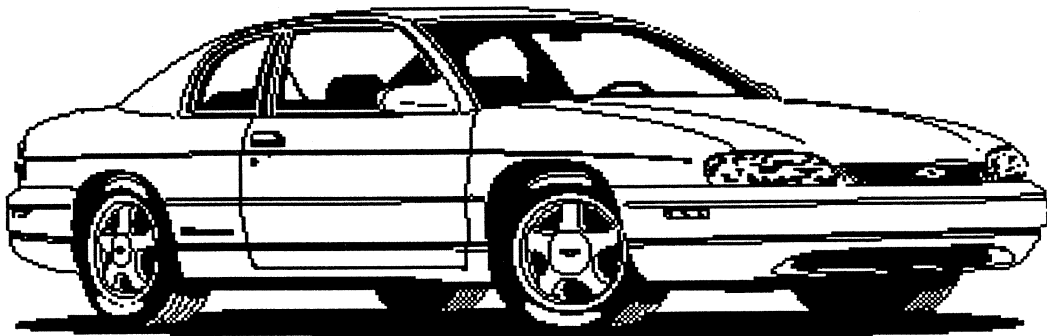
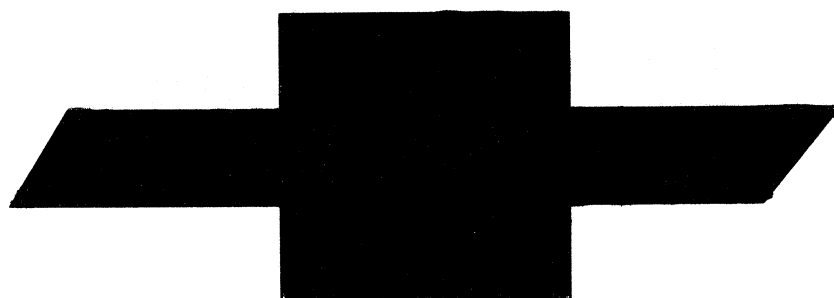


1998 MONTE CARLO

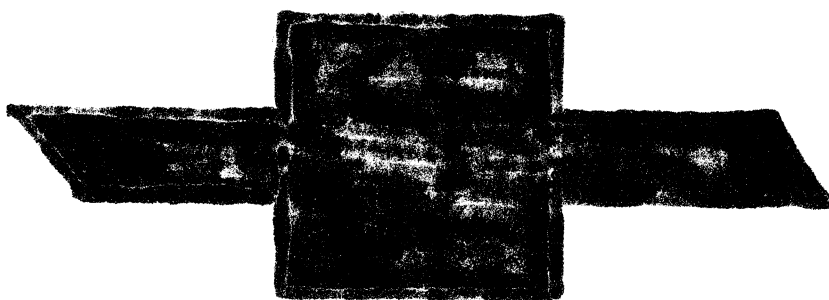


RESTORATION PACKET

1998



**MONTE
CARLO**



1998 MONTE CARLO HIGHLIGHTS

NEW FOR 1998

- **NEW ALUMINUM MACHINED FACED WHEEL STANDARD ON Z34 MODEL.**

NEW STANDARD "L36 3800 SFI V-6" ENGINE REPLACES STANDARD LQ1 3.4 ENGINE ON Z34.

- **ALL MONTE CARLO AXLE RATIO'S REVISED TO 3.29.**

EXTERIOR

- **CARRYOVER**

INTERIOR

- **NEW INTERIOR COLOR MED. DARK PEWTER (MERCHANDISED AS MED. GRAY) AVAILABLE IN CLOTH ONLY.**

PREFERRED EQUIPMENT GROUPS (PEGS)

- **SOME PREFERRED EQUIPMENT GROUPS RECONFIGURED TO ADD VALUE.**

COLORS

- **MED. REGAL BLUE (MET.) REPLACES MED. BLUE ADRIATIC (MET.)**
- **NAVY BLUE (MET.) REPLACES LIGHT BLUE ADRIATIC (MET.)**
- **LT. DRIFTWOOD (MET.) REPLACES GRANITE (MET.)**
- **LT. PEWTER (MET.) REPLACES MEDIUM LICHEN GREEN (MET.)**

STANDARD EQUIPMENT SUMMARY

		<u>1WW27</u>	<u>1WX27</u>
<u>CHASSIS</u>			
AXLES:	3.29 W/3100 SFI V6 ENGINE	S	--
	3.29 W/3800 SFI V6 ENGINE	--	S
BRAKES:	4-WHEEL ANTI-LOCK FRONT DISC, REAR DRUM	S	--
	4-WHEEL ANTI-LOCK DISC FRONT AND REAR	--	S
ENGINE:	3100 SFI V6	S	--
	3800 SFI V6	--	S
FUEL TANK:	16.6 GALLON CAPACITY	S	S
STEERING:	POWER	S	S
	TILT-WHEEL	S	S
TRANSMISSION:	4-SPEED AUTOMATIC	S	S
<u>INTERIOR</u>			
AIR BAGS:	DRIVER AND FRONT PASSENGER	S	S
AIR CONDITIONING:		S	S
CARGO NET:	LUGGAGE AREA	--	S
FLOOR MATS:	FRONT & REAR CARPETED	S	S
GAGES:	TACHOMETER	S	S
GLASS:	TINTED/SOLAR-RAY	S	S
LIGHTING:	AUXILIARY GLOVE BOX, TRUNK, IP MOUNTED ASHTRAY,		
	DOME LAMP, DUAL READING LAMPS	S	S
	INTERIOR, SUSTAINED ILLUMINATION	S	S
LOCKS:	POWER DOOR	S	S
	REMOTE KEYLESS ENTRY W/ILLUMINATION	--	S
	PASS KEY II THEFT DETERRENT SYSTEM	S	S
MIRRORS:	VISOR, LH AND ILLUMINATED RH	S	S
PASS KEY II:	THEFT DETERRENT SYSTEM	S	S
RADIO:	ELECTRONICALLY TUNED AM/FM STEREO RADIO W/SEEK-SCAN,		
	STEREO CASSETTE TAPE, DIGITAL CLOCK, AUTOMATIC TONE		
	CONTROL, THEFT LOCK AND SPEED COMPENSATED		
	VOLUME (INCLS PREMIUM FRONT AND REAR COAXIAL		
	SPEAKERS)	S	S
RADIO CONTROLS:	STEERING WHEEL (INCLS LEATHER WRAPPED STEERING WHL)	--	S
SCOTCHGARD:	FABRIC PROTECTOR INCLUDES SEATS, DOOR TRIM		
	AND FLOOR COVERING	S	S

MONTE CARLO

STANDARD EQUIPMENT SUMMARY

		<u>1WW27</u>	<u>1WX27</u>
<u>INTERIOR continued</u>			
SEATS:	CUSTOM CLOTH 60/40 SEAT W/CENTER STORAGE ARMREST WITH CUPHOLDER AND 4-WAY MANUAL DRIVER SEAT ADJUSTER AND SPLIT FOLDING REAR SEAT	S	--
	CUSTOM CLOTH BUCKET WITH CONSOLE, 4-WAY MANUAL DRIVER SEAT ADJUSTER AND SPLIT FOLDING REAR SEAT	--	S
SPEED CONTROL:	ELECTRONIC, W/RESUME SPEED	--	S
TEMPERATURE CONTROLS:	DRIVER AND PASSENGER SIDE	--	S
TRUNK OPENER:	POWER	--	S
WARNING LIGHTS:	ENGINE OIL WEAR INDICATOR, LOW COOLANT LEVEL, LOW ENGINE OIL	S	S
WINDOWS:	POWER	S	S
<u>EXTERIOR</u>			
LIGHTS:	AUTOMATIC DAYTIME RUNNING	S	S
MIRRORS:	DUAL BODY COLOR REMOTE, ELECTRIC	S	S
MOLDINGS:	BODYSIDE, COLOR-KEYED	S	S
PAINT:	BASE COAT/CLEAR COAT	S	S
TIRES:	P205/70R-15 BLACKWALL TOURING	S	--
	P225/60R-16 BLACKWALL PERFORMANCE	--	S
WHEEL COVER:	15" DELUXE BOLT-ON FULL (SILVER)	S	--
WHEELS:	16" MACHINE-FACED ALUMINUM	--	S
WIPERS:	VARIABLE INTERMITTENT	S	S

MONTE CARLO LS COUPE

*18,345.00

Model 1WW27 MONTE CARLO LS COUPE

*Includes Destination & Handling Charges

MUST ORDER ONE GROUP -- NO DELETIONS ALLOWED

N.C.

Base Preferred Equipment Group

(Refer Standard Equipment Summary Page)

1SG	1SH
X	X

635.00

Preferred Equipment Group 1

Cargo Retaining Net, Luggage Area

Power Trunk Opener

Temperature Control: Driver and Passenger Side

Speed Control: Electronic, w/Resume Speed

Keyless Entry: Remote

X
X
X
X
X

ADDITIONAL OPTIONS

ACKNOWLEDGMENTS:

N.C. R8S

Multiple Order Numbers

2.00 R8T

Preliminary Invoice (Refer Vehicle Price Schedule)

N.C. VK3

BRACKET: License Plate, Front

DEFOGGER: (MUST SPECIFY)

170.00 C49

Rear Window: Electric

N.C. R9W

Rear Window Defogger Not Desired

EMISSIONS: (MUST SPECIFY) (Refer Emission Requirements Tab Section)

N.C. FE9

Federal Emission Requirements

170.00 NG1

New York, Massachusetts or Connecticut Emission Requirements

170.00 YF5

California Emission Requirements

N.C. NB8

CA, NY, MA or CT State Emission Override (Reqs FE9 Emissions)

N.C. NC7

Federal Emission Override (Reqs YF5 or NG1 Emissions)

20.00 K05

HEATER: Engine Block

RADIO EQUIPMENT:

93.00 UN0

Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Digital Clock, Automatic Tone Control, Compact Disc Player, Theft Lock & Speed Compensated Volume (Incls Premium Front & Rear Coaxial Speakers)

171.00 UK3

Radio Controls, Steering Wheel (Incls Leather Wrapped Steering Wheel) (Reqs 1SH)

SEAT TYPE: (MUST SPECIFY)

N.C. AM6

Split (Base)

N.C. AR9

Bucket (Incls Console)

305.00 WG1

SEATS, ADDITIONAL: Power (Driver's Side Only)

225.00 K34

SPEED CONTROL: Electronic w/Resume Speed (Incl w/1SH)

175.00 D81

SPOILER: Rear Deck

700.00 CF5

SUNROOF: Electric, Sliding (Reqs 1SH)

175.00 QNX

TIRES: P225/60-R16 B/W Touring Radial (Replaces P205/70R-15 Tires)

(Reqs 16" PY0 Wheels)

WHEELS:

300.00 PY0

16" Sporty Aluminum (Replaces Base 15" Deluxe Bolt-On Wheel Cover) (Reqs QNX Tires)

N.C. 16P

16" White Aluminum (Reqs Color 16U Exterior White Paint and QNX Tires)

MONTE CARLO LS COUPE

INTERIOR AND EXTERIOR COLOR AVAILABILITY CHART

PLEASE NOTE: The Exterior Paint and Interior Trim Combinations Shown Below are the only Combinations that are available

TRIM LEVEL Seat Type		(a)SEAT OPTION	INTERIOR COLORS			
			Med Gray	Graphite	Neutral	Med Blue
N.C.	Custom Cloth 60/40	AM6	92D	12D	52D	30D
200.00	Custom Cloth Bucket	AR9	92D	12D	52D	30D
695.00	Leather Bucket	AR9		122	522	
Exterior Colors		Color	RECOMMENDED INTERIOR			
Solid Paint		Code	TRIM COLORS			
Black		41U	X	X	X	
Blue, Medium Regal (Met)		27U	X	X	X	X
Blue, Navy (Met)		28U	X		X	X
Driftwood, Lt (Met)		33U			X	
Green, Dk Jade (Met)		56U	X	X	X	
Pewter, Lt (Met)		11U	X	X	X	
Purple, Deep (Met)		89U	X	X	X	
Red, Dk Carmine (Met)		51U	X	X	X	
Red, Torch		70U	X	X	X	
White, Bright		16U	X	X	X	X

(a)Seat Option AM6 or AR9 Must Be Specified

MONTE CARLO Z34 COUPE

*20,845.00

Model 1WX27 MONTE CARLO Z34 COUPE

*Includes Destination & Handling Charges

MUST ORDER ONE 1SJ -- NO DELETIONS ALLOWED

1SJ

N.C. Base Preferred Equipment Group (Refer Standard Equipment Summary Page)

X

ADDITIONAL OPTIONS

ACKNOWLEDGMENTS:

N.C. R8S Multiple Order Numbers
V.P.S. R8T Preliminary Invoice (Refer Vehicle Price Schedule)
N.C. VK3 **BRACKET:** License Plate, Front

DEFOGGER: (MUST SPECIFY)

170.00 C49 Rear Window: Electric
N.C. R9W Rear Window Defogger Not Desired

EMISSIONS: (MUST SPECIFY) (Refer Emission Requirements Tab Section)

N.C. FE9 Federal Emission Requirements
170.00 NG1 New York, Massachusetts or Connecticut Emission Requirements
170.00 YF5 California Emission Requirements
N.C. NB8 CA, NY, MA or CT State Emission Override (Reqs FE9 Emissions)
N.C. NC7 Federal Emission Override (Reqs YF5 or NG1 Emissions)

20.00 K05 **HEATER:** Engine Block

RADIO EQUIPMENT:

93.00 UN0 Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Digital Clock, Automatic Tone Control, Compact Disc Player, Theft Lock & Speed Compensated Volume (Incls Premium Front & Rear Coaxial Speakers)

305.00 WG1 **SEATS, ADDITIONAL:** Power (Driver's Side Only)

175.00 D81 **SPOILER:** Rear Deck

700.00 CF5 **SUNROOF:** Electric, Sliding

MONTE CARLO Z34 COUPE

INTERIOR AND EXTERIOR COLOR AVAILABILITY CHART

PLEASE NOTE: The Exterior Paint and Interior Trim Combinations Shown Below are the only Combinations that are available

TRIM LEVEL		INTERIOR COLORS			
		Med Gray	Graphite	Neutral	Med Blue
N.C.	Custom Cloth Bucket	92D	12D	52D	30D
645.00	Leather Bucket		122	522	
Exterior Colors	Color Code	RECOMMENDED INTERIOR TRIM COLORS			
Solid Paint					
Black	41U	x	x	x	
Blue, Navy (Met)	28U	x		x	x
Driftwood, Lt (Met)	33U			x	
Green, Dk Jade (Met)	56U	x	x	x	
Pewter, Lt (Met)	11U	x	x	x	
Red, Dk Carmine (Met)	51U	x	x	x	
Red, Torch	70U	x	x	x	
White, Bright	16U	x	x	x	x



Monte Carlo

Dealer Order Guide inserts are your first look at Chevrolet Passenger Car models for 1998. Overall improvements, changes and deletions are highlighted. Use these inserts to assist you in ordering your initial shipments. NOTE: This information is preliminary and is subject to change.

FOCUS: Monte Carlo LS Coupe



FEATURE: Monte Carlo Z34 Coupe



Monte Carlo at a glance



The victorious racing heritage of the sleek, sophisticated Monte Carlo translates into a leadership message of performance, durability and technology, which is reflected in the fact that Monte Carlo surpassed Ford Thunderbird in total vehicle registrations in 1996.

Monte Carlo



Focus

The Focus vehicle is the model chosen for its saleability. It is equipped with the product features that customers want most. Generally, it is the "volume" vehicle that comprises the majority of the build. You'll want to be sure you have several of these models in stock. NOTE: Model, PEG and optional equipment may vary in your locality. Use the Retail Sales Analysis (RSA) to verify or select your dealership's Focus vehicle content.

Monte Carlo LS Coupe (image above, top)

The Focus vehicle for 1998 is Monte Carlo LS Coupe. This truly affordable, midsize, 6-passenger coupe offers sleek, contemporary styling teamed with an intelligent combination of standard safety and performance features. When equipped with the recommended PEG 1SH, this model represents the best opportunity for Monte Carlo high-volume sales at your dealership.

Ordering Recommendations:

Recommended Monte Carlo LS Coupe content, based on anticipated national sales volume, is listed below to assist your dealership in ordering.

Monte Carlo LS Coupe with PEG 1SH includes:

- Cargo Retaining Net
- Power Trunk Opener and Remote Keyless Entry
- Dual Temperature Control
- Electronic Speed Control with Resume Speed.

Recommended Individual options:

- Rear-Window Defogger
- Sporty Aluminum Wheels (require P225/60R-16 B/W Touring tires).

Popular Colors: Black, Bright White, Dark Jade Green Metallic, Torch Red and Dark Carmine Red Metallic.



Feature

The Feature vehicle is the "image" model Chevrolet will profile most in its advertising. Generally, it does the best job of capturing attention and creating consumer awareness.

Monte Carlo Z34 Coupe (image above, bottom)

The Feature vehicle for 1998 is Monte Carlo Z34 Coupe. This powerful, well-appointed sport coupe was designed to please the true automotive enthusiast. Standard features include:

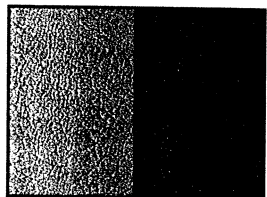
- 3800 Series II V6 with Sequential Fuel Injection
- Tuned Ride and Handling Suspension
- Analog Instrumentation with Tachometer and Trip Odometer
- New 16" Machine-Faced Aluminum Wheels and Goodyear Eagle RS-A Performance Tires
- Custom Cloth Bucket Seats with Center Storage Armrest and Cup Holder
- Dual Tailpipes
- Dual Remote Body-Color Electric Mirrors
- Radio Controls include Leather-Wrapped Steering Wheel
- Electronic Speed Control
- Remote Keyless Entry.

Popular Colors: Black, Dark Jade Green Metallic and Torch Red.

Trim Colors

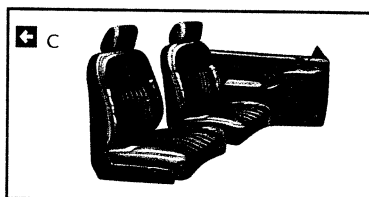
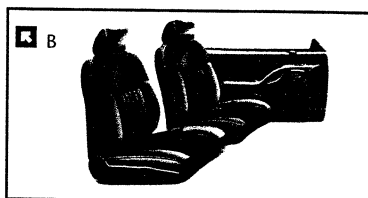
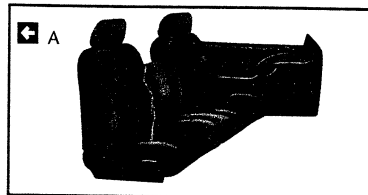


Custom Cloth available in Neutral, Medium Blue, Graphite and Medium Gray (standard on LS Coupe and Z34 Coupe).



Leather available in Neutral and Graphite (optional on LS Coupe and Z34 Coupe).

Seat Styles

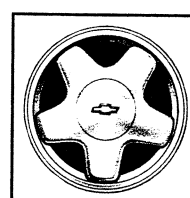


- A. Custom Cloth 60/40 front bench seat (standard on LS Coupe).
- B. Custom Cloth front bucket seats with storage console and cup holder (optional on LS Coupe, standard on Z34).
- C. Front bucket seats with leather seating accents, storage console and cup holder (optional on LS and Z34 Coupe).

Wheels



Monte Carlo LS standard 15" deluxe bolt-on wheel cover.



Monte Carlo LS optional 16" sporty aluminum wheel with chrome bowtie. Also available in white with Bright White exterior.*



Monte Carlo Z34 standard 16" machine-faced aluminum wheel.

*Requires optional P225/60R-16 Touring tires.

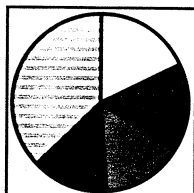
Most Popular Exterior Colors with Corresponding Interior Color Availability

INTERIOR MATERIAL COLORS

	Medium Gray	Graphite	Neutral	Medium Blue
EXTERIOR COLORS				
Bright White	✓	✓	✓	✓
Dark Jade Green Metallic	✓	✓	✓	
Torch Red	✓	✓	✓	
Black	✓	✓	✓	

See order guide for color availability by model.

Most Popular Exterior Colors by Percentage



Clockwise, at left, are the anticipated popular Monte Carlo colors for 1998, 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	18%
Dark Jade Green Metallic	16%
Torch Red	15%
Black	14%
Other colors	37%

NOTE: New Monte Carlo exterior colors are Light Pewter Metallic, Medium Regal Blue Metallic, Navy Blue Metallic and Light Driftwood Metallic. Granite Metallic, Medium Adriatic Blue Metallic, Light Adriatic Blue Metallic and Medium Lichen Green Metallic have been deleted.

Competitive Models

- Ford Thunderbird
- Mercury Cougar
- Chrysler Sebring
- Dodge Avenger.

New for 1998

- The highly respected 3800 Series II V6 SFI, judged one of the top ten engines in the world (*Ward's Auto World*, January 1996), replaces the 3.4 DOHC V6 on Z34 models for 1998. A lightweight, high-performance pushrod overhead valvetrain allows the 3800 to rev to 5800 rpm, making it competitive with multi-valve overhead cam designs. The 3800 Series II is teamed with a four-speed electronically-controlled automatic transmission for virtually seamless shifting.

Additional Information on Significant Features

- Monte Carlo features a truly world-class body structure for impressive rigidity, minimized squeaks and rattles and an unusually quiet ride.
- The 3100 V6 SFI engine, standard in Monte Carlo LS, boasts 160 horsepower for outstanding power and performance. Sequential Fuel Injection (SFI) precisely matches fuel delivery to each cylinder's intake stroke for a smooth idle, low emissions and excellent driveability.
- Additional features include a "high-resolution" 24X ignition system, which allows finer calibration at low rpm levels and results in fast ignition and smooth idle. The system sends 24 crankshaft reference signals to the powertrain control module for each crankshaft revolution. This provides more precise monitoring of engine position and improves spark delivery yielding enhanced driveability and exhaust emissions control at low rpm levels.

Feature Availability

	Monte Carlo LS Coupe	Monte Carlo Z34 Coupe
INTERIOR		
Air Bag – Driver and Front-Passenger	S	S
Air Conditioning – with CFC-Free Refrigerant	S	S
Convenience Net – Luggage-Area	O ¹	S
Cup Holders – Instrument Panel (60/40 Seats)	S	NA
– Center Console (Bucket Seats)	O	S
Defogger(s) – Rear-Window	O	O
– Side-Window	S	S
Door Locks – Power	S	S
Floor Mats – Carpeted, Front and Rear	S	S
Gauges – Tachometer and Odometer	S	S
Lights, Interior – Theatre Lighting	S	S
Low Coolant Level Monitor Light	S	S
Low Oil Level and Wear Indicator Monitors	S	S
OnStar System – Dealer Installed	O	O
PASS-Key II Theft-Deterrent System	S	S
Scotchgard™ Protector	S	S
Seats – 6-Way Power Driver	O	O
– 60/40 Custom Cloth, Front	S	NA
– Custom Cloth Bucket, Front	O	S
– Leather Bucket, Front	O	O
– Split-Folding, Rear	S	S
Speed Control – Electronic with Resume Speed	O ¹	S
Steering Column – Tilt-Wheel™ Adjustable	S	S
Steering Wheel with Radio Controls – Leather-Wrapped	O ¹	S
Stereo – AM/FM with Cassette Player	S	S
– AM/FM with CD Player	O	O
Visor Mirrors – LH and Illuminated RH Vanity	S	S
Sunroof – Electric	O ¹	O
Temperature Controls – Driver and Front-Passenger	O ¹	S
Trunk – Power Opener	O ¹	S
Windows – Power with Driver's Express-Down Feature	S	S
Wipers – Intermittent Variable	S	S
EXTERIOR		
Daytime Running Lamps – Automatic	S	S
Exhaust System – Stainless-Steel (dual tailpipes on Z34)	S	S
Mirrors – Outside Dual Body-Color Twin Remote Electric	S	S
Moldings – Body-Side	S	S
Paint – Basecoat/Clearcoat	S	S
Tires – P205/70R-15 Blackwall Touring	S	NA
– P225/60R-16 Blackwall Touring	O ²	NA
– P225/60R-16 Blackwall Eagle RS-A	NA	S
Wheel Covers – 15" Bolt-On	S	NA
Wheels – 16" Sporty Aluminum	O ³	NA
Wheels – 16" Machine-Faced Aluminum	NA	S
FUNCTIONAL		
Brakes – 4-Wheel Anti-Lock	S	S
– Power, Front Disc/Rear Drum	S	NA
– Power, Front/Rear Disc	NA	S
Engine – 3100 V6 SFI	S	NA
– 3800 Series II V6 SFI	NA	S
Fuel Tank – 16.6-Gallon Capacity	S	S
Remote Keyless Entry	O ¹	S
Suspension – 4-Wheel Independent	S	S
– Ride and Handling	NA	S
Transmission – 4-Speed Electronically Controlled Automatic	S	S

S — Standard. O — 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 Requires optional PEG 1SH. 2 Requires optional 16" sporty aluminum wheels. 3 Requires optional P225/60R-16 Touring tires.



Monte Carlo



S.P.A.C.E. is an acronym to help organize and explain key features and benefits in five major categories a customer needs and wants. Overall improvements, changes and deletions are highlighted. Please review the supplied information, keeping in mind that this material is provided to you before production start-up — and is liable to change.

S.P.A.C.E. (New-for-'98 features appear in color.)**SAFETY**

• **AVAILABLE OnStarSM SYSTEM (DEALER INSTALLED)** — uses satellite technology to offer support 24 hours a day, 7 days a week, with features like a hands-free voice activated cellular phone, route guidance information, remote door unlocking capability and stolen vehicle tracking. • **4-WHEEL ANTI-LOCK BRAKE SYSTEM (ABS)** — helps reduce wheel lockup and helps the driver maintain steering control during severe braking, even on slippery surfaces. • **4-WHEEL DISC BRAKES (STANDARD ON Z34)** — resist fading and offer impressive stopping power. • **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. • **SAFETY-CAGE CONSTRUCTION** — surrounds the entire passenger compartment. • **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.

**PERFORMANCE**

• **3800 V6 SFI ENGINE ON Z34 MODELS** — this world-class Series II V6 SFI delivers 200 hp at 5200 rpm, for truly impressive performance. • **IMPROVED FOUR-WHEEL INDEPENDENT SUSPENSION** — provides an excellent combination of ride and response. (F41 Ride and Handling Suspension is standard on Z34 model.) • **3100 V6 SFI ENGINE AND 4-SPEED ELECTRONICALLY CONTROLLED AUTOMATIC TRANSMISSION (STANDARD ON LS)** — deliver smooth, effortless power for passing and merging. Shifts are virtually seamless.

**APPEARANCE**

• **FOUR NEW EXTERIOR COLORS** — Navy Blue Metallic, Light Driftwood Metallic, Light Pewter Metallic and Medium Regal Blue Metallic. • **BASECOAT/CLEARCOAT PAINT** — not only provides a more durable, lustrous finish, but reduces the severity of water-spotting and etching from acid rain. • **TWO-SIDE-GALVANIZED STEEL** — on all exterior body panels (except the roof), for corrosion protection.

**COMFORT AND CONVENIENCE**

• **OPTIONAL ELECTRIC SUNROOF** — provides outside air and sunlight. • **OPTIONAL RADIO CONTROLS INCLUDE LEATHER-WRAPPED STEERING WHEEL (STANDARD ON Z34, OPTIONAL ON LS MODEL)** — make driving more comfortable/stylish, and allow for effortless radio control. • **SPLIT-FOLDING REAR SEAT** — allow long cargo items to extend from trunk to rear-passenger area. • **OPTIONAL INDIVIDUAL DRIVER AND FRONT-PASSENGER TEMPERATURE CONTROLS (STANDARD ON Z34 OPTIONAL ON LS MODEL)** — create a more comfortable environment for the driver and front-seat passenger.

**EASY-TO-OWN**

• **SCOTCHGARDTM PROTECTOR** — on seats, door panels, floor carpeting and floor mats, resists stains and makes cleanup easy. • **EXTENDED-LIFE TRANSMISSION FLUID** — never needs changing under normal driving conditions.* • **PLATINUM-TIP SPARK PLUGS** — allow up to 100,000 miles before the first scheduled tune-up.* • **EXTENDED-LIFE COOLANT** — has a first scheduled replacement interval of 5 years/150,000 miles, whichever comes first.* • **STAINLESS-STEEL EXHAUST SYSTEM** — includes all pipes, the catalytic converter and muffler to resist corrosion, for a long service life. • **GENUINE CUSTOMER CARE** — a 3-year/36,000-mile, no deductible, Bumper to Bumper limited warranty, 24-Hour Roadside Assistance via a toll-free hot line and Courtesy Transportation, if your vehicle ever needs warranty work, at participating dealers.

*Maintenance needs vary with different uses and driving conditions. See owner's manual for more information.

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. CUSTOMARY)

1998

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

Specifications

METRIC

Table of Contents

1	Vehicle Models/Origin	ø	Indicates Format Change
2	Power Teams		From Previous Year
3	Engine		
4	Lubrication System		
4	Diesel System		
5	Cooling System		
6	Fuel System		
7	Vehicle Emission Control		
7	Exhaust System		
8-10	Transmission, Axles and Shafts		
11	Suspension		
12-13	Brakes, Tires and Wheels		
14	Steering		
15-16	Electrical		
17	Body – Miscellaneous Information		
17	Frame		
18	Glass		
18	Headlamps		
19	Climate Control System		
20-21	Convenience Equipment		
21	Trailer Towing		
22-24	Vehicle Dimensions		
25	Vehicle Fiducial Marks		
26	Vehicle Mass		
27	Optional Equipment Differential Mass (Weight)		
28-34	Vehicle Dimensions Definitions – Key Sheets		
35	Index		

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.

MVMA Specifications

Vehicle Line MONTE CARLO

Model Year	1998
------------	------

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 (Mfg'r's Model Code)	No. of Designated Seating Positions (Front / Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)	EPA Fuel Economy (City/Hwy)
MONTE CARLO LS 2-Door Notchback Coupe (FWD)		1WW27	6 (3/3) 5 (2/3) Opt.		19/29 - L82
MONTE CARLO Z34 2-Door Notchback Coupe (FWD)		1WX27	5 (2/3)		19/30 - L36

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

MVMA Specifications

Vehicle Line	MONTE CARLO		
Model Year	1998	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	L36		
	Displacement Liters (in³)		3.1 (191)	3.8 (231)		
	Induction system (FI, Carb, etc.)		Sequential Fuel Injection	Sequential Fuel Injection		
	Compression ratio		9.6:1	9.4:1		
	SAE Net at RPM	Power kW (bhp)	119 (160) @ 5200	149 (200) @ 5200		
		Torque N • m (lb. ft.)	251 (185) @ 4000	305 (225) @ 4000		
	Exhaust single, dual		Single	Dual		
T R A N S	Transmission/ Transaxle		M13	M15		
	Effective Final Drive / Axle Ratio (std. first)		3.29	3.29		

[illegible]

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6
 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, Front, Transverse, OHV	
Manufacturer	General Motors Powertrain Group	
No. of cylinders	Six	
Bore	89.0 mm	
Stroke	84.0 mm	
Bore Spacing (C / L to C / L)	111.76 mm	
Cylinder block material & mass kg. (lbs.) (machined)	Cast Iron, 55.6 (122.6)	
Cylinder block deck height	224.0 mm	
Cylinder block length	435.5 mm	
Deck clearance (minimum) (above or below block)	0.58 mm (Above)	
Cylinder head material & mass kg. (lbs.)	Cast Aluminum, 6.9 (15.2)	
Cylinder head volume cm ³ (inches ³)	26.2 (1.6)	
Cylinder liner material	Not Applicable	
Head gasket thickness (compressed)	1.55 mm	
Minimum combustion chamber total volume cm ³ (inches ³)	60.29 (3.7)	
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, 8.7 (19.2)	
Exhaust manifold material & mass kg. (lbs)**	Cast Iron, Right: 4.3 (9.5), Left: 2.3 (5.1)	
Knock sensor (number & location)	One, Left Side of Block	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) ÷ 2	86	
Engine Mounts	Quantity	Total 4 (1 Engine Mount, 1 Transmission Mount and 2 Torque Reacting Mounts)
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Engine Mount - Hydroelastic; Transmission Mount - Hydroelastic Torque Reacting Mounts - Natural Rubber and Neoprene
	Added isolation (sub-frame, crossmember, etc.)	Isolated Cradle
Total dressed engine mass (wt) dry***		184 kg

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum Alloy, 375 (13.2)
--	----------------------------

Engine - Camshaft

Location	Above Crankshaft at Center of "V"	
Material & mass kg (weight, lbs.)	Assembled Steel, 2.3 (5.1)	
Drive type	Chain / belt	Chain
	Width / pitch	15.88 mm / 9.53 mm

* 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 MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8 LITER V6
 L36

Engine - General

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)	90 Degree V, Front, Transverse, OHV	
Manufacturer	General Motors Powertrain Group	
No. of cylinders	Six	
Bore	96.52 mm	
Stroke	86.36 mm	
Bore Spacing (C / L to C / L)	107.7 mm	
Cylinder block material & mass kg. (lbs.) (machined)	Cast Iron, 55.7 (122.8)	
Cylinder block deck height	216.49mm	
Cylinder block length	396.0 mm	
Deck clearance (minimum) (above or below block)	0.56 mm (Above)	
Cylinder head material & mass kg. (lbs.)	Cast Iron, 14.4 (31.7)	
Cylinder head volume cm ³ (inches ³)	62.93 (3.81)	
Cylinder liner material	Not Applicable	
Head gasket thickness (compressed)	1.5 mm	
Minimum combustion chamber total volume cm ³ (inches ³)	75.675 (4.618)	
Cyl. no. system (front to rear)*	L. Bank	1-3-5
	R. Bank	2-4-6
Firing order	1-6-5-4-3-2	
Intake manifold material & mass kg. (lbs.)**	Lower: Aluminum, Upper: Composite, 11.4 (25.1)	
Exhaust manifold material & mass kg. (lbs.)**	Right: Tubular Stainless Steel, 3.5 (7.7), Left: Cast Nodular Iron, 3.8 (8.4)	
Knock sensor (number & location)	Two Sides of Block	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) ÷ 2	87	
Engine Mounts	Quantity	Total 4 (1 Engine Mount, 1 Transmission Mount and 2 Torque Reacting Mounts)
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Engine Mount - Hydroelastic; Transmission Mount - Hydroelastic Torque Reacting Mounts - Natural Rubber and Neoprene
	Added isolation (sub-frame, crossmember, etc.)	Isolated Cradle
Total dressed engine mass (wt) dry***		201 kg

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Eutectic Aluminum Alloy, 387.0 (13.65)
--	--

Engine - Camshaft

Location	In Block	
Material & mass kg (weight, lbs.)	5150 Steel, 2.5 (5.5)	
Drive type	Chain / belt	Chain
	Width / pitch	0.398 mm Over Guides / 0.323 mm

* 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 MONTE CARLO
Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Engine Description
Engine Code

3.8 LITER V6
L36

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)		Standard
Valves	Number intake / exhaust	Six/Six
	Head O.D. intake / exhaust	45.72 mm / 38.6 mm

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Pearlitic Malleable Iron, 0.63 (1.4)
Length (axes C/L to C/L)	145.85 mm

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*		Nodular Cast Iron, 15.4 (34.0)
End thrust taken by bearing (no.)		Two
number & length of main bearing journals		21.95 mm; Four
Seal (material, one, two piece design, etc.)	Front	Rubber Lip, One Piece
	Rear	Rubber Lip, One Piece

Engine - Lubrication System

Normal oil pressure kPa (psi) at engine rpm	414 (60) @ 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.)	3.78 (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

MVMA Specifications

Vehicle Line MONTE CARLO
Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Engine Description
Engine Code

3.1 LITER V6
L82

Engine - Valve System

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

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged Steel, 0.59 (1.3)
Length (axes C/L to C/L)	144.78 mm

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*		Cast Iron, 17.2 (37.9)
End thrust taken by bearing (no.)		Three
Number & Length of main bearing journals		One - 29.5 mm; Two and Three - 24.0 mm, Four - 36.0 mm
Seal (material, one, two piece design, etc.)	Front	Viton/Steel, One Piece
	Rear	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

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8 LITER V6
 L36

Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad., bottle)		Bottle	
Radiator cap relief valve pressure kPa (psi)		103.4 (15.0)	
Circulation thermostat	Type (choke, bypass)	Bypass	
	Starts to open at °C (°F)	90 (194)	
Water pump	Type (centrifugal, other)	Centrifugal	
	GMP 1000 pump rpm	10	
	Number of pumps	One	
	Drive (V-belt, other)	Poly V-Belt	
	Bearing type	Double Row (Ball/Roller)	
	Impeller material	Cast Iron	
	Housing material	Aluminum	
By-pass recirculation type (inter., ext.)		External	
Cooling System capacity	With heater - L (qt.)	9.6 (10.2)	
	With air conditioner - L (qt.)	9.6 (10.2)	
	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, 3.2 (7.05)	
	Width	774.0 mm (30.5 in.)	
	Height	382.0 mm (15.0 in.)	
	Thickness	16.0 mm (0.630 in.)	
	Fins per inch	20, 2.5 mm	
Radiator end tank material		Plastic	
Fan	Std., elec., opt.	Electric	Electric
	Number of blades & type (flex, solid, material)	Seven Blades, Solid, Plastic	Seven Blades, Solid, Plastic
	Number & location (front, rear of radiator)	Rear (LH)	Rear (RH)
	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	PCM Controlled	PCM Controlled
	Drive type (direct, remote)	Direct	Direct
	RPM at idle (elec.)	1500 RPM (Parallel Mode)	1800 RPM (Parallel Mode)
	Motor rating (wattage/elec.)	90 W	115 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.)	Series Mode (Both Low Fan Speed) On: 222.8°F Off: 219.2°F	Parallel Mode (Both High Fan Speed) On: 230°F Off: 226.4°F
	Engine Coolant or A/C head Pressure with Vehicle Speed	On: 190 PSI & Below 70 MPH Off: 140 PSI or 75+MPH	On: 240 PSI & Below 48 MPH Off: 190 PSI or 50+MPH
	Fan shroud (material)	Not Applicable	Not Applicable

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6
 L82

Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad., bottle)		Bottle	
Radiator cap relief valve pressure kPa (psi)		103.4 (15)	
Circulation thermostat	Type (choke, bypass)	Bypass	
	Starts to open at °C (°F)	90 (195)	
Water pump	Type (centrifugal, other)	Centrifugal	
	GMP 1000 pump rpm	12	
	Number of pumps	One	
	Drive (V-belt, other)	Poly V-Belt	
	Bearing type	Double Row (Ball/Roller)	
	Impeller material	Cast Iron	
	Housing material	Aluminum	
By-pass recirculation type (inter., ext.)		External	
Cooling System capacity	With heater - L (qt.)	10.4 (11.0)	
	With air conditioner - L (qt.)	10.4 (11.0)	
	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	20, 2.5 mm	
Radiator end tank material		Plastic	
Fan	Std., elec., opt.	Electric	Electric
	Number of blades & type (flex, solid, material)	Seven Blades, Solid, Plastic	Seven Blades, Solid, Plastic
	Number & location (front, rear of radiator)	Rear (LH)	Rear (RH)
	Diameter & projected width	360.0 mm (14.2 in.), Diameter	360.0 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 MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8 LITER V6
 L36

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		Bosch
Carburetor no. of barrels		Not Applicable
Idle A/F mix.		PCM Controlled
Fuel injection	Point of injection (no.)	Ports (Six)
	Constant, pulse, flow	Pulse
	Control (electronic, mech.)	Electronic
	System pressure kPa (psi)	350 (50.8)
Idle speed-rpm (spec. neutral or drive and propane if used)	Manual	Not Applicable
	Automatic	PCM Controlled
Intake manifold heat control (exhaust or water thermostatic or fixed)		Throttle Body Water Heat; No Induction Air Heat
Air cleaner type		Replaceable Paper Element
Fuel filter (type/location)		Inline, Replaceable / Near Fuel Tank
Fuel pump	Type (elec. or mech.)	Electric
	Location (eng., tank)	Tank
	Pressure range kPa (psi)	270-350 (39.2 - 50.8)
	Flow rate at regulated pressure L (gal)/hr @ kPa (psi)	82 @ 350 (21.6 @ 50.8)

Fuel Tank

Capacity refill L (gallons)		62.8 (16.6)
Location (describe)		Underbody, Forward of Rear Cross Member
Attachment		Two Steel Straps w/Four Vertical Fasteners
Material & Mass kg. (weight lbs.)		Stamped Zinc/Nickel Steel Upper & Lower with Perimeter Seam Wld, 11.338 (25.065)
Filler pipe	Location & material	Left Rear Quarter Panel-Steel
	Connection to tank	Flexible Hose - Low Permeation
Fuel line (material)		Steel & Low Permeation, High Conductivity Nylon
Fuel hose (material)		Low Permeation, High Conductivity Nylon
Return line (material)		Steel & Low Permeation, High Conductivity Nylon
Vapor line (material)		Steel & Low Permeation, High Conductivity Nylon
Extended range tank	Opt., n.a.	Not Available
	Capacity L (gallons)	Not Available
	Location & material	Not Available
	Attachment	Not Available
Auxiliary tank	Opt., n.a.	Not Available
	Capacity L (gallons)	Not Available
	Location & material	Not Available
	Attachment	Not Available
	Selector switch or valve	Not Available
	Separate fill	Not Available

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6
 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		Delphi
Carburetor no. of barrels		Not Applicable
Idle A/F mix.		PCM Controlled
Fuel injection	Point of injection (no.)	Ports (Six)
	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	Not Applicable
	Automatic	PCM Controlled
Intake manifold heat control (exhaust or water thermostatic or fixed)		Fixed
Air cleaner type		Replaceable Paper Element
Fuel filter (type/location)		Inline, Replaceable / Near Fuel Tank
Fuel pump	Type (elec. or mech.)	Electric
	Location (eng., tank)	Tank
	Pressure range kPa (psi)	0-300 (0 - 43.5)
	Flow rate at regulated pressure L (gal)/hr @ kPa (psi)	72 @ 300 (19 @ 43.5)

Fuel Tank

Capacity refill L (gallons)		62.8 (16.6)
Location (describe)		Underbody, Forward of Cross Member
Attachment		Two Steel Straps w/Four Vertical Fasteners
Material & Mass kg. (weight lbs.)		Stamped Zinc/Nickle Steel Upper & Lower w/Perimeter Seam Weld, 11.388 (25.065)
Filler pipe	Location & material	Left Rear Quarter Panel-Steel
	Connection to tank	Flexible Hose - Low Permeation
Fuel line (material)		Steel & Nylon - Low Permeation, High Conductivity Nylon
Fuel hose (material)		Nylon - Low Permeation, High Conductivity
Return line (material)		Steel & Nylon - Low Permeation, High Conductivity
Vapor line (material)		Steel & Nylon - Low Permeation
Extended range tank	Opt., n.a.	Not Available
	Capacity L (gallons)	Not Available
	Location & material	Not Available
	Attachment	Not Available
Auxiliary tank	Opt., n.a.	Not Available
	Capacity L (gallons)	Not Available
	Location & material	Not Available
	Attachment	Not Available
	Selector switch or valve	Not Available
	Separate fill	Not Available

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8 LITER V6
 L36

Vehicle Emission Control

Type (air injection, engine modifications, other)			See Below
Exhaust Emission Control	Air injection	Pump or pulse	Not Applicable
		Driven by	Not Applicable
		Air distribution (head, manifold, etc.)	Not Applicable
		Point of entry	Not Applicable
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled Flow
		Exhaust source	Exhaust Manifold
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake Manifold
	Catalytic Converter	Type	Three-Way Catalyst
		Number of	Two
		Locations(s)	Mounted to Underbody
		Volume L (in³)	2.67 (163.0)
		Substrate type	Ceramic/Monolith
		Noble metal type	Platinum , Rhodium , Palladium
		Noble metal concentration (g/cm³)	0.001346
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Positive Ventilation To Induction System
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum
	Discharges to (intake manifold, other)		Intake Manifold
	Air inlet (breather cap, other)		Throttle Body
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	From Fuel Tank To	Canister
		From Carburetor To	Not Applicable
	Vapor storage provision		Canister
Electronic system	Closed loop (yes/no)		Yes
	Open loop (yes/no)		No

Engine - Exhaust System

Type (single, single with cross-over, dual, other)			Dual, w/Crossover
Ø	Muffler no. & type (reverse flow, straight thru, separate resonator) , Muffler volume (liters), Material & Mass kg. (weight lbs.)		Dual, Reverse Flow, 22.2L, 409 Stainless Steel
Ø	Resonator no., type, & volume (liters)		Round Bottle, Straight Thru, 2.4L
Exhaust pipe	Branch o.d., wall thickness		Not Applicable
	Main o.d., wall thickness		Not Applicable
	Material & Mass kg. (weight lbs.)		Not Applicable
Intermediate pipe	o.d. & wall thickness		57.2 x 1.4 mm, (2.25 x .055 in.)
	Material & Mass kg. (weight lbs.)		409 Stainless Steel
Tail pipe	o.d. & wall thickness		Two @ 57.2 x 1.4 mm (2.25 x .055 in.)
	Material & Mass kg. (weight lbs.)		409 Stainless Steel - Painted Black

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6
 L82

Vehicle Emission Control

Type (air injection, engine modifications, other)			See Below
Exhaust Emission Control	Air injection	Pump or pulse	Not Applicable
		Driven by	Not Applicable
		Air distribution (head, manifold, etc.)	Not Applicable
		Point of entry	Not Applicable
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled Flow
		Exhaust source	Exhaust Manifold
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake Manifold
	Catalytic Converter	Type	Three Way Catalyst
		Number of	One
		Locations(s)	Underbody
		Volume L (in³)	2.67 (163.0)
Substrate type		Monolith/Ceramic	
Noble metal type		Platinum / Palladium / Rhodium	
	Noble metal concentration (g/cm³)		
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)	From Fuel Tank To	Canister
		From Carburetor To	Not Applicable
	Vapor storage provision		Canister
Electronic system	Closed loop (yes/no)		Yes
	Open loop (yes/no)		No

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Single w/Crossover
Muffler no. & type (reverse flow, straight thru, separate resonator), Muffler volume (liters), Material & Mass kg. (weight lbs.)		Single, Reverse Flow, 17.0L, 409 Stainless Steel
Resonator no., type, & volume (liters)		Round Bottle, Straight Thru, 2.4L
Exhaust pipe	Branch o.d., wall thickness	Not Applicable
	Main o.d., wall thickness	Not Applicable
	Material & Mass kg. (weight lbs.)	Not Applicable
Intermediate pipe	o.d. & wall thickness	50.8 x 1.1 mm (2.0 x 0.043 in.)
	Material & Mass kg. (weight lbs.)	409 Stainless Steel
Tail pipe	o.d. & wall thickness	50.8 x 1.1 mm (2.0 x 0.043 in.)
	Material & Mass kg. (weight lbs.)	409 Stainless Steel - Painted Black

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8L LITER V6
 L36

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

Manual 4-speed (manufacturer/country)	Not Applicable
Manual 5-speed (manufacturer/country)	Not Applicable
Manual 6-speed (manufacturer/country)	Not Applicable
Automatic (manufacturer/country)	Not Applicable
Automatic overdrive (manufacturer/country)	Gm Powertrain Group, USA

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 mfr. & 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.

MVMA Specifications

Vehicle Line MONTE CARLO
Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Engine Description
Engine Code

3.1 LITER V6
L82

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

Manual 4-speed (manufacturer/country)	Not Applicable
Manual 5-speed (manufacturer/country)	Not Applicable
Manual 6-speed (manufacturer/country)	Not Applicable
Automatic (manufacturer/country)	Not Applicable
Automatic overdrive (manufacturer/country)	Gm Powertrain Group,USA

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 mfr. & 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.

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8 LITER V6
 L36

Automatic Transmission/Transaxle

Trade Name		Hydra-Matic 4T65E Transaxle
Type and special features (describe)		Four Speed, Front Wheel Drive, Electronically Controlled, Automatic Transaxle with Torque Converter Clutch and Overdrive
Shift mechanics		Hydraulic Clutches/Electronic Controls
Gear selector	Location (column, floor, other)	Floor
	Ltr./No. designation (e.g. PRND21)	P - R - N - D D - 2 - 1
	Shift interlock (yes, no, describe)	Yes - Brake, Ignition Key
Gear ratios	1st	2.92
	2nd	1.57
	3rd	1.00
	4th	0.70
	5th	Not Applicable
	6th	Not Applicable
	Reverse	2.39
	Final drive ratio	3.29
Max. upshift vehicle speed - drive range km/h (mph)		One - Two = 45 MPH Two - Three = 85 MPH
Max. upshift engine speed RPM		5700
Max. kickdown speed - drive range km/h (mph)		Two - One = 35 MPH Three - Two = 122 (76)
Min. overdrive speed km/h (mph)		67 (42)
Torque converter	Type	ECCC
	Torus design	Yes
	Number of elements	Three
	Max. ratio at stall	1.68
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 mm (9.7 in.)
Torque converter	Capacity factor "K"	163 k
	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**		93 wet, 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 $\div \sqrt{\text{torque}}$

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

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6
 L82

Automatic Transmission/Transaxle

Trade Name		Hydra-Matic 4T60-E (M13) Transaxle
Type and special features (describe)		Four-Speed Automatic w/Torque Converter Clutch - ECCC
Shift mechanics		Hydraulic Clutches/Electronic Controls
Gear selector	Location (column, floor, other)	Column & Floor (Mechanical)
	Ltr./No. designation (e.g. PRND21)	P - R - N - D -D - 2 - 1
	Shift interlock (yes, no, describe)	Yes - Brake, Ignition Key
Gear ratios	1st	2.92
	2nd	1.57
	3rd	1.00
	4th	0.70
	5th	Not Applicable
	6th	Not Applicable
	Reverse	2.38
Final drive ratio		3.29
Max. upshift vehicle speed - drive range km/h (mph)		One - Two = 66 (41) Three - Four = 163 (101) Two - Three = 124 (77)
Max. upshift engine speed RPM		5600
Max. kickdown speed - drive range km/h (mph)		Two - One = 48 (30) Four - Three: 151 (94) Three - Two = 113 (70)
Min. overdrive speed km/h (mph)		50 (31) Minimum 4-3
Torque converter	Type	ECCC
	Torus design	Yes
	Number of elements	Three
	Max. ratio at stall	1.95
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245.0 mm
Capacity factor "K"		180
Pump type		Variable Displacement Vane
Lubricant	Capacity refill L (qts.)	12.7 (13.4) Dry
	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 $\div \sqrt{\text{torque}}$

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

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8 LITER V6 (231)
 L36

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

Effective final drive ratio (or overall top gear ratio)			3.29
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	Not Applicable
	Offset	Not Applicable
No. of differential pinions		Two
Pinion / differential	Adjustment (shim, etc.)	Not Applicable
	Bearing adjustment	Not Applicable
Driving wheel bearing (type)		Sealed Ball Bearing
Lubricant	Capacity L (pt.)	
	Type recommended	

Axle Shafts - Front Wheel Drive

Manufacturer and number used			Delphi Saginaw Steering Systems	
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	Not Applicable	
	Automatic transaxle	Left	27.8 x 323.0 mm	
		Right	27.8 x 353.0 mm	
	Optional transaxle	Left	Not Available	
		Right	Not Available	
Slip yoke	Type		Not Applicable	
	Number of teeth		Not Applicable	
	Spline o.d.		Not Applicable	
Universal joints	Make and mfg. no.	Inner	Delphi Saginaw Steering Systems	
		Outer	Delphi Saginaw Steering Systems	
	Number used		Inboard & Outboard on Each Shaft Assembly	
	Type, size, plunge	Inner	Tripot Joint, 32 Size 66.0 mm Plunge	
		Outer	Rzeppa Joint; Fixed Center, 32 Size	
	Attach (u-bolt, clamp, etc.)		Retaining Ring (Inboard)	Nut/Washer (Outboard)
	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.

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6
 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	Not Applicable
		Ring gear	Not Applicable

Front Drive Unit

Description (integral to trans., etc.)		Planetary Final Drive Integral with Transmission
Limited slip differential (type)		Not Applicable
Drive pinion	Type	Not Applicable
	Offset	Not Applicable
No. of differential pinions		Two
Pinion / differential	Adjustment (shim, etc.)	Not Applicable
	Bearing adjustment	Not Applicable
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			Two 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	Not Applicable	
	Automatic transaxle	Left		
		Right		
	Optional transaxle	Left		
		Right		
Slip yoke	Type		--	
	Number of teeth		--	
	Spline o.d.		--	
Universal joints	Make and mfg. no.	Inner	Delphi Saginaw Steering Systems	
		Outer	Delphi Saginaw Steering Systems	
	Number used		Four, Two on Each Shaft	
	Type, size, plunge	Inner	Tripot Joint, 27 Size 66.0 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.

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

3.8 LITER V6
 L36

Suspension - General Including Electronic Controls

Car leveling	Standard/optional/not available		Not Available
	Manual/automatic control		Not Available
	Type (air/hydraulic)		Not Available
	Primary/assist spring		Not Available
	Rear only/4 wheel leveling		Not Available
	Single/dual rate spring		Not Available
	Single/dual ride heights		Not Available
	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		Not Available
	Number of damping rates		Not Available
	Type of actuation (manual/ electric motor/air, etc.)		Not Available
	Sensors	Lateral acceleration	Not Available
		Deceleration	Not Available
		Acceleration	Not Available
		Road surface	Not Available
Shock absorber (front & rear)	Type		MacPherson Strut Front, Tubular Rear
	Make		Delphi Chassis Systems
	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)	78.0 mm (3.07 in.)
	Full rebound	95.0 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.); 173.0 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, 34.0 mm (1.34 in.) - Hollow (Wall Thickness = 5.1 mm)

Suspension - Rear

Type and description			Tri-Link Independent MacPherson Strut with Coil Springs Large Lateral Links Attached to Body Cross Member, Trailing Arms
Travel	Full jounce (define load condition)		102.0 mm (4.02 in.)
	Full rebound		105.0 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, 20.0 mm (0.79 in.) Solid
Track bar (type)			Not Applicable

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

3.1 LITER V6
 L82

Suspension - General Including Electronic Controls

Car leveling	Standard/optional/not available		Not Available
	Manual/automatic control		Not Available
	Type (air/hydraulic)		Not Available
	Primary/assist spring		Not Available
	Rear only/4 wheel leveling		Not Available
	Single/dual rate spring		Not Available
	Single/dual ride heights		Not Available
	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		Not Available
	Number of damping rates		Not Available
	Type of actuation (manual/ electric motor/air, etc.)		Not Available
	Sensors	Lateral acceleration	Not Available
		Deceleration	Not Available
		Acceleration	Not Available
		Road surface	Not Available
Shock absorber (front & rear)	Type MacPherson Strut Front, MacPherson Strut Rear		
	Make Delphi Chassis Systems		
	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)		78.0 mm (3.07 in.)
	Full rebound		95.0 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.); 173.0 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, 32.0 mm (1.26 in.) - Hollow; Wall thickness = 4.8 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)		102.0 mm (4.02 in.)
	Full rebound		105.0 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, 16.0 mm (0.63 in.) Solid
Track bar (type)			Not Applicable

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

ALL

Tires And Wheels (Standard)

Tires	Size (service description)		P205/70R15 AL2 BW (95 S)
	Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial (Two 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	Five & 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
Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial
Wheel (type & material)		Stamped Steel
Rim (size, flange type and offset)		15 x 6 (42.0 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 (38.0 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 (38.0 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, Foot Pedal Application, Push to Release
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)	--

MVMA Specifications

Vehicle Line MONTE CARLO
Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
Engine Code/Description

ALL

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)	DRUM (3.1L); DISC (3.8L)	
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 Aplicable	
	Type (engine or brake intervention)		Not Aplicable	
Antilock device	Front/rear (std., opt., n.a.)		Standard - All Models	
	Manufacturer		Delphi Chassis Systems	
	Type (electronic, mech.)		Electronic	
	Number sensors or circuits		Four	
	Number antilock hydraulic circuits		Four Separate Brake Lines/Three 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)*			Four Wheels 286.1 cm ² (44.4 in. ²)	
Gross Lining area cm ² (in. ²)** (F/R)			F: 167.7 (26.0); R: 118.4 cm ² (18.4 in. ²)	
Swept area cm ² (in. ²)*** (F/R)			F: 1165.2 (180.6); R: 1034.0 cm ² (160.3 in. ²)	
Rotor	Outer working diameter		F/R F: 282.5 mm (11.1 in.); R: 276.0 mm (10.9 in.)	
	Inner working diameter		F/R F: 206.0 mm (8.1 in.); R: 208.0 mm (8.2 in.)	
	Thickness		F/R F: 26.3 mm (1.04 in.); R: 11.0 mm (.43 in.)	
	Material & type (vented/solid)		F: Composite Vented; R: Composite Solid	
Drum	Diameter & width		F/R 225.0 x 45.0 mm (8.86 x 1.77 in.)	
	Type and material		F/R Composite Solid	
Wheel cylinder bore			F: 42.0 mm (1.65 in.); R: 38.0 mm (1.50 in.)	
Master cylinder	Bore/stroke	F/R	Bore: 24.0 mm (0.94 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		Delphi Chassis Systems
		Lining code *****		DM130EE
		Material		Semi-Metallic
		****	Primary or out-board	119.4 x 38.1 mm / (4.7 x 1.5 in.)
		Size	Secondary or in-board	119.4 x 38.1 mm / (4.7 x 1.5 in.)
		Shoe thickness (no lining)		4.98 mm (0.196 in.)
	Rear wheel	Bonded or riveted (rvts/seg.)		Integrally Molded (Disc); Riveted (Drum)
		Manufacturer		Delco Chassis Division
		Lining code *****		DM131 EE (Disc); 245 FF (Drum)
		Material		Semi-Metallic
		****	Primary or out-board	91.0 x 33.5 x 9.0 mm (3.58 x 1.32 x .35 in.)
		Size	Secondary or in-board	91.0 x 33.5 x 9.0 mm (3.58 x 1.32 x .35 in.)
		Shoe thickness (no lining)		5.0 mm (0.197 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.

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

ALL

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1.8 ± 0.5
		Camber (deg.)	0.7 ± 0.5
		Toe-in outside track mm (in.)	0.0 ± 0.20
	Service reset*	Caster (deg.)	Pre-set
		Camber (deg.)	0.7
		Toe-in mm (in.)	0.0
Rear wheel at curb mass (wt.)	Periodic M.V. in-spection	Caster (deg.)	
		Camber (deg.)	
		Toe-in mm (in.)	
	Service checking	Camber (deg.)	15" Whl. -0.35 ± 0.5 16 " Whl. -0.45 ± 0.5
		Toe-in outside track (deg.)	0.0 ± 0.3 (Sum Toe)
	Service reset*	Camber (deg.)	15" Whl. -0.35 ± 0.5 16 " Whl. -0.45 ± 0.5
		Toe-in (deg.)	0.0 ± 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

Speed-ometer	Type (analog, digital, std., opt.)		Analog
	Trip odometer (std., opt., n.a.)		Not Available
Head-up display	Standard, optional, not available		Not Available
	Type	Secondary, opto-electronic	Not Available
	Speedometer	Digital	Not Available
	Status/warning indicators	Turn signals, high beam, low fuel, check gauges	Not Available
	Brightness control	Day / night mode, adjustable	Not Available
EGR maintenance indicator			Not Available
Charge indicator	Type		Not Available
	Warning device (light, audible)		Tell-Tale Light
Temperature indicator	Type		Not Available
	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		560.0 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		Two
Other	PRNDL Odometer Tachometer		Mechanical Mechanical Not Available

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

ALL

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		Delphi Saginaw Steering
			(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.)		Coupe: FE1 - 12.93 (42.42); F41 - 13.58 (44.55)	
		Curb to curb (l. & r.)		FE1 - 11.2 (36.7); F41 - 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		Not Available	
		Ratios	Gear	Not Available	
			Overall	Not Available	
	No. wheel turns (stop to stop)		Not Available		
Power	Type (coaxial, elec. hyd., etc.)		Hydraulic		
	Manufacturer		Saginaw Division		
	Gear	Type		End Take-Off Rack and Pinion	
		Ratios	Gear	49.9 mm/Rev	
			Overall	15.7:1	
	Pump (drive)		Belt		
	No. wheel turns (stop to stop)		P205/70R15-2.60 (FE1) P225/60R16-2.26 (F41)		
Linkage	Type		End Take-Off		
	Location (front or rear of wheels, other)		Rear		
	Tie rods (one or two)		Two		
Steering axis	Inclination at 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.

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.8 LITER V6
 L36

Electrical - Supply System

Battery	Manufacturer	Delphi Energy & Engine Management Systems
	Model, std., (opt.)	SAE 78-690
	Voltage	12
	Amps at 0° F. cold crank	690
	Minutes-reserve capacity	115
	Amps/hrs.-20 hr. rate	69
	Location	Engine Compartment
Alternator	Manufacturer	Delphi
	Rating (idle/max. rpm)	36/100 Amps
	Ratio (alt. crank/rev.)	2.98
	Output at idle (rpm, park)	70 Amps w/AC on
	Optional (type & rating)	Not Applicable
Regulator	Type	Integral with Alternator

Electrical - Starting System

Motor	Manufacturer	Delphi
	Current drain -29 (-20) °C (°F)	400 Amps
	Power rating kw (hp)	1.5 (2.0)
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)		Not Available
Coil	Manufacturer		Delphi
	Model		Direct Ignition
	Current	Engine stopped - A	Less than 100 mA
		Engine idling - A	Less than 1.5 A (Avg.)
Spark plug	Manufacturer		Delphi
	Model		R44LTSM6
	Thread (mm)		14
	Tightening torque N·m (lb. ft.)		9-20 (7-15)
	Gap		1.5 mm
	Number per cylinder		One
Distributor	Manufacturer		Not Applicable
	Model		Not Applicable

Electrical - Suppression

Locations & type	Generator - Internal Capacitor Suppression Ignition - Internal Resistor/Capacitor Networks
------------------	---

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6
 L82

Electrical - Supply System

Battery	Manufacturer	Delphi Energy & Engine Management Systems
	Model, std., (opt.)	SAE 78-600
	Voltage	12
	Amps at 0° F. cold crank	600
	Minutes-reserve capacity	115
	Amps/hrs.-20 hr. rate	69
	Location	Engine Compartment
Alternator	Manufacturer	Delphi
	Rating (idle/max. rpm)	36/100 Amps
	Ratio (alt. crank/rev.)	2.75
	Output at idle (rpm, park)	68 Amps
	Optional (type & rating)	Not Applicable
Regulator	Type	Integral with Alternator

Electrical - Starting System

Motor	Manufacturer	Delphi
	Current drain -29 (-20) °C (°F)	325 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)		Not Applicable
Coil	Manufacturer		Delphi
	Model		Direct Ignition
	Current	Engine stopped - A	Less than 100 mA
		Engine idling - A	Less than 1.5 A (Avg.)
Spark plug	Manufacturer		Delphi
	Model		41 - 940
	Thread (mm)		14
	Tightening torque N-m (lb. ft.)		9-20 (7-15)
	Gap		1.5 mm
	Number per cylinder		One
Distributor	Manufacturer		Not Applicable
	Model		Not Applicable

Electrical - Suppression

Locations & type	
------------------	--

MVMA Specifications

Vehicle Line MONTE CARLO

Model Year 1998

Issued

Revised (●)

METRIC (U.S. Customary)

Model Code/Description

ALL

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat	3Pt. Single Loop W/Shldr. Retractor, End Release Buckle, Head Rest 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, Head Rest Guide, Child Cinch Retractor/All Retractors are Web & Vehicle Sensitive Retractors
	(lap & shoulder belt, lap belt, etc.)	Second seat	Three Pt. Single Loop W/Shldr. Retractor, End Release Buckle, Child Cinch Retractor, Child Comfort Guide/All Retractors are Web & Vehicle Sensitive Retractors	Lap Belt Manual Adjustment End Release Buckle	Three Pt. Single Loop W/Shldr. Rtrctr., End Release Buckle, Child Cinch Retractor, Child Comfort Guide/All Retractors are Web & Vehicle Sensitive Retractors
	Standard / Optional	Third seat			
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt)	First seat	Air Bag	Air Bag (Passenger Side)	Air Bag
	Standard / Optional	Second seat			
		Third seat			
Glass		SAE Ref.No.			
Windshield glass exposed surface area cm ² (in. ²)		S1			
Side glass exposed surface area cm ² (in. ²) - total 2 sides		S2	3815.14 cm ²		
Backlight glass exposed surface area cm ² (in. ²)		S3			
Total glass exposed surface area cm ² (in. ²)		S4	--		
Windshield glass (type/thickness)					
Side glass (type/thickness)			5.0 mm		
Backlight glass (type/thickness)					
Tinted (yes/no, location)					
Solar control (yes/no, coated/batched, location)					

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	Two
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	Trade No. 9005/HB3
Quantity	Two

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description

ALL

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, 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)	Not Available
	Internal release control (elec., mech., n.a.)	Not Available
Tailgate	Material & mass	Not Available
	Type (drop, lift, door)	Not Available
	Internal release control (elec., mech., n.a.)	Not Available
Vent window control (crank, friction, pivot, power)	Front	Not Applicable
	Rear	Not Applicable
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	Custom Cloth - 60/40 Split Bench or 40/40 Bucket, Trim Material Bonded to Foam Leather - 40/40 Bucket on Foam
	Rear	Custom Cloth - Bench, Trim Material Bonded to Foam with Encapsulated Frame Leather - Bench, On Foam with Encapsulated Frame
	3rd seat	Not Applicable
Seat back type (e.g., 60/40 bucket, bench, wire, foam, etc.)	Front	Custom Cloth - 60/40 Split Bench or 40/40 Bucket, Trim Material Bonded to Foam Leather - 40/40 Bucket on Foam
	Rear	Custom Cloth - Bench, Trim Material Bonded to Foam with Encapsulated Frame Leather - Bench, On 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, Steering Rack and Engine Mounts.
---	--

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Model Code/Description

ALL

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	Not Available
	Number of occupants	Not Available
	Occupant weight/height (min. & max.)	Not Available
	Restraint system description (3 or 5-point belts/booster seat capability)	Not Available
Lamps	Daytime Running Light (Yes/No)	Yes, Standard
	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
	Other Ashtray	Standard
	CHMSL	Standard
	Daytime Running Lights (DRL)	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)	
	Navigation system (describe)	Not Available
	Parking brake-auto release (warning light)	Standard - Warning Light

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Engine Code/Description

ALL

Climate Control System

Air conditioning (std., opt., man., auto.)		Standard - L82
Condenser	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	Delphi Harrison Thermal Systems
	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.)	Not Applicable
	Diameter (mm.)	Not Applicable
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.)		1.875 lbs.
Cold engine lockout switch (yes / no)		No
Wide open throttle cutout switch (yes / no)		Yes
Power steering cutout switch (yes/no)		No

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 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.	ALL
Width		
Tread (front)	W101	1512 (59.5)
Tread (rear)	W102	1500 (59.1)
Vehicle width	W103	1825 (71.9)
Body width at SgRP (front)	W117	1795 (70.7)
Vehicle width (front doors open)	W120	4057 (159.7)
Vehicle width (rear doors open)	W121	Not Applicable
Tumble-home (degrees)	W122	28
Outside mirror width	W410	1980 (78.0)

Length

Wheelbase	L101	2730 (107.5)
Vehicle length	L103	5099 (200.7)
Overhang (front)	L104	1172 (46.1)
Overhang (rear)	L105	1197 (47.1)
Upper structure length	L123	2876.5 (113.2)
Rear Wheel C/L "X" coordinate	L127	4525 (178.1)

Height **

Passenger distribution (front/rear)	PD1 ,2,3	2/3
Trunk/cargo load		**
Vehicle height	H101	1368 (53.9)
Cowl point to ground	H114	862 (33.9)
Deck point to ground	H138	
Rocker panel-front to ground	H112	194 (7.6)
Rocker panel-rear to ground	H111	195 (7.7)
Windshield slope angle (degrees)	H122	64
Backlight slope angle (degrees)	H121	69

Ground Clearance **

Front bumper to ground	H102	
Rear bumper to ground	H104	
Bumper to ground front at curb mass (wt.)	H103	
Bumper to ground rear at curb mass (wt.)	H105	
Angle of approach (degrees)	H106	
Angle of departure (degrees)	H107	
Ramp breakover angle (degrees)	H147	
Axle differential to ground (front/rear)	H153	
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.

All linear dimensions are in millimeters (inches).

MVMA Specifications

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/Description

ALL

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 Four Way, Driver Side Only; Optional Six-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		Standard Power
	Vent windows		Not Applicable
Rear windows		Not Applicable	
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 - Two In Front Doors, Two 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, Four-Spd. Auto., 3.33; 3.8L, Four-Spd. Auto., 3.43
Tow class (I, II, III)*	Std. / Opt.	One
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 MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

METRIC (U.S. Customary)

Model Code/
Description

ALL

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
Front		X - Fiducial Mark to Vertical Zero Grid Line - Front Measured Horizontally, from the Zero Grid Line to the Front Fiducial Mark Located on Top of the Front Seat Adjuster Mounting Bolt.
		Y - Fiducial Mark to Centerline of Car - Front, Width Measurement made from Centerline Car to Fiducial Mark Located on Top of the Front Seat Adjuster Mounting Bolt.
		Z - Fiducial Mark to Horizontal zero Grid Line - Front, Measured Vertically from Zero Grid Line to 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 Hole Located on the Rail (Compartment Pan - Longitudinal.)
		Y - Fiducial Mark to Centerline of Car - Rear, Width Measurement made from Centerline of Car to Fiducial Hole 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 Hole Located on the Rail (Compartment Pan - Longitudinal.)
NOTE: Provide 3 of 4 Fiducial Mark Locations		
Front	W21**	555.0 (21.9)
	L54**	2775.0 (109.3)
	H81**	278.0 (10.9)
	H161**	340.7 (13.4)
	H163**	324.8 (12.8)
Rear	W22**	488 (19.2)
	L55**	5200 (204.7)
	H82**	388 (15.3)
	H162**	458.7 (18.0)
	H164**	439.1 (17.3)

* 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.

MVMA Specifications

Vehicle Line MONTE CARLO
Model Year 1998 Issued Revised (●)

METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for definitions

Model Code/Description

SAE
Ref.
No.

ALL

Front Compartment

SgRP front, "X" coordinate	L31	3139.5 (123.6)
Effective head room	H61	963 (37.9)
Max. effective leg room (accelerator)	L34	1076 (42.4)
SgRP to heel point	H30	240 (9.4)
SgRP to heel point	L53	876 (34.5)
Back angle (degrees)	L40	26.0
Hip angle (degrees)	L42	98.0
Knee angle (degrees)	L44	128
Foot angle (degrees)	L46	87
Design H-point front travel	L17	218 (8.6)
Normal driving & riding seat track trvl.	L23	178.5 (7.0)
Shoulder room	W3	1460 (57.5)
Hip room	W5	1356 (53.4)
*** Upper body opening to ground	H50	1203 (47.4)
Steering wheel maximum diameter*	W9	375 (14.8)
Steering wheel angle (degrees)	H18	22
Accel. heel pt. to steer. whl. cntr.	L11	
Accel. heel pt. to steer. whl. cntr.	H17	
Undepressed floor covering thickness	H67	29 (1.1)

Front Compartment Interior Dimensions are Measured with the Seating Reference Point (SgRP) 39.5 mm forward and 5.5 mm Upward of Rearmost Position.

Rear Compartment

SgRP point couple distance	L50	792 (31.2)
Effective head room	H63	938 (36.9)
Min. effective leg room	L51	886 (34.9)
SgRP (second to heel)	H31	249.5 (9.8)
Knee clearance	L48	22 (0.9)
Shoulder room	W4	1463 (57.6)
Hip room	W6	1310 (51.6)
*** Upper body opening to ground	H51	Not Applicable
Back angle (degrees)	L41	28
Hip angle (degrees)	L43	84
Knee angle (degrees)	L45	87
Foot angle (degrees)	L47	123
Depressed floor covering thickness	H73	18 (0.7)

Luggage Compartment

Usable luggage capacity L (cu. ft.)	V1	444.4 (15.7)
*** Lifter height	H195	679 (26.7)

Interior Volumes (EPA Classification)

Vehicle class		Mid-Size
Interior volume index including trunk/cargo (cu. ft.)**	E1	112.1
Cargo Utility index (%)	V13	51.3

* See page 14.

** See definition page 33.

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

*** EPA Loaded Vehicle Weight, Loading Conditions

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line MONTE CARLO
 Model Year 1998 Issued _____ Revised (●) _____

		Optional Equipment Differential Mass (weight)*			
Code	Equipment	MASS, kg. (lb.)			Remarks Restrictions, Requirements
		Front	Rear	Total	
AG1	Seat Adj-6 Way Pwr Drv Only	1.0	0.6	1.6	
		(2.2)	(1.3)	(3.5)	1WW27
AM9	Seat-RR, Split Back, Fldg.	0.4	4.8	5.2	
		(0.9)	(10.6)	(11.5)	1WA00
AP9	Convenience Net	0.0	0.2	0.2	
		(0.0)	(0.4)	(0.4)	1WW27
AQ9	Seat Front-Bucket/Recliner	0.6	0.6	1.2	
		(1.3)	(1.3)	(2.6)	1WA00
AR9	Seat Front Bkt, Euro P/D Recliner	-1.0	-1.0	-2.0	
		(-2.2)	(-2.2)	(-4.4)	1WW27
AU0	Lock Control Remote Entry	0.2	0.0	0.2	
		(0.4)	(0.0)	(0.4)	1WW27
A90	Lock-RR Compt Lid, Rem Cont Ele.	0.0	0.2	0.2	
		(0.0)	(0.44)	(0.44)	1WW27
BF9	Cover-Flr. Mat Delete	-1.4	-1.0	-2.4	
		(-3.1)	(-2.2)	(-5.3)	
CF5	Sunroof - Electric	5.4	6.4	11.8	
		(11.9)	(14.1)	(26.0)	
CJ3	HVAC Sys, A/C Front	0.4	0.0	0.4	
		(0.9)	(0.0)	(0.9)	1WW27
C49	Defogger-RR Window, Electric	0.0	0.2	0.2	
		(0.0)	(0.4)	(0.4)	
DG7	Mirror - O/S, L&R, Elec. Painted	0.0	0.0	0.0	
		(0.0)	(0.0)	(0.0)	
D55	Console-Frt. Compt. Floor	1.8	1.8	3.6	
		(4.0)	(4.0)	(7.9)	1WW27
D81	Spoiler - R Aero Wing	-0.2	1.6	1.4	
		(-0.4)	(3.5)	(3.1)	
IPC	Trim, Interior Design	0.2	0.0	0.2	
		(0.4)	(0.0)	(0.4)	
KC4	Cooling System - Eng. Oil	1.0	0.0	1.0	
		(2.2)	(0.0)	(2.2)	
KD1	Cooling System - Trans Oil	1.4	-0.2	1.2	
		(3.1)	(-0.4)	(2.6)	

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

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line MONTE CARLO

Issued

Revised (●)

[illegible]

* Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.

** ETWC - Equivalent Test Weight Class - basis for U.S. Environmental Protection Agency emission certifications.

Refer to ETWC code legend below for test weight class.

ETWC LEGEND

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

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

35 (77)

MVMA Specifications
METRIC (U.S. Customary)

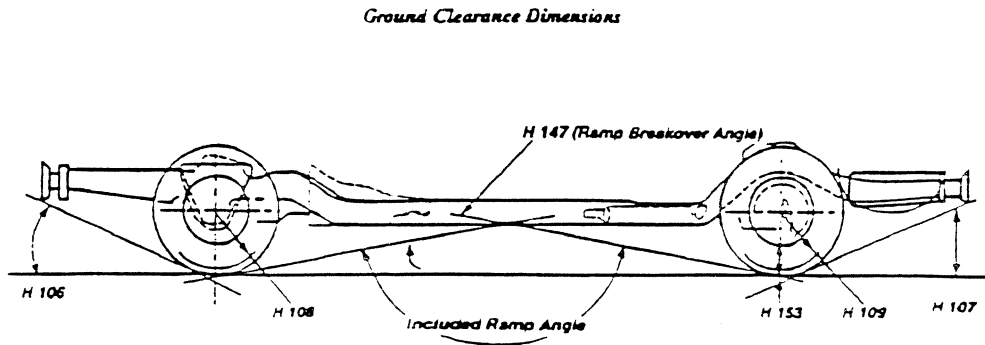
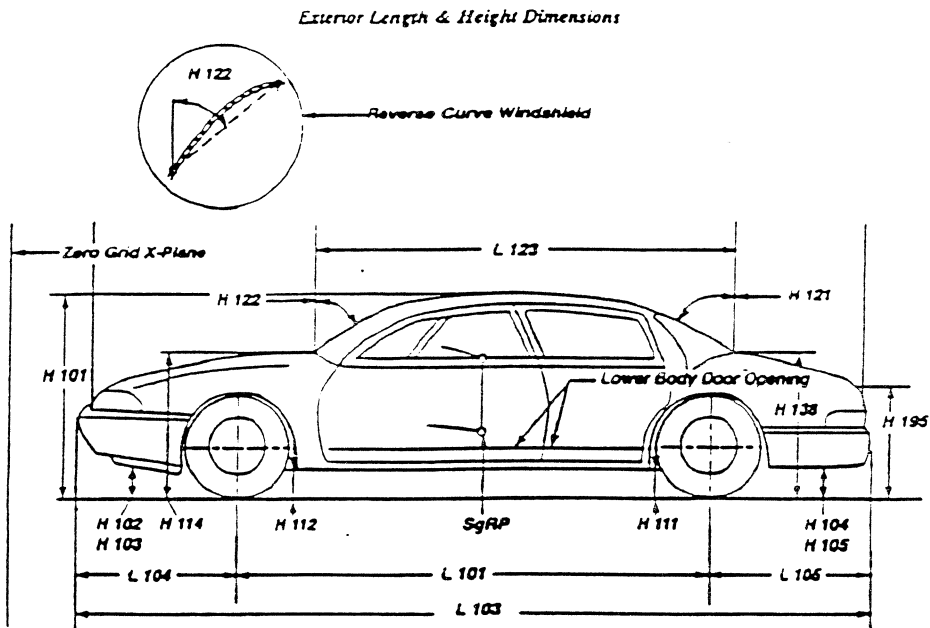
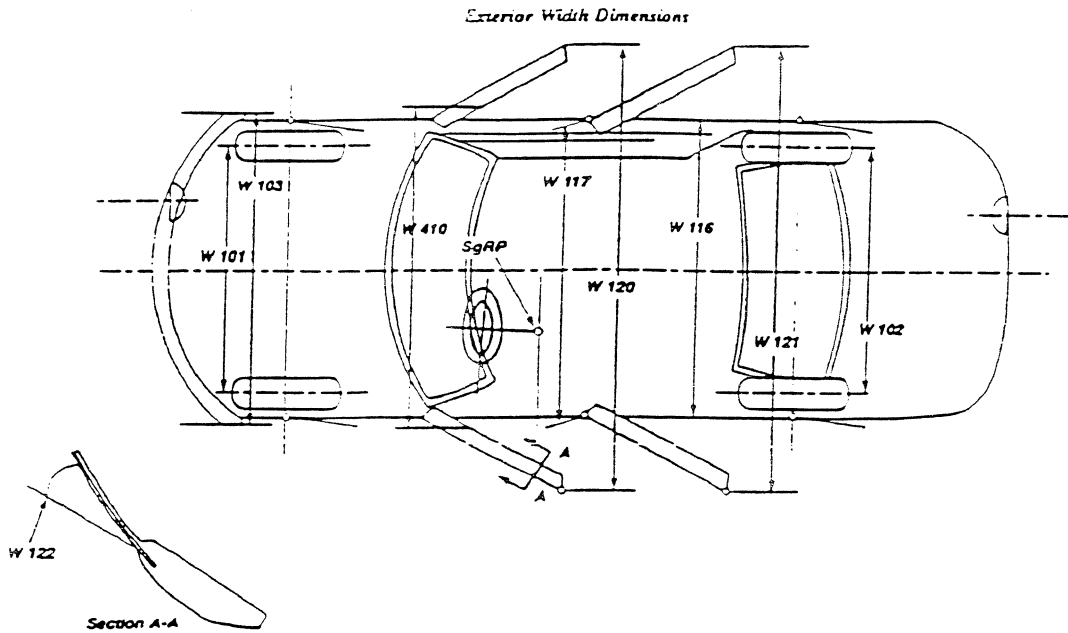
Vehicle Line MONTE CARLO
 Model Year 1998 Issued Revised (●)

		Optional Equipment Differential Mass (weight)*			
Code	Equipment	MASS, kg. (lb.)			Remarks Restrictions, Requirements
		Front	Rear	Total	
K05	Heater - Engine Block	0.2 (0.4)	0.0 (0.0)	0.2 (0.4)	
K34	Cruise Control Auto Electronic	1.2 (2.6)	0.0 (0.0)	1.2 (2.6)	1WW27
N81	Full Size Spare Tire	0.0 (0.0)	6.4 (14.1)	6.4 (14.1)	
PY0	Wheel - 16 x 6.5 Aluminum	-6.2 (13.7)	-6.2 (13.7)	-12.4 (27.3)	1WW27
QNX	Tire-P225/60R16/NBL	1.6 (3.5)	1.6 (3.5)	3.2 (7.1)	1WW27
UL0	Radio-AM/FM Stereo	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1WW27
UL5	Radio-Delete	-1.2 (-2.6)	-0.8 (-1.8)	-2.0 (-4.4)	
UN0	Radio-AM/FM Compact Disc	0.2 (0.4)	0.0 (0.0)	0.2 (0.4)	
VK3	License Plt Frt Mount Package	0.4 (0.9)	-0.2 (-0.4)	0.2 (0.4)	

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

Specifications
METRIC

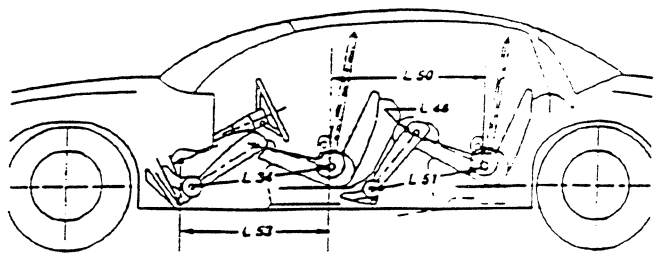
Exterior Vehicle And Body Dimensions - Key Sheet



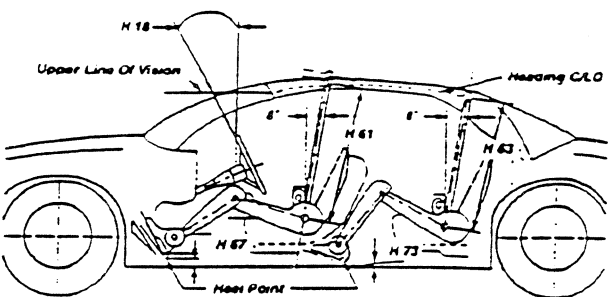
Specifications
METRIC

Interior Vehicle And Body Dimensions - Key Sheet

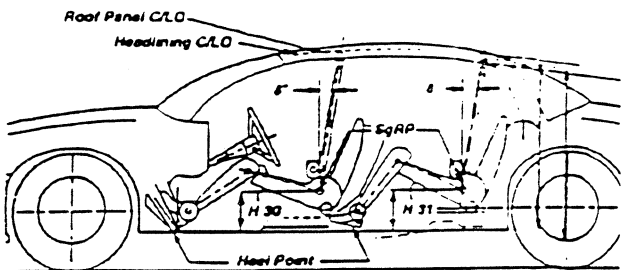
Interior Length Dimensions



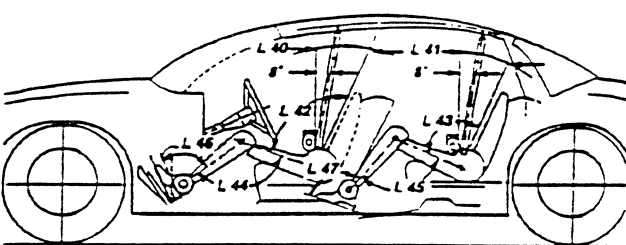
Interior Height Dimensions



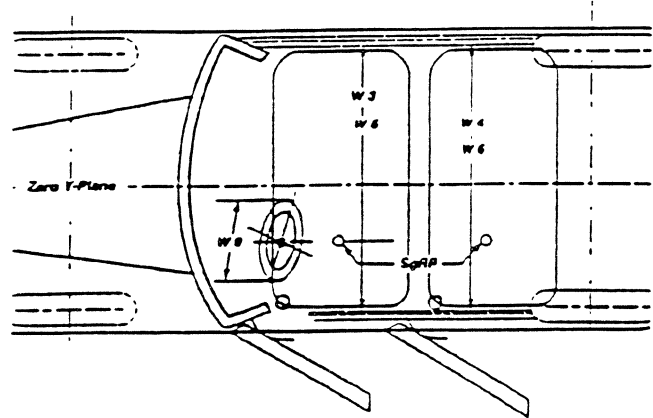
Interior Height Dimensions



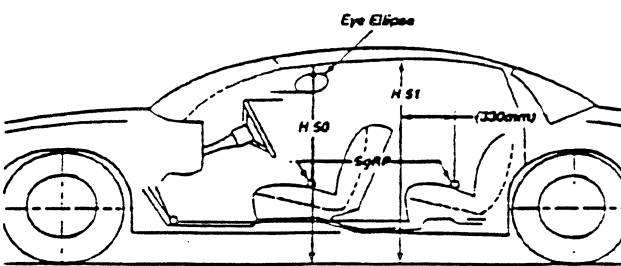
Interior Length Dimensions



Interior Width Dimensions

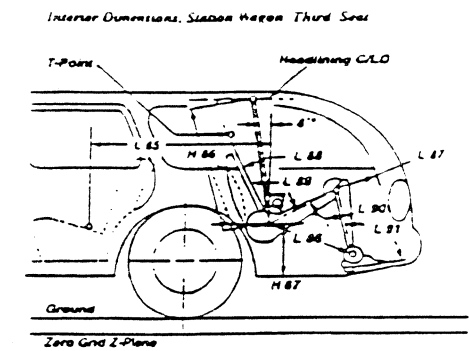


Interior Height Dimensions

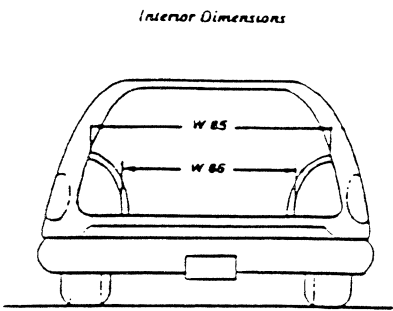
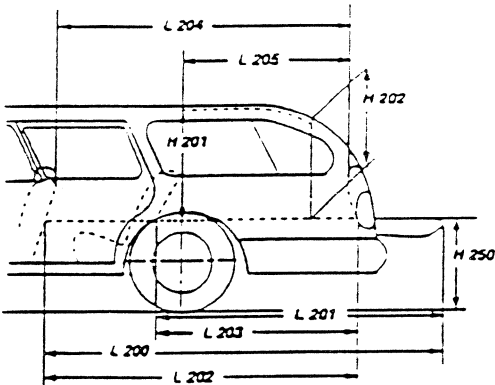


Specifications
METRIC

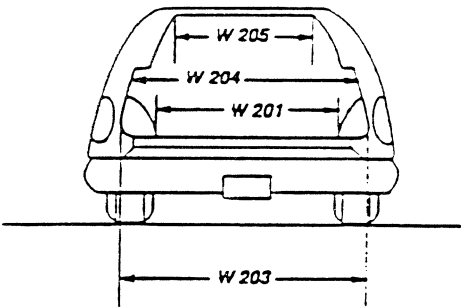
Interior Vehicle And Body Dimensions - Key Sheet



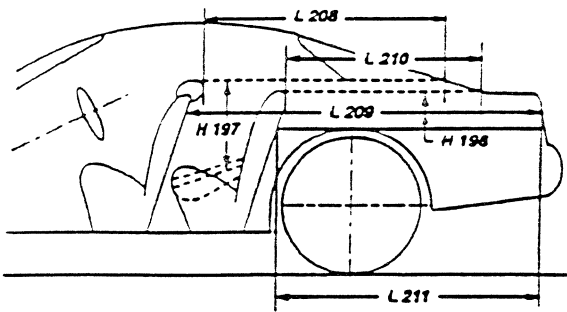
Cargo Space Dimensions



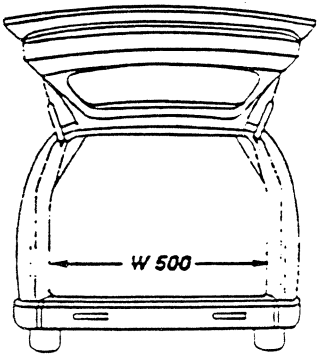
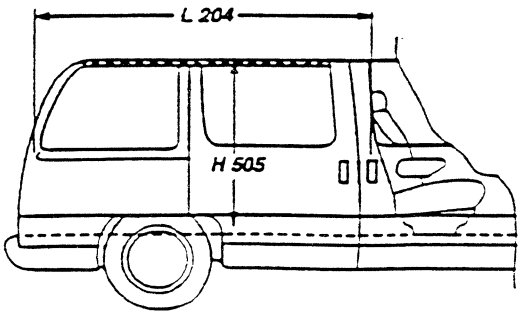
Cargo Space Dimensions



Cargo Space Dimensions



Multipurpose Vehicle Cargo Space



Specifications

METRIC

Exterior Vehicle And Body Dimensions - Key Sheet

Dimensions Definitions

Seating Reference Point

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

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

Width Dimensions

- W101 TREAD-FRONT. The dimension measured between the tire centerlines at the ground.
- W102 TREAD-REAR. The dimension measured between the tire centerlines at the ground. In case of dual wheels, the dimension will be measured to the centerline of tire and wheel assemblies.
- W103 VEHICLE WIDTH. The maximum dimension measured between the widest point on the vehicle, excluding exterior mirrors, flexible mud flaps, marker lamps, but including bumpers, moldings, sheet metal protrusions or dual wheels, if standard equipment.
- W117 BODY WIDTH AT SGRP-FRONT. The dimension measured laterally between the widest points on the body at the SGRP-front, excluding door handles, applied moldings, or appliques.
- W120 VEHICLE WIDTH-FRONT DOORS OPEN. The dimension measured between the widest point on the 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.

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

Height Dimensions

- H101 VEHICLE HEIGHT. The dimension measured vertically from the highest point on the vehicle body to ground.
- H111 ROCKER PANEL-REAR TO GROUND. The dimension measured vertically from the bottom of the rocker or side quarter panel at the front of the rear wheel opening, excluding flanges, to ground.
- H112 ROCKER PANEL-FRONT TO GROUND. The dimension measured vertically from the foremost point on the bottom of the rocker panels, excluding flanges, to ground.
- H114 COWL POINT TO GROUND. Measured at zero "Y" plane.
- H121 BACKLIGHT SLOPE ANGLE. The angle between the vertical reference line and the surface of backlight at vehicle zero "Y" plane. For curve backlight, the angle is to chord of backlight arc from lower DLO to upper DLO.
- H122 WINDSHIELD SLOPE ANGLE. The angle between the vertical reference line and a chord of the windshield arc running from the lower DLO to the upper DLO at the vehicle zero "Y" plane. In the case of wrap over glass, the angle to be measured will be formed by a chord 457 mm (18.0 in.) long drawn from the lower DLO to the intersecting point on the windshield.
- H138 DECK POINT TO GROUND. Measured at zero "Y" plane.
- H109 STATICLOAD-TIRE RADIUS-REAR. Specified by the manufacturer in accordance with composite TIRE SECTION STANDARD.

Ground Clearance Dimensions

- H102 FRONT BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the front bumper to ground, including bumper guards, if standard equipment.
- H103 FRONT BUMPER TO GROUND-CURB MASS (WT.). Measured in the same manner as H102.
- H104 REAR BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the rear bumper to ground, including bumper guards, if standard equipment.
- H105 REAR BUMPER TO GROUND-CURB MASS (WT.). Measured in the same manner as H104.
- H106 ANGLE OF APPROACH. The angle measured between a line tangent to the front tire static loaded radius arc and the initial point of structural interference forward of the front tire to ground. The limiting structural component shall be designated.
- H107 ANGLE OF DEPARTURE. The angle measured between a line tangent to the rear tire static loaded radius arc and the initial point of structural interference rearward of the rear tire to ground. The limiting component shall be designated.
- H147 RAMP BREAKOVER ANGLE. The angle measured between two lines tangent to the front and rear tire static loaded radius and intersecting at a point on the underside of the vehicle which defines the largest ramp over which the vehicle can roll.
- H153 REAR AXLE DIFFERENTIAL TO GROUND. The minimum dimension measured from the rear axle differential to ground.
- H156 MINIMUM RUNNING GROUND CLEARANCE. The minimum dimension measured from the sprung vehicle to ground. Specify location.

Specifications

METRIC

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 underdepressed 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.

Specifications

METRIC

Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

Luggage Compartment Dimensions

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

Interior Volumes (EPA Classification)

The Interior 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 (2.0 in.). With rear-facing third seat, dimension is measured to closure.
L88 BACK ANGLE-THIRD. Measured in the same manner as L41.
L89 HIP ANGLE-THIRD. Measured in the same manner as L43.
L90 KNEE ANGLE-THIRD. Measured in the same manner as L45.
L91 FOOT ANGLE-THIRD. Measured in the same manner as L47.
W85 SHOULDER ROOM-THIRD. Measured in the same manner as W4.
W86 HIP ROOM-THIRD. Measured in the same manner as W5.
H86 EFFECTIVE HEAD ROOM-THIRD. The dimension, measured along a line 8 deg. from the SgRP-third to the headlining rear of vertical plus a constant of 102 mm (4.0 in.).
H87 SgRP-THIRD TO HEEL POINT
SD1 SEAT FACING DIRECTION-THIRD.

Station Wagon/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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 wheelhouseings 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 undeepressed floor covering.

H201 CARGO HEIGHT. The dimension measured vertically from the top of the undeepressed 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 undeepressed 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 undeepressed 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.

Specifications

METRIC

Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

V2	STATION WAGON Measured in inches: $\frac{W4 \times H201 \times L204}{1728} - ft^3$ Measured in mm: $\frac{W4 \times H201 \times L204}{10^9} - m^3(cubicmeter)$	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.
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.	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.
V5	TRUCKS AND MPV'S WITH OPEN AREA. Measured in inches: $\frac{L506 \times W505 \times H503}{1728} - ft^3$ Measured in mm: $\frac{L506 \times W500 \times H503}{10^9} - m^3(cubicmeter)$	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.
V6	TRUCKS AND MPV'S WITH CLOSED AREA. Measured in inches: $\frac{L204 \times W500 \times H505}{1728} - ft^3$ Measured in mm: $\frac{L204 \times W500 \times H505}{10^9} - m^3(cubicmeter)$	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.
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.	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.
V10	STATION WAGON CARGO VOLUME INDEX. Measured in inches: $\frac{H201 \times L205 \times \frac{W4 \times W201}{2}}{1728} - ft^3$ Measured in mm: $\frac{H201 \times L205 \times \frac{W4 \times W201}{2}}{10^9} - m^3(cubicmeter)$	H198	SECOND SEATBACK TO LOAD FLOOR HEIGHT. The dimension measured vertically from the second seatback to the undepressed floor covering.
		V3	HATCHBACK. Measured in inches: $\frac{\frac{L208 - L209}{2} \times W4 \times H197}{1728} - ft^3$ Measured in mm: $\frac{\frac{L208 - L209}{2} \times W4 \times H197}{10^9} - m^3(cubicmeter)$
		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: $\frac{\frac{L210 - L211}{2} \times W4 \times H198}{1728} - ft^3$ Measured in mm: $\frac{\frac{L210 - L211}{2} \times W4 \times H198}{10^9} - m^3(cubicmeter)$

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).

Specifications

METRIC

Index

Subject	Page No.
Alternator	16
Axle, Drive, Front, Rear, All Four	2, 9, 10
Axle Shafts	10
Battery	16
Body and Miscellaneous Information	17
Brakes-Parking Service	12, 13
Camber	15
Camshaft	3
Capacities	
Cooling System	5
Fuel Tank	6
Lubricants	
Engine Crankcase	4
Transmission/Transaxle	8,9
Rear Axle	10
Carburetor	2,6
Caster	15
Climate Control System	13
Clutch-Pedal Operated	8
Coil, Ignition	16
Connecting Rods	4
Convenience Equipment	20,21
Cooling System	5
Crankshaft	4
Cylinders and Cylinder Head	3
Diesel Information	4
Dimension Definitions	
Key Sheet-Exterior	28,31,32
Key Sheet-Interior	29,30,32,33,34
Electrical System	15,16
Emission Controls	7
Engine-General	
Bore, Stroke, Type	3
Compression Ratio	2
Displacement	2,3
Firing Order, Cylinder Numbering	3
General Information, Power & Torque	2
Intake System	4
Power Teams	2
Exhaust System	7
Equipment Availability, Convenience	20
Fan, Cooling	5
Filters - Engine Oil, Fuel System	4
Four Wheel Drive	10
Frame	17
Front Suspension	11
Front Wheel Drive Unit	10
Fuel Economy, EPA	1
Fuel Injection	6
Fuel System	6
Fuel Tank	6
Glass	18
Headlamps	18
Headroom-Body	23,24
Heights	22
Horns	15
Horsepower-Brake	2
Ignition System	16
Inflation-Tires	13
Interior Volumes	23
Instruments	15
Legroom	23,24
Lengths	22
Leveling,Suspension	11
Lifters, Valve	4
Linings-Clutch, Brake	8,12
Lubrication-Engine Transmission/Transaxle	4,8,9
Luggage Compartment	23
Models	1
Motor Starting	16
Muffler	7

Subject	Page No.
Origin	1
Passenger Capacity	1
Passenger Mass Distribution	26
Pistons	3
Power Brakes	12
Power Engine	2
Power Steering	14
Power Teams	2
Propeller Shaft	10
Pumps-Fuel	6
Water	5
Radiator-Cap, Hoses, Core	5
Ratios-Axle, Transaxle	2,9,10
Compression	2
Steering	14
Transmission/Transaxle	2,8,9
Rear Axle	2,10
Regulator-Alternator	16
Restraint System	18
Rims	13
Rods-Connecting	4
Scrub Radius	14
Seats	17
Shock Absorbers, Front & Rear	11
Spark Plugs	16
Speedometer	15
Springs-Front & Rear Suspension	11
Stabilizer (Sway Bar)-Front & Rear	11
Starting System	16
Steering	14
Suppression-Ignition, Radio	16
Suspension-Front & Rear	11
Tail Pipe	7
Theft Protection	21
Thermostat, Cooling	5
Tires	13
Toe-In	15
Torque Converter	9
Torque-Engine	2,8,9
Trailer Towing	21
Transaxle	9
Transmission-Types	2,8,9
Transmission-Automatic	2,9
Transmission-Manual	2,8
Transmission-Ratios	2,8,9
Tread	22
Trunk Cargo Load	1
Trunk Luggage capacity	23
Turning Diameter	14
Unitized Construction	18
Universal Joints, Propeller Shaft	10
Valve System	4
Vehicle Dimensions	
Width	22
Length	22
Height	22
Ground Clearance	22
Front Compartment	23
Rear Compartment	23
Luggage Compartment	23
Station Wagon-Third Seat	24
Station Wagon-Cargo Space	24
Hatchback-Cargo Space	24
Fiducial Marks	25
Voltage Regulator	16
Water Pump	5
Weights	26,27
Wheel Alignment	15
Wheelbase	22
Wheels & Tires	13
Wheel Spindle	14
Widths	22
Windshield	18
Windshield Wiper and Washer	15

