	Material & O.D. bar/tube, wall thickness		Steel, 34 mm (1.34 in.) - Hollow (Wall Thickness = 5.1 mm)

Suspension - Rear

Type and description		Tri-Link Independent MacPherson Strut with Coil Springs Lateral Links Attached to Body Cross Member, Trailing Arms	
Travel	Full jounce (define load condition)	102 mm (4.02 in.)	
	Full rebound	105 mm (4.13 in.)	
Spring	Type (coil, leaf, other & material)		Coil
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)		Coil: 224.0 mm (8.8 in.); 137.0 mm (5.4 in.)
	Spring rate N/mm (lb./in.)		18.5 / 33.3 Variable Rate
	Rate at wheel N/mm (lb./in.)		TBD
	Insulators (type & material)		Rubber
	If leaf	No. of leaves	-
		Shackle (comp. or tens.)	-
Stabilizer	Type (link, linkless, frameless)		Link
	Material & O.D. bar/tube, wall thickness		Steel, 22 mm (.866 in.) Solid
Track bar (type)		Not Applicable	



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (☉) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

SEDAN

Brakes - Service

Description		Dual Piston Caliper - Front Disc; Single Piston Caliper - Rear Disc			
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)	Disc			
	Rear (disc or drum)	Disc			
Valving type (proportion, delay, metering, other)		Proportioning			
Power brake (std., opt., n.a.)		Standard			
Booster type (remote, integral, vac., hyd., etc.)		Vacuum			
Vacuum	Source (inline, pump, etc.)	Inline			
	Reservoir (volume in. ³)	Not Applicable			
	Pump-type (elec., gear or belt driven)	Not Applicable			
Traction assist	Operational speed range	Not Applicable			
	Type (engine or brake intervention)	"			
Antilock device	Front/rear (std., opt., n.a.)	Standard - All Models Exc. Available on Base Sedan			
	Manufacturer	Delco Chassis Division, G.M.			
	Type (electronic, mech.)	Electronic			
	Number sensors or circuits	4			
	Number antilock hydraulic circuits	4 Separate Brake Lines/3 Controlled Channels (LF, RF, RR)			
	Integral or add-on system	Add-On Mounted to Master Cylinder			
	Yaw control (yes, no)	Yes			
Hyd. power source (elec., vac., mtr., pwr., strg.)		Not Applicable			
Effective area cm ² (in. ²) [*]		560.1 (86.4)			
Gross Lining area cm ² (in. ²) ^{**} (F/R)		F: 167.7 (26.0); R: 392.4 (60.4)			
Swept area cm ² (in. ²) ^{***} (F/R)		F: 1090.9 (169.09); R: 1272.3 (197.2)			
Rotor	Outer working diameter	F/R	F: 267 mm (10.5 in.)		
	Inner working diameter	F/R	F: 167.0 mm (6.6 in.)		
	Thickness	F/R	F: 26.3 mm (1.04 in.)		
	Material & type (vented/solid)	F/R	F: Composite Vented		
Drum	Diameter & width	F/R	225 x 45 mm (8.86 x 1.77 in.)		
	Type and material	F/R	Composite Solid		
Wheel cylinder bore		F: 42.0 mm (1.65 in.)			
Master cylinder	Bore/stroke	F/R	Bore: 24.0 mm (.94 in.); Stroke: 35.5 mm (1.40 in.)		
Pedal arc ratio		3.5:1			
Line press. at 445 N (100 lb.) pedal load [kPa (psi)]		13600 kPa (1972 psi)			
Lining clearance		F/R	0/0 mm		
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Integrally Molded	
		Rivet Size		-	
		Manufacturer		Delco Chassis Division	
		Lining code *****		DM130EE	
		Material		Semi-Metallic	
		****	Primary or out-board	119.4 x 38.1 mm / (4.7 x 1.5 in.)	
		****	Secondary or in-board	119.4 x 38.1 mm / (4.7 x 1.5 in.)	
	Shoe thickness (no lining)		4.98 mm (.196 in.)		
	Rear wheel	Bonded or riveted (rvts/seg.)		Riveted	
		Manufacturer		Delco Chassis Division	
		Lining code *****		245FF	
		Material		Semi-Metallic	
		****	Primary or out-board	44.2 x 22.2 mm (1.74 x .874 in.)	
		****	Secondary or in-board	"	
Shoe thickness (no lining)		2 mm (.0787 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 circumference.)
 (Disc brake: Square of Outer Working Dia. minus Square of Inner Working Dia. multiplied by $\pi/2$ for each brake.)

**** Size for drum brakes includes length x width x thickness. ***** Manufacturer I.D., catalog for formulation designation and coefficient of friction classification.



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MVMA Specifications

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METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

SEDAN

Tires And Wheels (Standard)

Tires	Size (service description)		P205/70R15 AL2 BW (95 S)
	Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial (2 Ply)
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	205 (30)
		Rear kPa (psi)	205 (30)
Rev./mile at 70 km/h (45 mph)		492 Rev/Km	
Wheels	Type & material		Stamped Steel
	Rim (size & flange type)		15 x 6
	Wheel offset		42.0 mm (1.65 in.)
	Attachment	Type (bolt or stud & nut)	Stud (M12 x 1.5)
		Circle diameter	115 mm (4.52 in.)
Number & size		5 & M12	
Spare	Tire and wheel		Compact Spare T125/70D16 16 x 4 Wheel
	Storage position & location (describe)		Horizontal, Under Trunk Compartment Load Floor

Tires And Wheels (Optional)

Tire size (service description)		P215/65R15 - Police (95 H)
Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial
Wheel (type & material)		Stamped Steel
Rim (size, flange type and offset)		15 x 6 (42 mm Offset)
Tire size (service description)		
Type (bias, radial, steel, nylon, etc.)		
Wheel (type & material)		
Rim (size, flange type and offset)		
Tire size (service description)		P225/60R16 - AL2 BW (97 S)
Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial
Wheel (type & material)		Cast Aluminum
Rim (size, flange type and offset)		16 x 6.5 (38 mm Offset)
Tire size (service description)		P225/60R16 - AL3 BL - Z34 (97 H)
Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial
Wheel (type & material)		Cast Aluminum
Rim (size, flange type and offset)		16 x 6.5 (38 mm 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)		

Brakes - Parking

Type of control		Single Stroke - Push to Release, Foot Pedal Application
Location of control		Left of Driver's Left Knee
Operates on		Rear Service Brakes
If separate from service brakes	Type (internal or external)	--
	Drum diameter	--
	Lining size (length x width x thickness)	--



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MVMA Specifications

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METRIC (U.S. Customary)

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SEDAN

Steering

Manual (std., opt., n.a.)		Not Available		
Power (std., opt., n.a.)		Standard		
Speed-sensitive (std., opt., n.a.)		Not Available		
4-wheel steering (std., opt., n.a.)		Not Available		
Adjustable steering wheel/column (tilt, telescope, other)	Type	Tilt		
	Manufacturer	Saginaw Division		
	(std., opt., n.a.)	Standard		
Wheel diameter** (W9) SAE J1100	Manual	Not Available		
	Power	380.0 mm		
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	Sedan: FE1 - 12.91 (42.37); F41/FE3/FE2 - 13.56 (44.50)	
		Curb to curb (l. & r.)	FE1 - 11.2 (36.7); F41 - 11.88 (39.0); FE2 - 11.88 (39.0); FE3 - 11.88 (39.0)	
	Inside rear	Wall to wall (l. & r.)	Not Available	
		Curb to curb (l. & r.)	7.18 (23.6)	
Scrub Radius*		Base - 15.78 mm; Touring - 16.39; Sport - 24.05 mm		
Manual	Gear	Type	Not Available	
		Manufacturer	"	
		Ratios	Overall	"
	No. wheel turns (stop to stop)		"	
	Type (coaxial, elec. hyd., etc.)		Hydraulic	
Power	Manufacturer		Saginaw Division	
	Gear	Type	End Take-Off Rack and Pinion	
		Ratios	Overall	16.1:1
		Pump (drive)		Belt
	No. wheel turns (stop to stop)		P205/70R15-2.60; (FE1) P225/60R16-2.26; (FE1) P225/60R16 RS-2.26 (F41)	
	Linkage	Type		End Take-Off
Location (front or rear of wheels, other)		Rear		
Tie rods (one or two)		2		
Steering axis	Inclination of camber (deg.)		13.4	
	Bearings (type)	Upper	Ball Bearing	
		Lower	Ball Joint	
		Thrust	Not Applicable	
Steering spindle/knuckle & joint type		MacPherson Strut		

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

** See Page 23.



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METRIC (U.S. Customary)

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SEDAN

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1.8 ± .5
		Camber (deg.)	0.7 ± .5
		Toe-in outside track mm (in.)	0.0 ± .20
	Service reset*	Caster (deg.)	Pre-set
		Camber (deg.)	0.7
		Toe-in mm (in.)	0.0
Periodic M.V. inspection	Caster (deg.)		
	Camber (deg.)		
	Toe-in mm (in.)		
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	15" Wheel - .35 ± .5; 16" Wheel - .45 ± .5
		Toe-in outside track (deg.)	0.0 ± .3 (Sum Toe)
	Service reset*	Camber (deg.)	15" Wheel - .35 ± .5; 16" Wheel - .45 ± .5
		Toe-in mm (deg.)	0.0 ± .3 (Sum Toe)
	Periodic M.V. insp.	Camber (deg.)	
		Toe-in mm (in.)	

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

Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog
	Trip odometer (std., opt., n.a.)	Mechanical
Head-up display	Standard, optional, not available	Not Available
	Type	Secondary, opto-electronic
	Speedometer	Digital
	Status/warning indicators	Turn signals, high beam, low fuel, check gauges
	Brightness control	Day / night mode, adjustable
EGR maintenance indicator		-
Charge indicator	Type	Analog
	Warning device (light, audible)	Tell-Tale Light
Temperature indicator	Type	Analog
	Warning device (light, audible)	Tell-Tale Light
Oil pressure indicator	Type	Not Available
	Warning device (light, audible)	Tell-Tale Light
Fuel indicator	Type	Analog
	Warning device (light, audible)	Not Available
Windshield wiper	Type (standard)	Depressed Park/Pulse Wiper
	Type (optional)	Not Available
	Blade length	560 mm (22.0 in.)
	Swept area cm ² (in. ²)	7558.3 (1171.5)
Windshield washer	Type (standard)	Wet-Arm System
	Type (optional)	Not Available
	Fluid level indicator (light, audible)	Not Available
Rear window wiper, wiper/washer (std., opt., n.a.)		Not Available
Horn	Type	Vibrator
	Number used	2
Other	PRNDL Odometer Tachometer	Mechanical Mechanical Analog



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MVMA Specifications

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METRIC (U.S. Customary)

Engine Code/Description

3.1 LITER V6 (191 CID)
 SEQUENTIAL FUEL INJECTION RPO L82

Electrical - Supply System

Battery	Manufacturer	Delco Remy
	Model, std., (opt.)	SAE 75-525 (1983655)
	Voltage	12
	Amps at 0° F. cold crank	525
	Minutes-reserve capacity	90
	Amps/hrs.-20 hr. rate	54
	Location	Engine Compartment
Alternator	Manufacturer	Delco Remy
	Rating (idle/max. rpm)	36/100 Amps
	Ratio (alt. crank/rev.)	2.75
	Output at idle (rpm, park)	68 Amps W/AC
	Optional (type & rating)	None
Regulator	Type	Integral with Alternator

Electrical - Starting System

Motor	Manufacturer	Delco Remy
	Current drain -29 (-20) °C (°F)	350 Amps
	Power rating kw (hp)	1.4 (1.9)
Motor drive	Engagement type	Solenoid Actuated, Positive Engagement
	Pinion engages from (front, rear)	Front

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	Standard	
	Other (specify)	None	
Coil	Manufacturer	Delco Remy	
	Model	Direct Ignition	
	Current	Engine stopped - A	Less than 100 ma
		Engine idling - A	Less than 1.5 A (Avg.)
Spark plug	Manufacturer	AC Rochester	
	Model	R44LTSM6	
	Thread (mm)	14 x 1.25	
	Tightening torque N-m (lb. ft.)	9-20 (7-15)	
	Gap	1.52 mm (.060 in.)	
	Number per cylinder	1	
Distributor	Manufacturer	Not Applicable	
	Model		

Electrical - Suppression

Locations & type	
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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Engine Code/Description

3.4 LITER V6 (207 CID)
 SEQUENTIAL FUEL INJECTION RPO LQ1

Electrical - Supply System

Battery	Manufacturer	Delco Remy
	Model, std., (opt.)	Standard
	Voltage	12
	Amps at 0° F. cold crank	690 CCA
	Minutes-reserve capacity	90
	Amps/hrs.-20 hr. rate	54
Location		Engine Compartment
Alternator	Manufacturer	Delco Remy
	Rating (idle/max. rpm)	42/105 Amps
	Ratio (alt. crank/rev.)	2.52
	Output at idle (rpm, park)	66 Amps W/AC
	Optional (type & rating)	None
Regulator	Type	Integral with Alternator

Electrical - Starting System

Motor	Manufacturer	Delco Remy
	Current drain -29 (-20) °C (°F)	395 Amps
	Power rating kw (hp)	1.6 (2.1)
Motor drive	Engagement type	Solenoid Operated Shift Lever
	Pinion engages from (front, rear)	Front

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	Electronic Direct Ignition (Standard) - Control Module with Three Integral Coils and One Remote Timing Sensor	
	Other (specify)	--	
Coil	Manufacturer	Delco Remy	
	Model	1103792	
	Current	Engine stopped - A	Less than 100 ma
		Engine idling - A	Less than 1.5 A (Avg.)
Spark plug	Manufacturer	AC Rochester	
	Model	.R42LTSM	
	Thread (mm)	14 x 1.25	
	Tightening torque N-m (lb. ft.)	10-20 (7.38-14.75)	
	Gap	1.14 mm (.045 in.)	
	Number per cylinder	1	
Distributor	Manufacturer	Not Applicable	
	Model	"	

Electrical - Suppression

Locations & type	Alternator - Internal Capacitor Suppression Ignition - Internal Resistor/Capacitor Networks
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MVMA Specifications

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METRIC (U.S. Customary)

Model Code/Description

SEDAN

Body

Structure	Unitized Body - Frame. Body Side Assembly Includes Full Drawn Quarter Panels. Fully Stamped Inner/Outer Door Panels with Header Extending into Roof. Full-Length Deck Lid Inner/Outer Panels, Full-Drawn Floor Pan.
Bumper system front - rear	Body Color Soft Fascia, Frt.-Honeycomb Absorber/Rr.-Foam Absorber and Rigid Reinforcing Bar Used at Both Front and Rear.
Anti-corrosion treatment	Double-Sided Galvanizing or Gavaneal of all Major Body/Sheet Metal Inner/Outer Panels Including Hood, Deck Lid, Doors as well as Rear and End Panel, Plenum, Fenders, Compartment Pan, Quarter Panels, Rocker Panels and Wheelhouse Outer Panels.

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)	Base Coat-Clear Coat Acrylic Enamel Over ELPO Primer	
Hood	Material & mass	Steel, 17.3 kg.
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Gas Charged Strut
	Release control (internal, external)	Internal
Trunk lid	Material & mass	Steel
	Type (counterbalance, other)	Dual Torque Rods
	Internal release control (elec., mech., n.a.)	Electric, Optional
Hatchback lid	Material & mass	Not Available
	Type (counterbalance, other)	.
Tailgate	Material & mass	.
	Type (drop, lift, door)	.
Vent window control (crank, friction, pivot, power)	Front	Not Applicable
	Rear	.
Window regulator type (cable, tape, flex drive, etc.)	Front	Cross Arm Regulator
	Rear	Cross Arm Regulator
Seat cushion type (e.g. 60/40 bucket, bench, wire, foam, etc.)	Front	Base - 60/40 Split Bench, Trim Material on Foam Uplevel - 60/40 Split Bench or 40/40 Bucket, Trim Material Bonded to Foam
	Rear	Base - Bench, Trim Material on Foam with Encapsulated Frame Uplevel - Bench, Trim Material Bonded to Foam with Encapsulated Frame
	3rd seat	Not Applicable
Seat back type (e.g., 60/40 bucket, bench, wire, foam, etc.)	Front	Base - 60/40 Split Bench, Trim Material on Foam Uplevel - 60/40 Split Bench or 40/40 Bucket, Trim Material Bonded to Foam
	Rear	Base - Bench, Trim Material on Foam with Encapsulated Frame Uplevel - Bench, Trim Material Bonded to Foam with Encapsulated Frame
	3rd seat	Not Applicable

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Unitized Body/Frame, Bolted-On Powertrain Cradle with Mounting Provisions for Suspension and Engine Mounts.
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MVMA Specifications

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METRIC (U.S. Customary)

Model Code/Description

SEDAN

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.) Standard/Optional	First seat	3 Pt. Single Loop W/Shldr. Retractor, End Release Buckle, Adjustable Guide Loop/All Retractors are Web & Vehicle Sensitive Retractors.	Lap Belt Manual Adjustment End Release Buckle	3 Pt. Single Loop W/Shldr. Retractor, End Release Buckle, Adjustable Guide Loop, Child Cinch Retractor/All Retractors are Web & Vehicle Sensitive Retractors.
		Second seat	3 Pt. Single Loop W/Shldr. End Release Buckle, Child Cinch Retractor, Child Comfort Guide/All Retractors are Web & Vehicle Sensitive Retractors	Lap Belt Manual Adjustment End Release Buckle	3 Pt. Single Loop W/Shldr. Retractor, End Release Buckle, Child Cinch Retractor, Child Comfort Guide/All Retractors are Web & Vehicle Sensitive Retractors.
		Third seat			
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt) Standard / Optional	First seat	Air Bag	Air Bag (Passenger Side)	Air Bag
		Second seat			
		Third seat			
Glass		SAE Ref.No.			
Windshield glass exposed surface area cm ² (in. ²)		S1	8798 (1363.7)		
Side glass exposed surface area cm ² (in. ²) - total 2 sides		S2	2771.94 cm ² F/D; 2610.53 cm ² R/D		
Backlight glass exposed surface area cm ² (in. ²)		S3	4624 (716.7)		
Total glass exposed surface area cm ² (in. ²)		S4	-		
Windshield glass (type/thickness)			Curved-2nd Laminated Float, 5.4 mm		
Side glass (type/thickness)			Curved-Tempered Float: 5.0 mm F/D Sedan; 4.0 mm R/D Sedan, Quarter		
Backlight glass (type/thickness)			Curved-Tempered Float, 4.0 mm		
Tinted (yes/no, location)			Tinted All Around		
Solar control (yes/no, coated/batched, location)			No		

Headlamps

Description (sealed beam, halogen, replaceable bulb, etc.)	Halogen, Replacement Bulb Unit
Shape	Aero
Lo-beam type (2A1, 2B1, 2C1, etc.)	Trade No. 9006/HB4
Quantity	2
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	Trade No. 9005/HB3
Quantity	2



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METRIC (U.S. Customary)

Engine Code/Description

ALL

Climate Control System

Air conditioning (std., opt., man., auto.)		Standard - L82, LQ1
Condensar	Type	Tube & Fin
	Eff. face area (sq. mm.)	315,181
	Fins per inch	13
Evaporator	Type	U Flow, Aluminum
	Eff. face area (sq. mm.)	48,437
	Fins per inch	14
Heater core	Material	Aluminum
	Eff. face area (sq. mm.)	33,028
	Fins per inch	30
Compressor	Type	V5
	Displacement (cc.)	Variable Displacement
	Manufacturer	Harrison Division, G.M.
	A/C pulley ratio	1.37
Accumulator	Type	Non-Serviceable, Sealed, Integral Design
	Height (mm.)	206
	Diameter (mm.)	89
Receiver	Type	Not Applicable
	Height (mm.)	"
	Diameter (mm.)	"
Refrigerant control (CCOT, TVS, etc.)		Variable Displacement Compressor VDOT
Heater water valve (yes / no)		No
Refrigerant (R - 12, R - 134a, etc.)		R134A
Charge level (lbs. - oz.)		2.0 lbs.
Cold engine lockout switch (yes / no)		No
Wide open throttle cutout switch (yes / no)		Yes
Power steering cut-out switch (yes/no)		Yes, LQ1 Only



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METRIC (U.S. Customary)

Model Code/Description

SEDAN

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

	Clock (digital, analog)	Digital - In Radio, Standard
	Compass / thermometer	Not Available
	Console (floor, overhead)	Optional, Floor (Overhead - Not Available)
	Defroster, electric windshield	Not Available
	Defroster, electric backlight	Optional
Electronic	Diagnostic monitor (integrated, individual)	Not Available
	Instrument cluster (list instruments)	Not Available
	Keyless entry	Optional
	Tripminder (avg. spd., fuel)	Not Available
	Voice alert (list items)	Not Available
	Other	
	Fuel door lock (remote, key, electric)	
Integrated Child Seating	Std./opt. & location in vehicle	OPT, Center
	Number of occupants	(1)
	Occupant weight/height (min. & max.)	Not Available
	Restraint system description (3 or 5-point belts/booster seat capability)	Not Available
Lamps	Auto head on/off delay, dimming	Not Available
	Cornering	Not Available
	Courtesy (map, reading) Dome	Standard
	Door lock, ignition	
	Engine compartment	Standard
	Fog	Not Available
	Glove compartment	Standard
	Trunk	Standard
	Illuminated entry system (list lamps, activation)	Sustained Interior Illumination - Standard
	Other Ashtray	Standard
CHMSL	Standard	
Mirrors	Day / night (auto., man.)	Standard - Manual
	L.H. (remote, power, heated)	Standard - Remote; Optional - Power
	R.H. (convex, remote, power, heated)	Standard - Manual; Optional - Power
	Visor vanity (RH / LH, illuminated)	Not Available, (Uncovered Visor Vanity - Optional)
	Navigation system (describe)	Not Available
	Parking brake-auto release (warning light)	Standard - Warning Light

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METRIC (U.S. Customary)

Model Code/Description

SEDAN

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

Power equipment	Deck lid (release, pull down)		Optional, Electric Release	
	Door locks (manual, automatic, describe system)		Electric, Standard	
	Seats	2 - 4 - 6 way, etc.		Standard 4-Way, Driver Side Only; Optional 6-Way
		Reclining (R.H., L.H.)		Standard - Manual
		Memory (R.H., L.H., preset recline)		Not Available
		Support (lumbar, hip, thigh, etc.)		Not Available
		Heated (R.H., L.H., other)		Not Available
	Side windows		Optional Electric	
	Vent windows		Not Applicable	
	Rear windows		Optional Electric	
Radio systems	Antenna (location, whip, w/shield, power)		Standard, Fixed Whip Located on Right Rear Upper Quarter Panel	
	Standard	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM/FM Stereo, Seek & Scan/Standard	
	Optional		AM/FM Stereo, Seek & Scan, Cassette ATC (Theft Deterrent) - Optional AM/FM Stereo, Seek & Scan, Cassette - Optional AM/FM Stereo, Seek & Scan/Compact Disc ATC (Theft Deterrent) - Optional	
	Speaker (number, location)		Standard - 2 In Front Doors, 2 In Package Shelf, Optional - Dual Coax	
	Roof: open air or fixed (flip-up, sliding, "T")		Not Available	
Speed control device		Optional, Automatic Electronic		
Speed warning device (light, buzzer, etc.)		Not Available		
Tachometer (rpm)		Optional (Included as Part of Optional Gauge Package)		
Telephone system (describe)		Not Available		
Theft deterrent system		Not Available		

Trailer Towing

Towing capable	Yes / No	Yes
Engine / transmission / axle	Std. / Opt.	3.1L, 4-Spd. Auto., 3.33; 3.4L, 4-Spd. Auto., 3.43
Tow class (I, II, III)*	Std. / Opt.	1
Max. gross trailer wgt. (lbs.)	Std. / Opt.	1000
Max. trailer tongue load (lbs.)	Std. / Opt.	100
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
 Model Year 1996 Issued _____ 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.

Model Code/Description	SAE Ref. No.	SEDAN
------------------------	--------------	-------

Width

Tread (front)	W101	1512 (59.5)
Tread (rear)	W102	1500 (59.0)
Vehicle width	W103	1841 (72.5)
Body width at SgRP (front)	W117	1800 (70.8)
Vehicle width (front doors open)	W120	3480 (137.0)
Vehicle width (rear doors open)	W121	3483 (137.1)
Tumble-home (degrees)	W122	27.0 (1.1)
Outside mirror width	W410	1980 (77.9)

Length

Wheelbase	L101	2730 (107.5)
Vehicle length	L103	5104 (200.9)
Overhang (front)	L104	1174 (46.2)
Overhang (rear)	L105	1200 (47.2)
Upper structure length	L123	2880 (113.3)
Rear Wheel C/L "X" coordinate	L127	4525 (178.1)

Height **

Passenger distribution (front/rear)	PD1_2,3		**
Trunk/cargo load			**
Vehicle height	H101	1403 (55.2)	
Cowl point to ground	H114	937 (36.8)	
Deck point to ground	H138	1001 (39.4)	
Rocker panel-front to ground	H112	194 (7.6)	
Rocker panel-rear to ground	H111	195 (7.7)	
Windshield slope angle (degrees)	H122	60.0 (2.3)	
Backlight slope angle (degrees)	H121	64.0 (2.5)	

Ground Clearance **

Front bumper to ground	H102	329 (12.9)
Rear bumper to ground	H104	321 (12.6)
Bumper to ground front at curb mass (wt.)	H103	356 (14.0)
Bumper to ground rear at curb mass (wt.)	H105	370 (14.6)
Angle of approach (degrees)	H108	16.0
Angle of departure (degrees)	H107	10.0
Ramp breakover angle (degrees)	H147	13.0
Axle differential to ground (front/rear)	H153	163 (6.4)
Min. running ground clearance	H156	165 (6.5)
Location of min. running ground clear.		Exhaust Pipe Rear of Converter

** 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.



MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (●) _____

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for definitions

Model Code/Description

SAE
 Ref.
 No.

SEDAN

Front Compartment

SgRP front, "X" coordinate	L31	3140 (123.6)
Effective head room	H61	975 (38.4)
Max. effective leg room (accelerator)	L34	1077 (42.4)
SgRP to heel point	H30	251 (9.9)
SgRP to heel point	L53	875 (34.4)
Back angle (degrees)	L40	26.0
Hip angle (degrees)	L42	89.0
Knee angle (degrees)	L44	128.0
Foot angle (degrees)	L46	87.0
Design H-point front travel	L17	218 (8.6)
Normal driving & riding seat track trvl.	L23	178 (7.04)
Shoulder room	W3	1483 (58.4)
Hip room	W5	1407 (55.4)
*** Upper body opening to ground	H50	1271 (50.0)
Steering wheel maximum diameter**	W9	375 (14.8)
Steering wheel angle (degrees)	H18	22.0
Accel. heel pt. to steer. whl. cntr.	L11	515 (20.3)
Accel. heel pt. to steer. whl. cntr.	H17	620 (24.4)
Undepressed floor covering thickness	H67	

Front Compartment Interior Dimensions are Measured with the Seating Reference Point (SgRP) _____ mm forward and _____ mm Upward of Rearmost Position.

Rear Compartment

SgRP point couple distance	L50	826 (32.5)
Effective head room	H63	949 (37.4)
Min. effective leg room	L51	930 (36.6)
SgRP (second to heel)	H31	286 (11.2)
Knee clearance	L48	35 (1.3)
Shoulder room	W4	1458 (57.4)
Hip room	W6	1404 (55.3)
*** Upper body opening to ground	H51	1331 (52.4)
Back angle (degrees)	L41	28.0
Hip angle (degrees)	L43	90.0
Knee angle (degrees)	L45	95.0
Foot angle (degrees)	L47	123.0
Depressed floor covering thickness	H73	17 (6.7)

Luggage Compartment

Usable luggage capacity L (cu. ft.)	V1	444.0 (17.4)
*** Lifter height	H185	679 (26.7)

Interior Volumes (EPA Classification)

Vehicle class	Mid Size
Interior volume index including trunk/cargo (cu. ft.)**	116.0
Trunk/cargo index (cu. ft.)	15.5

* See page 14.

** See definition page 33.

All linear dimensions are in millimeters (inches) unless otherwise noted.

*** EPA Loaded Vehicle Weight, Loading Conditions



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MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Model Code/Description

SEDAN

Station Wagon/MPV*
 -Third Seat

SAE
 Ref.
 No.

(NOT APPLICABLE)

Seat facing direction	SD1	
SgRP couple distance	L85	
Shoulder room	W85	
Hip room	W86	
Effective leg room	L86	
Effective head room	H86	
SgRP to heel point	H87	
Knee clearance	L87	
Back angle (degrees)	L88	
Hip angle (degrees)	L89	
Knee angle (degrees)	L90	
Foot angle (degrees)	L91	

Station Wagon/MPV* - Cargo Space

(NOT APPLICABLE)

Cargo length (open front)	L200	
Cargo length (open second)	L201	
Cargo length (closed front)	L202	
Cargo length (closed second)	L203	
Cargo length at belt (front)	L204	
Cargo length at belt (second)	L205	
Cargo width (wheelhouse)	W201	
Rear opening width at floor	W203	
Opening width at belt	W204	
Min. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
Tailgate to ground height	H250	
Front seat back to load floor height	H197	
Cargo volume index m ³ (ft. ³)	V2	
Hidden cargo volume index m ³ (ft. ³)	V4	
Cargo volume index-rear of 2-seat	V10	
Cargo volume index*	V6	
Cargo width at floor*	W500	
Maximum cargo height*	H505	

Hatchback - Cargo Space

(NOT APPLICABLE)

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

All linear dimensions are in millimeters (inches) unless otherwise noted.

* MPV - Multipurpose Vehicle

** EPA Loaded Vehicle Weight, Loading Conditions



MVMA Specifications

Vehicle Line LUMINA
 Model Year 1996 Issued Revised (®)

METRIC (U.S. Customary)

Model Code/
Description

SEDAN

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 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.)
NOTE: Provide 3 of 4 Fiducial Mark Locations		
Front	W21**	555.0
	L54**	2776.0 (109.29)
	H81**	279.0 (11.0)
	H161***	334 (13.1)
	H163***	314 (12.3)
Rear	W22**	488 (19.2)
	L55**	5200 (204.7)
	H82**	388 (15.2)
	H162***	314 (12.3)
	H164***	425 (16.7)

* Reference - SAE Recommended Practice, J182a, Motor Vehicle Fiducial Marks.
 ** Reference - SAE Recommended Practice J1100 - Motor Vehicle Dimensions.
 *** EPA Loaded Vehicle Weight, Loading Conditions
 All linear dimensions are in millimeters (inches) unless otherwise noted.



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MVMA Specifications
METRIC (U.S. Customary)

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (●) _____

		Optional Equipment Differential Mass (weight)*			Remarks Restrictions, Requirements
Code	Equipment	MASS, kg. (lb.)			
		Front	Rear	Total	
AG1	Seat Adj-6 Way Power Driver Only	.6 (1.3)	.6 (1.3)	1.2 (2.6)	
AQ9	Seat Front-Bucket/Recliner	6.0 (13.2)	6.0 (13.2)	12.0 (26.4)	
AR9	Seat Front Bucket, Euro P/D Recliner	-2.4 (-5.3)	-1.8 (-4.0)	-4.2 (-9.3)	
A31	Windows - Power	2.0 (4.4)	2.0 (4.4)	4.0 (8.8)	
A90	Lock-RR Compt. Lid, Rem Count Ele.	.0 (0)	.2 (.4)	.2 (.4)	
BF9	Cover-Floor Mat Deleta	-1.8 (-4.0)	-1.4 (-3.0)	-3.2 (-7.0)	
C49	Defogger-RR Window, Electric	.0 (0)	.2 (.4)	.2 (.4)	
DG7	Mirror-O/S, L&R, Elec Painted	.2 (.4)	.0 (0)	.2 (.4)	
D55	Console-Frt. Compt Floor, Var 1	2.0 (4.0)	2.0 (4.0)	4.0 (8.0)	
F41	Suspension System-Frt/RR, Firm Ride, Hdlg	1.0 (2.2)	1.0 (2.2)	2.0 (4.4)	
JL9	Brake System-Power Frt & RR Disc ABS	6.4 (14.1)	.6 (1.3)	7.0 (15.4)	
JM4	Antilock Brakes	6.4 (14.1)	.6 (1.3)	7.0 (15.4)	
KC4	Cooling System-Engine Oil	2.4 (5.3)	-.2 (-.4)	2.2 (4.9)	
KD1	Cooling System-Transmission Oil	1.4 (3.1)	-.2 (-.4)	1.2 (2.6)	
K05	Heater-Engine Block	.4 (.9)	.0 (0)	.4 (.9)	
K34	Cruise Control Auto Electronic	1.2 (2.6)	.0 (.0)	1.2 (2.6)	

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

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MVMA Specifications
METRIC (U.S. Customary)

Vehicle Line LUMINA
 Model Year 1996 Issued _____ Revised (*) _____

Code	Equipment	Optional Equipment Differential Mass (weight)*			Remarks Restrictions, Requirements
		MASS, kg. (lb.)			
		Front	Rear	Total	
LQ1	Engine-Gas, 6 Cylinder, 3.4L MF1	61.4 (135.4)	-7.8 (-17.2)	53.6 (118.2)	
M13	Transmission-Four Speed Auto, HMD	18.8 (41.4)	.0 (0)	18.8 (41.4)	
NC5	Exhaust-Dual Vert Tail Pipes	1.0 (2.2)	10.8 (23.8)	11.8 (26.0)	
NWO	Wheel 16 x 6.5 Cast Aluminum	-3.6 (-7.9)	-3.6 (-7.9)	-7.2 (-15.8)	
N81	Fullsize Spare Tire	0 (0)	2.6 (5.7)	2.6 (5.7)	
P01	Trim Discs-Wheel, Var 1	.6 (1.3)	.6 (1.3)	1.2 (2.6)	
QNJ	Tire All P215/65R15 BW	2.0 (4.4)	2.0 (4.4)	4.0 (8.8)	
QNX	Tire-P225/60R16/NBL	.6 (1.3)	.6 (1.3)	1.2 (2.6)	
QVG	Tire-P225/60R16/N	2.2 (4.9)	2.2 (4.9)	4.4 (9.8)	
UA1	Battery-High Capacity, Wet	1.6 (3.5)	.0 (0)	1.6 (3.5)	
UL0	Radio AM/FM Stereo	.6 (1.3)	.2 (.4)	.8 (1.7)	
UL5	Radio-Delete	-2.2 (-4.9)	-1.4 (-3.1)	-3.6 (-8)	
UM6	Radio-AM/FM Stereo, Seek & Scan, Cass., CL	.6 (1.3)	.2 (.4)	.8 (1.7)	
UN0	Radio-AM/FM Cassette	.8 (1.8)	.2 (.4)	1.0 (2.2)	
UV8	Telephone Provision	.2 (.4)	.2 (.4)	.4 (.8)	
U62	Speaker System-4 Dual Front Coax	.2 (.4)	.2 (.4)	.4 (.8)	
VB7	Bumper Frt & RR Sport	-.6 (-1.3)	.2 (.4)	-.4 (-.9)	

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

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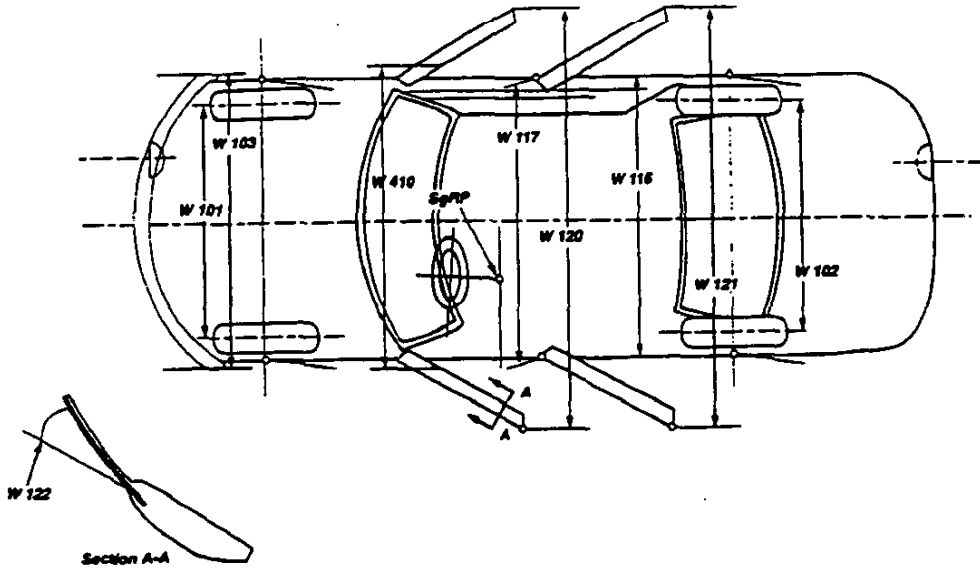
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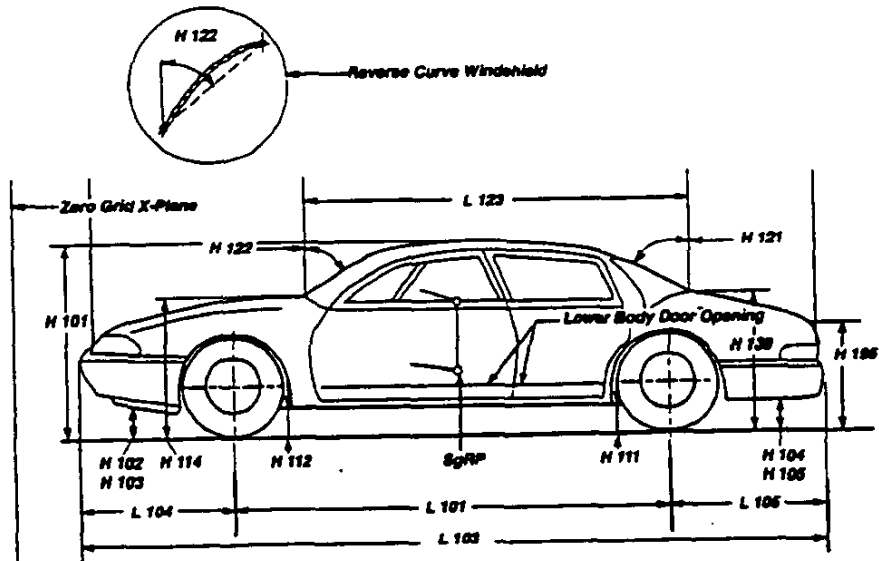
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METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions - Key Sheet

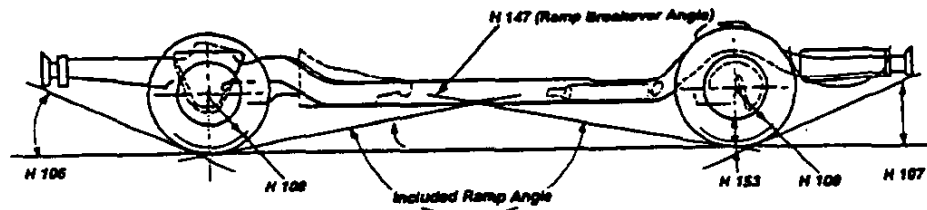
Exterior Width Dimensions



Exterior Length & Height Dimensions



Ground Clearance Dimensions



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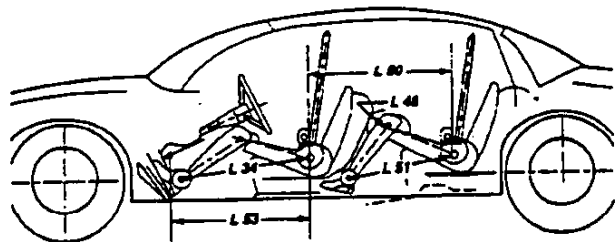
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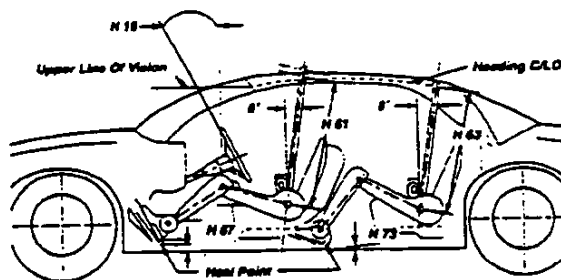
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Interior Vehicle And Body Dimensions - Key Sheet

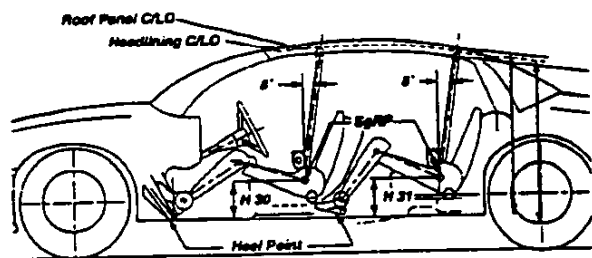
Interior Length Dimensions



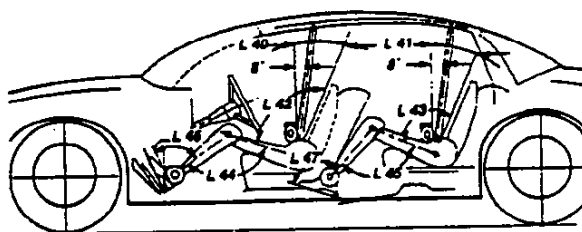
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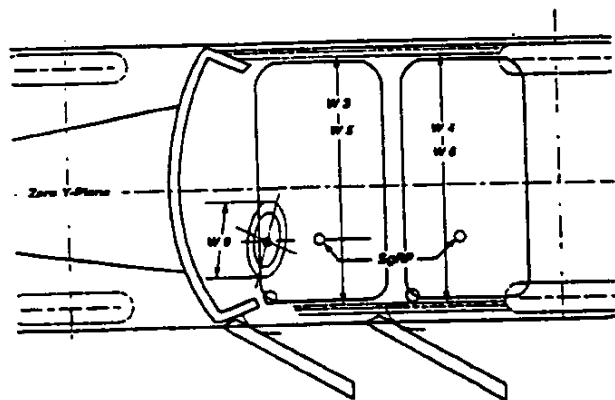
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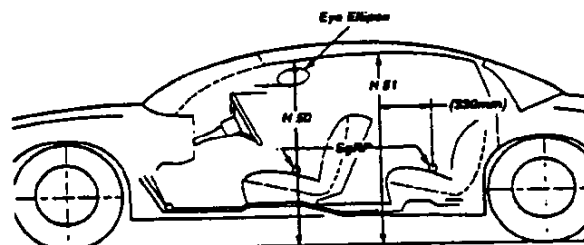
Interior Length Dimensions



Interior Width Dimensions



Interior Height Dimensions



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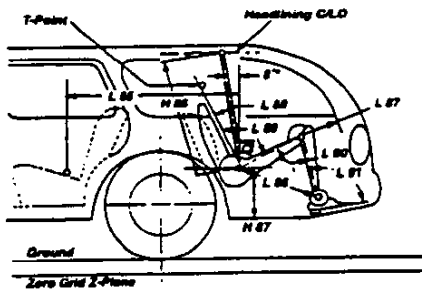
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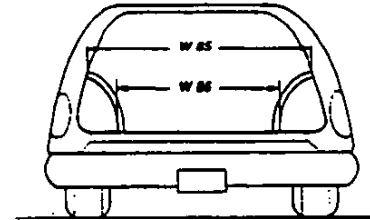
AAMA Specifications
METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet

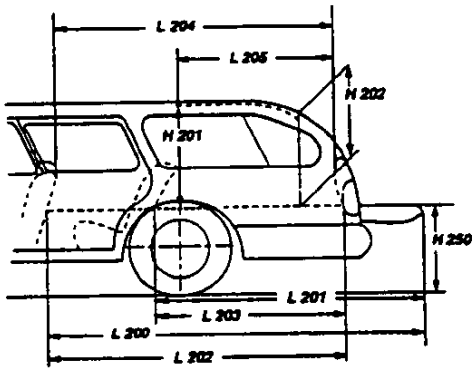
Interior Dimensions: Station Wagon Third Seat



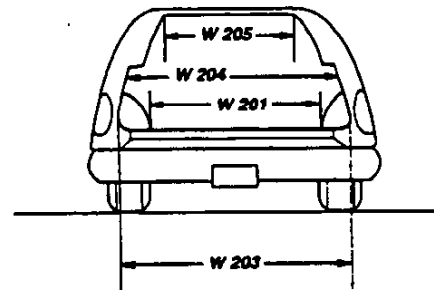
Interior Dimensions



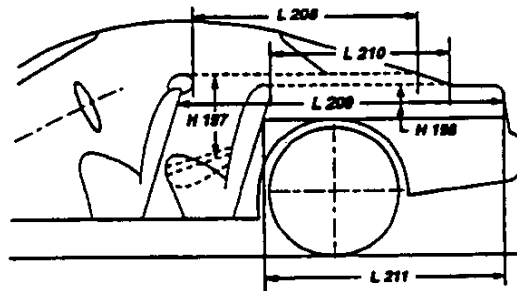
Cargo Space Dimensions



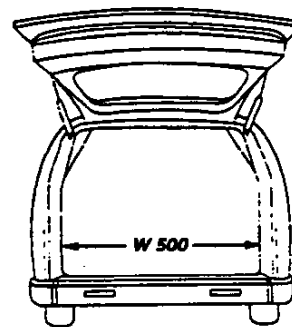
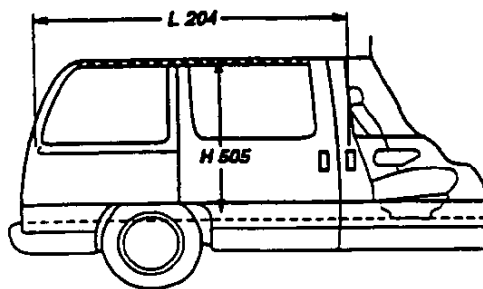
Cargo Space Dimensions



Cargo Space Dimensions



Multipurpose Vehicle Cargo Space



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AAMA Specifications

METRIC (U. S. Customary)

Exterior Vehicle And Body Dimensions - Key Sheet

Dimensions Definitions

<p>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,".</p>	<p>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.</p>
<p>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 rear 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.</p>	<p>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 STATICLOAD-TIRE RADIUS-REAR. Specified by the manufacturer in accordance with composite TIRE SECTION STANDARD.</p>
<p>Length Dimensions L101 WHEELBASE (WB). The dimension measured longitudinally between front and rear wheel centerline. In case of dual rear axles, the dimension shall be to the midpoint of the centerlines of the rear wheels. L103 VEHICLE LENGTH. The maximum dimension measured longitudinally between the foremost point and the rearmost point on the vehicle, including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment. L104 OVERHANG-FRONT. The dimension measured longitudinally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow hook 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.</p>	<p>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 of structural interference rearward of the rear tire to ground. The limiting component shall be designated. H147 RAMP BRAKEROVER 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.</p>



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AAMA Specifications

METRIC (U. S. Customary)

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.
 H82 "Z" coordinate.
 H162 Height "Z" coordinate to ground at curb weight.
 H164 Height "Z" coordinate to ground.

Front Compartment Dimensions

- L11 ACCELERATOR WHEEL 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.
 L40 BACK ANGLE-FRONT. The angle measured between a vertical line through the SgRP-front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.
 L42 HIP ANGLE-FRONT. The angle measured between torso line and thigh centerline.
 L44 KNEE ANGLE-FRONT. The angle measured between thigh centerline and lower leg centerline measured on the right leg.
 L46 FOOT ANGLE-FRONT. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the bare foot flesh line measured on the right leg. Ref SAE J826.
 L53 SgRP-FRONT TO HEEL. The dimension measured horizontally from the SgRP-front to the accelerator heel point.
 W3 SHOULDER ROOM-FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP-front at height between the belt line and 254 mm (10.0 in.) above the SgRP-front, excluding the door assist strap and attaching parts.

- W5 HIP ROOM-FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP-front within 25 mm (1.0 in.) below and 76 mm (3.0 in.) above the SgRP-front and 76 mm (3.0 in.) fore and aft of the SgRP-front.
 W9 STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.
 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 (4.0 in.).
 H67 FLOOR COVERING THICKNESS - UNDEPRESSED - FRONT. The dimension measured vertically from the surface of the undepressed floor covering to the underbody sheet metal at the accelerator heel point.

Rear Compartment Dimensions

- L41 BACK ANGLE-SECOND. The angle measured between a vertical line through the SgRP-second and the torso line.
 L43 HIP ANGLE-SECOND. The angle measured between torso line and thigh 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.

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AAMA Specifications

METRIC (U. S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet

Dimensions Definitions

Luggage Compartment Dimensions

VI **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 Index is listed for each body style except two seaters. The Interior Volume Index estimates the space in a car. It is based on four measurements - head room, shoulder room, hip room, and leg room - for the front and rear seats, plus trunk capacity.

The 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/MPV - 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 (2.0in.). 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/MPV - Cargo Space Dimensions

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

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

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

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

L204 **CARGO LENGTH AT BELT-FRONT**. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab 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 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.

W500 **CARGO WIDTH AT FLOOR**. The maximum dimension measured laterally between the limiting interferences at the floor level. This dimension shall include ribs and pillars, but will exclude wheelhouses.

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.

H505 **MAXIMUM CARGO HEIGHT**. The maximum vertical dimension rear of the front seat from the cargo floor to roof bow or headlining at the zero "Y" plane.



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AAMA Specifications

METRIC (U. S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet

Dimensions Definitions

V2 STATION WAGON
Measured in inches:

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

Measured in mm:

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

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:

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

Measured in mm:

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

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

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

Measured in mm:

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

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:

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

Measured in mm:

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

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. 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. The minimum dimension measured from the "X" plane tangent to the rearmost surface of second seatback or the load floor which is towed 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 SEATBACK. 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:

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

Measured in mm:

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

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:

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

Measured in mm:

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



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