

**1991 CHEVROLET
CAVALIER**

**RESTORATION
PACKAGE**

ORIGINAL

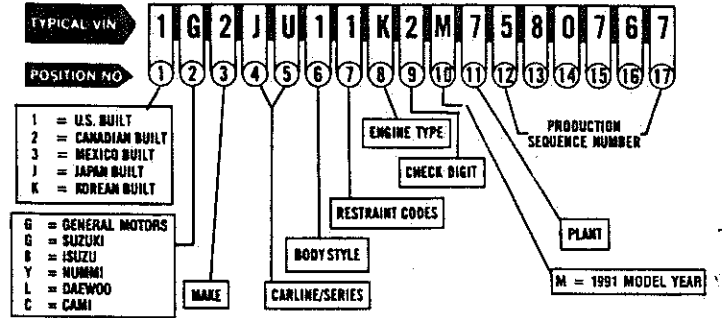
General Motors

Passenger Car 1991

VIN System



1991 PASSENGER CAR VIN SYSTEM



3 MAKE

1 - CHEVROLET	4 - BUICK	6 - CADILLAC
2 - PONTIAC	5 - PONTIAC	7 - GM OF CANADA
3 - OLDSMOBILE	INCOMPLETE	8 - SATURN

4-5 CARLINE/SERIES

CHEVROLET	B/L - CAPRICE	M/K - CUTLASS CALAIS INTERNATIONAL SERIES
B/M - CAMARO SPORT	F/P - CAMARO COUPE & CONV.	N/L - CUTLASS CALAIS
J/C - CAVALIER & CONV.	J/F - CAVALIER Z24	N/T - CUTLASS CALAIS SL
L/T - CORSICA LT	L/W - BERETTA	W/H - CUTLASS SUPREME
L/Z - BERETTA GTZ	M/R - GEO METRO	W/R - CUTLASS SUPREME INTERNATIONAL SERIES
M/S - GEO METRO XF	M/T - SPRINT	W/S - CUTLASS SUPREME SL
R/V - GEO STORM	R/T - GEO STORM GS	W/T - CUTLASS SUPREME CONV.
S/K - GEO PRIZM	S/L - GEO PRIZM GS	SUICK
W/L - LUMINA	W/M - LUMINA EURO	A/M - CENTURY CUSTOM
W/P - CORVETTE	Y/Z - CORVETTE ZR1	A/L - CENTURY LIMITED
PONTIAC	A/J - 6000 SE	B/B - COACHBUILDER WAGON
F/S - FIREBIRD	F/W - FIREBIRD TRANS AM	B/R - ROADMASTER
H/X - BONNEVILLE LE	H/Y - BONNEVILLE SSE	C/U - ESTATE WAGON
J/B - SUNBIRD LE	J/C - SUNBIRD	C/W - PARK AVENUE
J/D - SUNBIRD SE	J/O - SUNBIRD GT	E/C - REATA
M/R - FIREFLY	M/W - GRAND AM	E/Z - RIVIERA
N/E - GRAND AM LE	N/W - GRAND AM SE	H/P - LE SABRE CUSTOM
T/N - LEMANS LE	T/X - LEMANS AERO COUPE	H/R - LE SABRE LIMITED
W/H - GRAND PRIX LE	W/J - GRAND PRIX SE	M/C - SKYLARKCUSTOM(4-DR)
W/P - GRAND PRIX GT	W/T - GRAND PRIX STE	M/D - SKYLARKLUXURY(4-DR)
OLDSMOBILE	A/J - CUTLASS CIERA S	M/J - SKYLARKCUSTOM(2-DR)
A/M - CUTLASS CIERA SL	B/P - CUSTOM CRUISER WAGON	M/M - SKYLARK GRAND SPORT (2-DR)
C/V - TOURING SEDAN	C/W - WHEATY EIGHT REGENCY ELITE	N/V - SKYLARK
E/V - TORONADO TROFEO	E/Z - TRONADO	W/B - REGAL CUSTOM
H/Y - EIGHTY EIGHT ROYALE	H/Z - EIGHTY EIGHT ROYALE	W/D - REGAL LIMITED
M/N - EIGHTY EIGHT ROYALE	M/P - BROUGHAM	CADILLAC
N/F - CUTLASS CALAIS S	N/S - CUTLASS CIERA S	C/B - FLEETWOOD
	N/T - CUTLASS CIERA S WAGON	C/D - DEVILLE
	N/U - CUTLASS CIERA SL & CUTLASS CRUISER SL WAGON	C/G - FLEETWOOD SIXTY SPECIAL
	N/V - CUTLASS CRUISER S WAGON	C/H - COMMERCIAL CHASSIS
	N/W - TOURING SEDAN	C/J - BROUGHAM
	N/X - WHEATY EIGHT REGENCY ELITE	E/L - ELDERADO
	N/Y - TORONADO TROFEO	K/S - SEVILLE
	N/Z - TRONADO	K/T - SEVILLE TOURING SEDAN
	O/A - EIGHTY EIGHT ROYALE	V/R - ALLANTE (CONV. HARDTOP)
	O/B - EIGHTY EIGHT ROYALE	V/S - ALLANTE (CONV.)
	O/C - BROUGHAM	GM OF CANADA
	O/D - CUTLASS CALAIS S	L/T - TEMPEST
		M/R - FIREFLY LE TURBO
		M/T - FIREFLY
		M/U - STYLUS (4-DR)
		M/V - IMPULSE (2-DR)
		T/N - OPTIMA LS
		T/S - OPTIMA GS
		T/X - OPTIMA
		SATURN
		Z/B - SC (2-DR)
		Z/D - SL1 (4-DR)
		Z/F - SL2
		Z/G - SL1
		Z/H - SC (2-DR)
		Z/J - SL1 (4 DR)
		Z/K - SL2

6 BODY STYLE

1	TWO-DOOR COUPE/SEDAN (GM STYLES: 11, 27, 37, 47, 57, 97)
2	TWO-DOOR HATCHBACK/LIFTBACK (GM STYLES: 07, 08, 77, 87)
3	TWO-DOOR CONVERTIBLE (GM STYLE: 67)
4	TWO-DOOR STATION WAGON (GM STYLE: 15)
5	FOUR-DOOR SEDAN (GM STYLES: 19, 69)
6	FOUR-DOOR HATCHBACK/LIFTBACK (GM STYLE: 88)
8	FOUR-DOOR STATION WAGON (GM STYLE: 35)

7 RESTRAINT CODES

1	ACTIVE (MANUAL) BELTS
3	ACTIVE (MANUAL) BELTS/DRIVER INFLATABLE RESTRAINT SYSTEM
4	PASSIVE (AUTOMATIC) BELTS

8 ENGINE TYPE

CODE	ENG. OPT.	DISP.	CYL.	FUEL SYSTEM	DIV. USAGE	PROD. IN*
A	L60	2.3L	L4	FI	1,2,3	U
B	L26	4.9L	V8	FI	6	U
C	LN3	3.8L	V6	FI	2,3,4	U
D	LD2	2.3L	L4	FI	2,3,4	U
E	LO3	5.0L	V8	FI	1,2,3,4,6	U,C
F	LR9	5.0L	V8	FI	1,2	U
G	LM3	2.2L	L4	FI	1	U
J	LT5	5.7L	V8	FI	1	U
K	LT2	2.0L	L4	FI	2,7	B
L	L27	3.8L	V6	FI	3,4	U
M	LG7	3.3L	V6	FI	3,4	U
R	LR8	2.5L	L4	FI	1,2,3,4	U
T	LH0	3.1L	V6	FI	1,2,3,4	M,C
U	LE9	2.5L	L4	FI	2,3,4	U
X	LQ1	3.4L	V6	FI	1,2,3	U
Z	LS3	1.0L	L3	FI	7	J
5	LW0	1.6L	L4	FI	1,7	J
6	L73	1.6L	L4	FI	2,7	K
8	LP2	1.0L	L3	FI	1,7	J
8	LO1	1.6L	L4	FI	1,7	J
7	LOS	1.9L	L4	FI	8	U
7	LLO	5.7L	V8	FI	1,6	U,C
8	LO6	4.5L	V8	FI	6	U
8	L98	5.7L	V8	FI	1,2	U
8	LV4	1.6L	L4	FI	7	J
9	LKO	1.9L	L4	FI	8	U

*LEGEND
U = U.S. K = KOREA
C = CANADA J = JAPAN
M = MEXICO B = BRAZIL

11 PLANT

A LAKEWOOD	GA	F FLINT (T&B)	MI	U HAMTRACK	MI	8 PONTIAC (T&B)	MI	9 BOWLING GREEN	KY
B LANSHIRE (GA&Z)	MI	N FLINT	MI	Y PONTIAC (T&B)	MI	1 WENTZVILLE	MO	6 INGERSOLL	OH
B BALTIMORE (T&B)	MD	J JAMESVILLE (T&B)	WI	W WILLOW RUN	MI	1 OSHAWA #2	ON	8 OKLAHOMA CITY	OK
C PUYONG	KOR	J JAMESVILLE	WI	W WATA	JAP	2 MORGANE (T&B)	OH	7 LORDSTOWN	OH
C LANSING	MI	W KOSU	JAP	Y WILMINGTON	DE	2 STE THERESE	PO	7 LORDSTOWN (T&B)	OH
D DORAVILLE	GA	L VAN NUYS	CA	Z FREMONT	CA	3 DETROIT (T&B)	MI	7 TULSAWA	JAP
E LINDEN	NJ	M LANSING (A)	MI	Z SPRING HILL	TN	3 KAWASAKI	JAP	8 SHEVEPORT (T&B)	LA
E PONTIAC (T&B)	MI	R ARLINGTON	TX			4 OKON	JAP	8 OSHAWA #1	ON
F FAIRFAX #	KS	R RAMOS ARIZPE	MEX			4 SCARBOROUGH	ON		
		T TAPPAYTOWN (T&B)	NY						

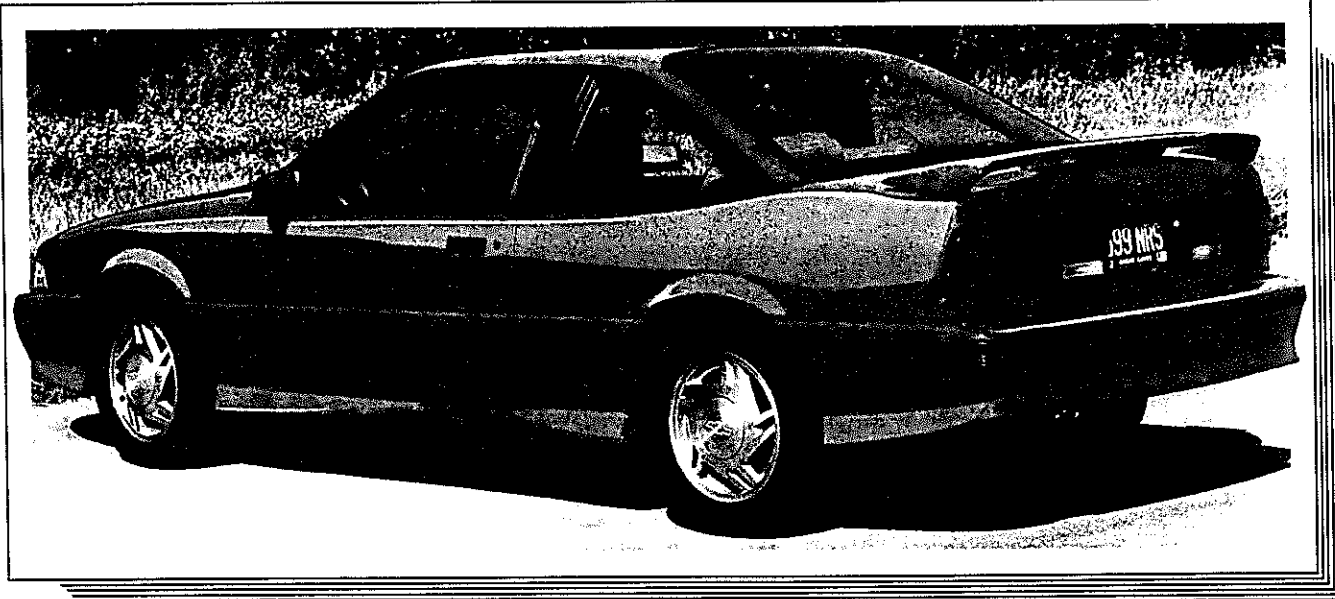
The information shown is correct at time of printing, but may be changed during model year.

'91

CAVALIER

CAVALIER	MODEL NUMBER	RS 4-Door Sedan 1JC69
VL 2-Door Coupe	1JC37	RS 4-Door Wagon 1JC35
VL 4-Door Sedan	1JC69	Z24 2-Door Coupe 1JF37
VL 4-Door Wagon	1JC35	PASSENGER CAPACITY
RS 2-Door Coupe	1JC37	All Models Five

Cavalier Z24 Coupe



HIGHLIGHTS

- RS models become the base models for 1991; VL models remain as price leaders.
- RS Cavaliers have color-coordinated facias and body-side moldings while VL models have black facias and body-side moldings.
- New Lt. Gold Metallic exterior color and Camel interior available.
- All 1991 models feature newly designed front end panels, headlamps, front facias, grilles, tail lamps and rear facia.
- New 14" five-spoke appearance wheels for VL and RS models with specific treatments, new 15" aluminum wheels for Z24.
- **Scotchgard™ Fabric Protector** manufactured into seat and door panel trim fabrics.
- New optional Performance Handling Package for RS models includes Level II suspension, P195/70R-14 performance tires and Rally instrumentation.
- P185/75R-14 tires standard on VL and RS models, new P205/60R-15 black-lettered tires for Z24.
- The 2.2 Liter L4 with Electronic Fuel Injection (EFI) is the base engine for Cavalier.
- The 3.1 Liter V6 with Multi-Port Fuel Injection (MPFI) is standard on the Z24 and optional on wagon models.
- Stainless steel exhaust system for extended life.

EQUIPMENT AVAILABILITY

	VL Coupe	VL Sedan	VL Wagon	RS Coupe	RS Sedan	RS Wagon	Z24 Coupe
Body-color grille panel (specific to model)	S	S	S	S	S	S	S
Black bumper facias and body-side moldings	S	S	S	NA	NA	NA	NA
Body-color bumper facias aero package	NA	NA	NA	NA	NA	NA	S
Color-coordinated bumper facia and body-side moldings	NA	NA	NA	S	S	S	S
Composite halogen headlamps	S	S	S	S	S	S	S
Tinted glass	O	O	S	S	S	S	S
Self-Aligning Feature (SAF) steering wheel	S	S	S	S	S	S	S
Passenger floor carpeting	S	S	S	S	S	S	S
Trunk floor carpeting	S	S	NA	S	S	NA	S
Load floor carpeting	NA	NA	S	NA	NA	S	NA
Full-length floor console with integral armrest	S	S	S	S	S	S	S
AM/FM stereo radio with seek-scan, digital clock and ERS™	O	O	O	S	S	S	S
Headlamps-on reminder buzzer	NA	NA	NA	S	S	S	S
Easy-entry passenger seat	NA	NA	NA	S	NA	NA	S
Color-keyed safety belt system	NA	NA	NA	S	S	S	S
Trunk/rear compartment lamp	S	S	S	S	S	S	S
P185/75R-14 blackwall radial ply tires	S	S	S	S	S	S	NA
P205/60R-15 black-lettered performance radial tires	NA	NA	NA	NA	NA	NA	S
14" styled steel wheels	S	S	S	S	S	S	NA
15" cast aluminum wheels	NA	NA	NA	NA	NA	NA	S
Level II sport suspension	NA	NA	NA	O	O	O*	NA
Level III sport suspension	NA	NA	NA	NA	NA	NA	S
Power front disc/rear drum brake system	S	S	S	S	S	S	S

S—Standard. NA—Not Available. O—Optional at Extra Cost. ERS—Extended Range Sound System. VL model has restricted color availability, black safety belt system and equipment deletions including AM/FM radio, glove compartment lock, easy-entry passenger seat adjuster, headlamps-on reminder, ashtray and tinted windows on Coupe and Sedan.

*Included with Wagon 3.1L V6 package.

Refer to Passenger Car Order Guide for option availability and application.

O R D E R I N G I N F O R M A T I O N

PREFERRED EQUIPMENT GROUPS

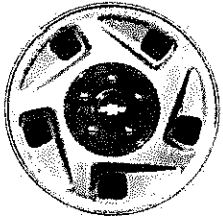
NOTE: NOT TO BE USED FOR ORDERING. REFER TO ORDER GUIDE FOR CURRENT USAGE AND AVAILABILITY.

DESCRIPTION	CAVALIER VL COUPE/ SEDAN	CAVALIER RS COUPE/SEDAN			CAVALIER VL WAGON	CAVALIER RS WAGON			CAVALIER Z24 COUPE	
	P.E.G. 1	P.E.G. 1	P.E.G. 2	P.E.G. 3	P.E.G. 1	P.E.G. 1	P.E.G. 2	P.E.G. 3	P.E.G. 1	P.E.G. 2
Floor Mats, Front/Rear Color-Keyed	X	X	X	X	X	X	X	X	X	X
Tinted Glass	X	STD.	STD.	STD.	STD.	STD.	STD.	STD.	STD.	STD.
Twin Sport Outside Rearview Mirrors (LH remote)	X	X	X	X	X	X	X	X	STD.	STD.
Intermittent Wiper System		X	X	X		X	X	X	X	X
AM/FM Stereo with Seek-Scan, Digital Clock and ERS	X	STD.	STD.	STD.	X	STD.	STD.	STD.	STD.	STD.
Luggage Area Cargo Retaining Net		X	X	X					STD.	STD.
Dual Covered Visor Vanity Mirrors		X	X	X		X	X	X	STD.	STD.
Split-Folding Rear Seat-Back (includes Deluxe Luggage/Cargo Area Trim)		X	X	X		X	X	X	STD.	STD.
Reading Lamp, Inst. Panel-Mounted		X	X	X		X	X	X	STD.	STD.
Air Conditioning	0	0	X	X	0	0	X	X	X	X
Electronic Speed Control			X	X			X	X	X	X
Comfortilt Steering Wheel			X	X			X	X	X	X
AM/FM Stereo with Seek-Scan, Cassette, Digital Clock and ERS	0	0	0	X		0	0	X	X	X
Power Door Lock System		0	0	X		0	0	X	0	X
Power Windows				X				X		X
Roof Carrier						0	X	X		
Dome Reading Lamp									X	X
Power Trunk Opener				X						X
INDIVIDUAL OPTIONS										
Tires/Wheel Trim										
P195/70R-14 Blackwall Tires*		0*	0*	0*		0*	0*	0*		
P205/60R-15 Raised White-Lettered Tires									0	0
Climate Control										
Air Conditioning	0	0	X	X	0	0	X	X	X	X
Rear Defogger	0	0	0	0	0	0	0	0	0	0
Engine Block Heater	0	0	0	0	0	0	0	0	0	0
Radio Equipment										
AM/FM Stereo with Seek-Scan, Digital Clock and ERS	X†		STD.		X†		STD.		STD.	
AM/FM Stereo with Seek-Scan, Cassette, Digital Clock and ERS	0	0	0	X	0	0	0	X	X	X
AM/FM Stereo with Seek-Scan, Compact Disc Player, Digital Clock and ERS									0	0
Additional Individual Options										
Power Door Lock System		0	0	X		0	0	X	0	X
Performance Handling Package (Z51)**		0	0	0		0	0	0		
Rear Spoiler									STD.	STD.
Roof Carrier						0	X	X		
Sunroof									0††	0††
Front License Plate Bracket	0	0	0	0	0	0	0	0	0	0

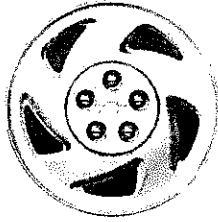
STD.—Standard. X—Included in P.E.G. 0—Available Individual Option. ERS—Extended Range Sound System. *Requires Z51 Performance Handling Package.
 †Also available as an Individual Option with Base Vehicle Group. **Includes P195/70R-14 blackwall tires, Level II sport suspension and gage package with tachometer.
 ††Requires RPO C60 Air Conditioning.

Refer to Passenger Car Order Guide for option availability and application.

WHEEL TRIM



Cavalier VL standard 14" styled steel wheels.

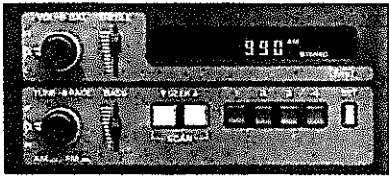


Cavalier RS standard 14" styled steel wheels.



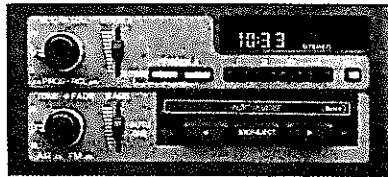
Cavalier Z24 standard 15" aluminum wheels.

RADIOS

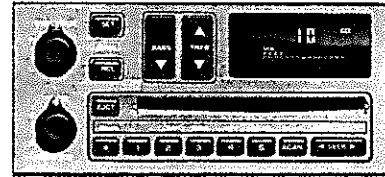


Standard* electronically tuned AM/FM stereo radio with seek-scan, digital clock and Extended Range Sound System (ERS) (RPO UM7, optional for Cavalier VL models).

*Except with VL models.



Optional electronically tuned AM/FM stereo radio with seek-scan, stereo cassette tape player and Extended Range Sound System (ERS) (RPO UM6).

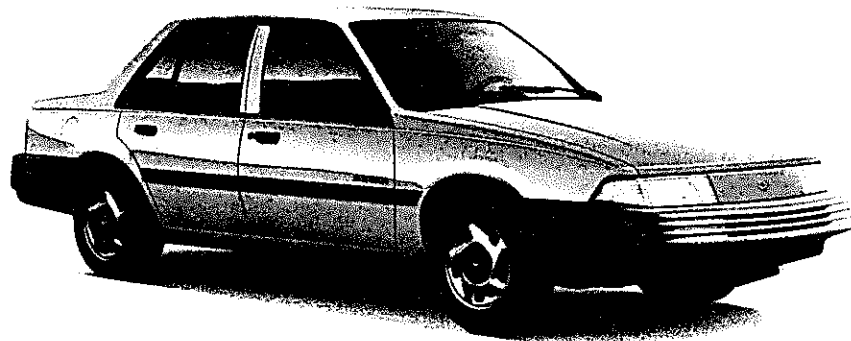


Optional electronically tuned AM/FM stereo with seek-scan, compact disc player, digital clock and Extended Range Sound System (ERS) (RPO U1C).

VALUE FEATURES

Cavalier models include many standard features that enhance operation, safety and convenience. For 1991, these include:

- Power front disc/rear drum brakes.
- Power rack-and-pinion steering.
- Instrument panel cup holder.
- Day/night inside rearview mirror.
- Console with armrest.
- Body-side moldings and bumper fascia rub strips.
- Stainless steel exhaust system.
- **Scotchgard™** Fabric Protector.
- Trunk/rear compartment lamp.
- 5 mph bumpers.
- Self-aligning steering wheel feature.



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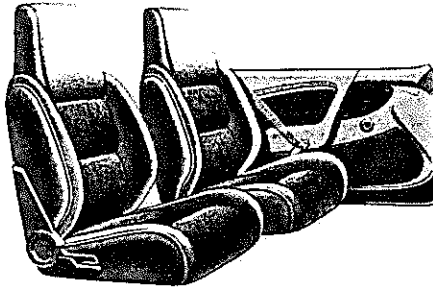
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SEAT TYPES & COLORS

CAVALIER VL AND RS STANDARD CLOTH SEAT TRIM

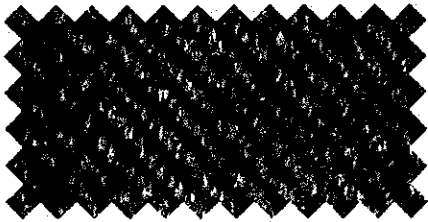


Cavalier VL and RS standard cloth seat trim available in Black, Dark Blue, Camel or Gray.

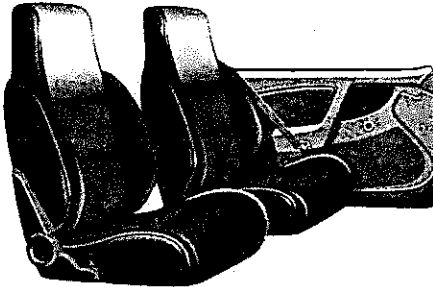


Cavalier standard cloth reclining bucket seats with integral head restraints and cloth door trim.

CAVALIER Z24 SPORT CLOTH SEAT TRIM



Z24 standard sport cloth seat trim available in Black, Dark Blue, Camel or Gray.



Cavalier Z24 standard cloth reclining bucket seats with integral head restraints, 4-way manual driver's seat adjuster and seat-back storage pockets.

Refer to Passenger Car Order Guide for option availability and application.

CHEVROLET SPECIFICATIONS --1991 CAVALIER

MODELS PASSENGER

Cavalier Z24 2-Door Coupe (1JF37)	5
Cavalier RS Convertible (1JC67)	5
Cavalier RS 2-Door Coupe (1JC37)	5
Cavalier RS 4-Door Sedan (1JC69)	5
Cavalier RS 4-Door Wagon (1JC35)	5
Cavalier VL 2-Door Coupe (1JC37/WV9)	5
Cavalier VL 4-Door Sedan (1JC69/WV9)	5
Cavalier VL 4-Door Wagon (1JC35/WV9)	5

DIMENSIONS (inches)

EXTERIOR

Wheelbase	101.2
Length (overall)	Sedan, Coupe 178.6
.....	Wagon 178.8
Width (overall)	66.0
Height (overall)	Sedan 53.6
.....	Coupe 52.0
.....	Wagon 54.3

INTERIOR

Head Room-Front/Rear	Sedan 39.1/37.4
.....	Coupe 37.8/36.1
.....	Wagon 38.9/38.4
Shoulder Room-Front/Rear	Sedan, Wagon 53.5/53.7
.....	Coupe 53.7/52.8
Hip Room-Front/Rear	Sedan 47.8/48.9
.....	Coupe 47.9/49.6
.....	Wagon 48.9/49.0
Leg Room-Front/Rear	Sedan 42.2/33.2
.....	Coupe 42.2/31.7
.....	Wagon 42.2/32.5

LUGGAGE/CARGO CAPACITY (cu. ft.)

Luggage Capacity	Sedan 13.6
.....	Coupe 13.2
Cargo Volume	
with Rear Seat Up	Wagon 34.1
With Rear Seat Down	Wagon 64.4

RATED FUEL TANK CAPACITY (gallons) 13.6

POWER TEAMS

STANDARD ENGINE
RPO LM3, 2.2 Liter (133 cu. in.) L4 with Electronic Fuel Injection (EFI)

OPTIONAL ENGINE
RPO LH0, 3.1 Liter (191 cu. in) V6 with Multi-Port Fuel Injection (MFI) (Std RS Convertible and Z24, Optional Wagon)

STANDARD TRANSMISSION
5-Speed Manual with Overdrive

OPTIONAL TRANSMISSION
3-Speed Automatic (Std Wagon)

STANDARD EQUIPMENT SUMMARY

Composite Halogen Headlamps
5-MPH Bumpers
Styled Steel Wheels
Console with Integral Armrest
All-Season Steel-Belted Radial Blackwall Tires
Black Side Window Moldings
L.H. Remote Sport Mirror (Black)
Engine Compartment Hood Insulator Pad
Passive Front Safety Belt System, Rear Seat Outer Position Lap/Shoulder Belts, Lap Belt for Rear Center Position
Passenger Floor and Trunk (Coupe, Sedan) or Load Floor (Wagon) Carpeting
Center High-Mounted Stop Lamp
Side Window Defoggers
Easy-Entry Passenger Seat (Coupe)*
Glove Compartment and Trunk/Rear Compartment Lamps
AM/FM Stereo Radio with Seek and Scan and Digital Clock*
Day/Night Inside Rear View Mirror
Headlamps-On Reminder*
Power Rack and Pinion Steering Wheel
Power Disc/Drum Front Rear Brakes
Self-Aligning Steering Wheel
Scotchgard™ Fabric Protector
Stainless Steel Exhaust System

*Not included on VL Models

SEAT STYLES

STANDARD SEATS
(VL and RS Models)
 Cloth Reclining Front Bucket Seats with Integral Head Restraints
(Z24 Coupe)
 Sport Cloth Reclining Front Bucket Seats with Integral Head Restraints and Split Folding Rear Seat Back
(RS Convertible)
 Custom Cloth Reclining Bucket Seats with Integral Head Restraints

OPTIONAL SEATS CUSTOM INTERIOR
(N/A VL Models)
 Cloth Reclining Bucket Seats with Integral Head Restraints, Split Folding Rear Seat and Custom Door Trim
(RS Convertible)
 Vinyl Reclining Bucket Seats with Integral Head Restraints

CAVALIER RS CONVERTIBLE

COLOR AND TRIM SELECTION

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

Interior Trim Color		Camel	Gray	White
MODEL	SEAT TYPE			
1JC67	Custom Cloth Bucket	FEE2	FQQ2	
	Vinyl Bucket			VWW2

@CONVERTIBLE TOP SELECTOR

Exterior Paint Color	Color Code 1	Color Code 2	Camel	Gray	White	Bumpers	Wheels	Moldings Accent Strip
Black	41	41	40T/41T	40T/41T	40T/41T	Black	Silver	Red
Blue, Bright (Met)	24	24		40T/41T	40T/41T	Black	Silver	Red
Red, Bright	81	81	40T/41T	40T/41T	40T/41T	Black	Silver	Red
White	40	40	40T/41T	40T/41T	40T/41T	White	White	Blue

@Convertible Top Option Must Be Specified in "Plus" (+) Option Section of Order Worksheet

CONVERTIBLE TOP COLOR

WHITE.....40T

BLACK.....41T

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO	
	2.53	3.61
WITH NA5 STANDARD EMISSIONS		
LH0 MM5	----	Std
MX1	Std	----
WITH YF5 CALIFORNIA EMISSIONS		
LH0 MM5	----	Std
MX1	Std	----

CAVALIER RS CONVERTIBLE

15,689.00 **Model 1JC67 Cavalier RS Convertible**

PREFERRED VEHICLE

MUST ORDER ONE GROUP -- NO DELETIONS ALLOWED

		JSA1	JSA2
848.00	Preferred Equipment Group 1		
(-500.00)	Preferred Equipment Group Savings 1		
	Air Conditioning	x	x
	Floor Covering: Carpeted Mats, Color-Keyed Front and Rear	x	x
	Reading Lamp, Instrument Panel Mounted	x	x
	Windshield Wiper System, Intermittent	x	x
1,388.00	Preferred Equipment Group 2		
(-650.00)	Preferred Equipment Group Savings 2		
	Cargo Retaining Net, Luggage Area		x
	Electronically Tuned AM/FM Stereo Radio with Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System		x
	Speed Control: Electronic, with Resume Speed		x
	Steering Wheel, Comfortilt		x

Base Vehicles may be ordered by specifying Preferred Equipment Group Code JSAB (Incls 14" Stamped Steel Wheels, Power Steering, 3.1 Liter MFI V6 Eng, 5-Speed Manual Trans, AM/FM Stereo Radio w/Seek-Scan and Digital Clock w/Extend Range Sound System, Covered Visor Vanity Mirrors, Dual O/S Rear View Mirrors and Rally Gage Cluster with Tachometer). (Includes Standard Options: Power Door Locks, Power Windows, Power Operated Top and Level II Suspension)

REGIONALIZED OPTIONS

ADDITIONAL OPTIONS MAY BE ORDERED FROM THIS LISTING ONLY

N.C.	ENGINE (Must Order)			Radio w/Seek-Scan and Digital Clock w/Extended Range Sound System (Base)
	LH0 3.1 Liter MFI V6			
N.C.	TRANSMISSION (Must Order One)	V.P.S.	UM6	Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System (Incl w/Group JSA2)
495.00	MM5 5-Speed Manual			
	MX1 3-Speed Automatic			
N.C.	EMISSION (Must Order One)			
	NA5 Standard Emissions			
100.00	YF5 California Emissions (Reqs C60 Air)	V.P.S.	U1C	Electronically Tuned AM Stereo/FM Stereo Radio w/Seek-Scan, Compact Disc Player and Digital Clock w/Extended Range Sound System
N.C.	TIRES (Must Order)			
	QME P195/70 R14 B/W (Base)			
745.00	CLIMATE CONTROL			
	C60 Air Conditioning (Incl w/Groups JSA1 and JSA2)			
20.00	K05 Heater, Engine Block	N.C.	F**2	Custom Cloth Bucket
	RADIO EQUIPMENT	75.00	V**2	Vinyl Bucket
.V.P.S.	--- Electronically Tuned AM/FM Stereo			
		115.00	V56	Carrier, Deck Lid: Black
		N.C.	VK3	License Plate Bracket, Front
		N.C.	R8T	Priced Order Acknowledgement

CAVALIER Z24 COUPE

COLOR AND TRIM SELECTION

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

Interior Trim Color	Black	Dk Blue	Camel	Gray
---------------------	-------	---------	-------	------

MODEL	SEAT TYPE	JBB2	JDD2	JEE2	JQQ2
1JF37	Sport Cloth Bucket				

SOLID PAINT APPLICATION

Exterior Paint Color	Color Code 1	Color Code 2	Black	Dk Blue	Camel	Gray
Black	41	41	x			x
Blue, Bright (Met)	24	24		x		x
Gray, Med (Met)	15	15	x			x
Red, Bright	81	81	x		x	x
Red, Autumn Maple (Met)	89	89	x			x
White	40	40	x	x	x	x

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO	
	2.84	3.61
WITH NA5 STANDARD EMISSIONS		
LH0 MM5	----	Std
MX1	*Std	----
WITH YF5 CALIFORNIA EMISSIONS		
LH0 MM5	----	*Std
MX1	*Std	----

*Reqs C60 Air

12,525.00 **Model 1JF37 Cavalier Z24 Coupe**

PREFERRED VEHICLE

MUST ORDER ONE GROUP -- NO DELETIONS ALLOWED

		JZA1	JZA2
1,377.00	Preferred Equipment Group 1		
(-400.00)	Preferred Equipment Group 1 Savings		
	Air Conditioning	X	X
	Dome Reading Lamp	X	X
	Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System	X	X
	Floor Covering: Carpeted Mats, Color-Keyed Front and Rear	X	X
	Speed Control: Electronic, with Resume Speed	X	X
	Steering Wheel, Comfortilt	X	X
	Windshield Wiper System, Intermittent	X	X
1,912.00	Preferred Equipment Group 2		
(-600.00)	Preferred Equipment Group 2 Savings		
	Power Door Lock System		X
	Power Trunk Opener		X
	Power Windows		X

Base Vehicles may be ordered by specifying Preferred Equipment Group Code JZAB (Incls LH Remote, RH Manual Sport Mirrors, Tinted Glass, 3.1 Liter MFI V6 Eng, 5-Speed Manual Trans, 15" Aluminum Wheels, Luggage Area Cargo Retaining Net, AM/FM Stereo Radio w/Seek-Scan and Digital Clock w/Extend Range Sound System, Level III Sport Suspension, Gas-Charged Shocks, Gage Pkg w/Tach, Sport Cloth Bucket Seats, Color-Keyed Aero Package, Split Folding Rear Seat, 4-Way Driver's Seat Adjuster, Deluxe Luggage Compartment Trim, Covered Visor Vanity Mirrors and Instrument Panel Reading Lamp). (Refer Latest Update Section for Custom Ordering Options.)

REGIONALIZED OPTIONS

ADDITIONAL OPTIONS MAY BE ORDERED FROM THIS LISTING ONLY

N.C.	ENGINE (Must Order) LH0 3.1 Liter MFI V6	V.P.S.	RADIO EQUIPMENT --- Electronically Tuned AM/FM Stereo Radio w/Seek-Scan and Digital Clock w/Extended Range Sound System (Base)
N.C.	TRANSMISSION (Must Order One) MM5 5-Speed Manual		
495.00	MX1 3-Speed Automatic (Reqs C60 Air)	V.P.S.	UM6 Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System (Incl w/Groups JZA1 and JZA2)
N.C.	EMISSION (Must Order One) NA5 Standard Emissions		
100.00	YF5 California Emissions (Reqs C60 Air)		
N.C.	TIRES (Must Order One) QHF P205/60 R15 B/W (Base)	V.P.S.	U1C Electronically Tuned AM Stereo/FM Stereo Radio w/Seek-Scan, Compact Disc Player and Digital Clock w/Extended Range Sound System
98.00	QHH P205/60 R15 Raised White Outlined Letter		
	CLIMATE CONTROL		
745.00	C60 Air Conditioning (Incl w/Groups JZA1 and JZA2)		
20.00	K05 Heater, Engine Block	N.C.	INTERIOR TRIM J**2 Sport Cloth Bucket
	(Note: One of the Following Defogger Options must be Specified)	115.00	ADDITIONAL OPTIONS V56 Carrier, Deck Lid: Black
170.00	C49 Defogger, Rear Window: Electric	N.C.	VK3 License Plate Bracket, Front
N.C.	R9W Defogger, Rear Window not Desired	210.00	AU3 Power Door Lock System (Incl w/Group JZA2)
		N.C.	R8T Priced Order Acknowledgement
		110.00	T43 Spoiler, Rear
		350.00	AD3 Sunroof, Removable (Reqs C60 Air)

CAVALIER RS COUPE AND SEDAN

COLOR AND TRIM SELECTION

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

Interior Trim Color		Black	Dk Blue	Camel	Gray
MODEL	SEAT TYPE				
1JC69 1JC37	Cloth Bucket	CBB2	CDD2	CEE2	CQQ2

SOLID PAINT APPLICATION

Exterior Paint Color	Color Code 1	Color Code 2	Black	Dk Blue	Camel	Gray	Bumpers	Wheels	Moldings Accent Strip
Black	41	41	x			x	Black	Silver	Red
Blue, Bright (Met)	24	24		x		x	Black	Silver	Red
Gold, Lt (Met)	67	67			x		Black	Lt Gold	Red
Gray, Med (Met)	15	15	x			x	Gray	Silver	Blue
Red, Bright	81	81	x		x	x	Black	Silver	Red
Red, Autumn Maple (Met)	89	89	x			x	Black	Silver	Red
Silver (Met)	12	12	x	x		x	Silver	Silver	Blue
White	40	40	x	x	x	x	White	White	Blue

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO	
	2.84	3.45
WITH NA5 STANDARD EMISSIONS		
LM3 MM5	----	Std
MX1	Std	----
WITH YF5 CALIFORNIA EMISSIONS		
LM3 MM5	----	Std
MX1	Std	----

CAVALIER RS COUPE AND SEDAN

9,540.00 **Model 1JC37 Cavalier RS Coupe**
 9,740.00 **Model 1JC69 Cavalier RS Sedan**

PREFERRED VEHICLE MUST ORDER ONE GROUP -- NO DELETIONS ALLOWED

		JCA1	JCA2	JCA3
327.00	Preferred Equipment Group 1			
	Cargo Retaining Net, Luggage Area	x	x	x
	Floor Covering: Carpeted Mats, Color-Keyed Front and Rear	x	x	x
	Mirrors: Visor Vanity, Dual Covered	x	x	x
	Reading Lamp, Instrument Panel Mounted	x	x	x
	Rear Seat: Split Back, Folding (Incls Deluxe Luggage Compartment Trim)	x	x	x
	Sport Mirrors: LH Remote, RH Manual	x	x	x
	Windshield Wiper System, Intermittent	x	x	x
1,442.00	Preferred Equipment Group 2			
(-400.00)	Preferred Equipment Group 2 Savings			
	Air Conditioning		x	x
	Speed Control: Electronic, with Resume Speed		x	x
	Steering Wheel, Comfortilt		x	x
2,117.00	Preferred Equipment Group 3 (1JC37)			
2,222.00	Preferred Equipment Group 3 (1JC69)			
(-600.00)	Preferred Equipment Group 3 Savings			
	Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System			x
	Power Door Lock System			x
	Power Trunk Opener			x
	Power Windows			x

Base Vehicles may be ordered by specifying Preferred Equipment Group Code JCAB (Incls LH Remote Sport Mirror, Tinted Glass, 2.2 Liter EFI L4 Eng, 5-Speed Manual Trans, Body Side Moldings, 14" Styled Steel Wheels and AM/FM Stereo Radio w/Seek-Scan and Digital Clock w/Extended Range Sound System). (Refer Latest Update Section for Custom Ordering Options.)

REGIONALIZED OPTIONS

ADDITIONAL OPTIONS MAY BE ORDERED FROM THIS LISTING ONLY

N.C.	ENGINE (Must Order)			
	LM3 2.2 Liter EFI L4			Stereo Radio w/Seek-Scan and Digital Clock w/Extended Range Sound System (Base)
N.C.	TRANSMISSION (Must Order One)			
495.00	MM5 5-Speed Manual	V.P.S.	UM6	Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System (Incl w/Group JCA3)
N.C.	EMISSION (Must Order One)			
100.00	NA5 Standard Emissions			
	YF5 California Emissions			
N.C.	TIRES (Must Order)			
	QFE P185/75 R14 B/W (Base)			INTERIOR TRIM
N.C.	WHEELS	N.C.		C**2 Cloth Bucket
	--- Styled Steel Wheels (Base)			ADDITIONAL OPTIONS
N.C.	CLIMATE CONTROL	N.C.	VK3	License Plate Bracket, Front
745.00	C60 Air Conditioning (N/A w/Group JCA1 (Incl w/Groups JCA2 and JCA3)	205.00	Z51	Performance Handling Package (Incls P195/70R14 Blackwall Tires, Level II Sport Suspension and Gage Pkg w/Tach)
20.00	K05 Heater, Engine Block			
	(Note: One of the Following Defogger Options must be Specified)	210.00	AU3	Power Door Lock System (Incl w/Group JCA3) (1JC37 Model)
170.00	C49 Defogger, Rear Window: Electric			
N.C.	R9W Defogger, Rear Window not Desired	250.00	AU3	Power Door Lock System (Incl w/Group JCA3) (1JC69 Model)
N.C.	RADIO EQUIPMENT			
V.P.S.	---- Electronically Tuned AM/FM	N.C.	R8T	Priced Order Acknowledgement

CAVALIER RS WAGON

COLOR AND TRIM SELECTION

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

Interior Trim Color	Black	Dk Blue	Camel	Gray	
MODEL	SEAT TYPE				
1JC35	Cloth Bucket	CBB2	CDD2	CEE2	CQQ2

SOLID PAINT APPLICATION

Exterior Paint Color	Color Code 1	Color Code 2	Black	Dk Blue	Camel	Gray	Bumpers	Wheels	Moldings Accent Strip
Black	41	41	x			x	Black	Silver	Red
Blue, Bright (Met)	24	24		x		x	Black	Silver	Red
Gold, Lt (Met)	67	67			x		Black	Lt Gold	Red
Gray, Med (Met)	15	15	x			x	Gray	Silver	Blue
Red, Bright	81	81	x		x	x	Black	Silver	Red
Red, Autumn Maple (Met)	89	89	x			x	Black	Silver	Red
Silver (Met)	12	12	x	x		x	Silver	Silver	Blue
White	40	40	x	x	x	x	White	White	Blue

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO
	2.84
WITH NA5 STANDARD EMISSIONS	
LM3 MX1	Std
LH0 MX1	*Std
WITH YF5 CALIFORNIA EMISSIONS	
LM3 MX1	Std
LH0 MX1	*Std

*Reqs C60 Air

10,745.00 **Model 1JC35 Cavalier RS Wagon**

PREFERRED VEHICLE MUST ORDER ONE GROUP -- NO DELETIONS ALLOWED

		JWA1	JWA2	JWA3
197.00	Preferred Equipment Group 1			
	Floor Covering: Carpeted Mats, Color-Keyed Front and Rear	x	x	x
	Mirrors: Visor Vanity, Dual Covered	x	x	x
	Reading Lamp, Instrument Panel Mounted	x	x	x
	Rear Seat: Split Back, Folding (Incls Deluxe Luggage Compartment Trim)	x	x	x
	Sport Mirrors: LH Remote, RH Manual	x	x	x
	Windshield Wiper System, Intermittent	x	x	x
1,427.00 (-400.00)	Preferred Equipment Group 2			
	Preferred Equipment Group 2 Savings			
	Air Conditioning		x	x
	Carrier, Roof		x	x
	Speed Control: Electronic, with Resume Speed		x	x
	Steering Wheel, Comfortilt		x	x
2,147.00 (-600.00)	Preferred Equipment Group 3			
	Preferred Equipment Group 3 Savings			
	Electronically Tuned AM/FM Stereo Radio w/Seek-Scan Stereo Cassette Tape and Digital Clock w/Extended Range Sound System			x
	Power Door Lock System			x
	Power Windows			x

Base Vehicles may be ordered by specifying Preferred Equipment Group Code JWAB (Incls LH Remote Sport Mirror, 2.2 Liter EFI L4 Eng, 14" Styled Steel Wheels, Body Side Moldings, AM/FM Stereo Radio w/Seek-Scan and Digital Clock w/Extended Range Sound System and Power Tailgate Release). (Refer Latest Update Section for Custom Ordering Options.)

REGIONALIZED OPTIONS ADDITIONAL OPTIONS MAY BE ORDERED FROM THIS LISTING ONLY

N.C.	ENGINE (Must Order One)	V.P.S.	RADIO EQUIPMENT
685.00	LM3 2.2 Liter EFI 4L		---- Electronically Tuned AM/FM Stereo Radio w/Seek-Scan and Digital Clock w/Extended Range Sound System (Base)
	LH0 3.1 Liter MFI V6 (Reqs C60 Air and Z51 Performance Handling Package)	V.P.S.	UM6 Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System (Incl w/Group JWA3)
N.C.	TRANSMISSION (Must Order)		INTERIOR TRIM
	MX1 3-Speed Automatic		C**2 Cloth Bucket
N.C.	EMISSION (Must Order One)		ADDITIONAL OPTIONS
100.00	NA5 Standard Emissions	115.00	V54 Carrier, Roof (Incl w/Groups JWA2 and JWA3)
	YF5 California Emissions (w/LH0 Eng Reqs C60 Air)	N.C.	VK3 License Plate Bracket, Front
N.C.	TIRES (Must Order)	205.00	Z51 Performance Handling Package (Incls P195/70R14 Blackwall Tires, Level II Sport Suspension and Gage Pkg w/Tach)
	QFE P185/75 R14 B/W (Base)	250.00	AU3 Power Door Lock System (Incl w/Group JWA3)
N.C.	WHEELS	N.C.	R8T Priced Order Acknowledgement
	---- 14" Styled Steel Wheel (Base)		
745.00	CLIMATE CONTROL		
	C60 Air Conditioning (Incl w/Group JWA2 and JWA3)		
20.00	K05 Heater, Engine Block		
	(Note: One of the Following Defogger Options must be Specified)		
170.00	C49 Defogger, Rear Window: Electric		
N.C.	R9W Defogger, Rear Window Not Desired		

CAVALIER VL COUPE AND SEDAN

COLOR AND TRIM SELECTION

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

Interior Trim Color		Black	Dk Blue	Camel	Gray
MODEL	SEAT TYPE				
1JC69 1JC37	Cloth Bucket	CBB2	CDD2	CEE2	CQQ2

SOLID PAINT APPLICATION

Exterior Paint Color	Color Code 1	Color Code 2	Black	Dk Blue	Camel	Gray
Black	41	41	x			x
Blue, Dk Sapphire (Met)	29	29		x		
Blue, Lt Sapphire (Met)	22	22		x		
Gold, Lt (Met)	67	67			x	
Gray, Med (Met)	15	15	x			x
Red, Bright	81	81	x		x	x
White	40	40	x	x	x	x

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO	
	2.84	3.45
WITH NA5 STANDARD EMISSIONS		
LM3 MM5	---	Std
MX1	Std	---
WITH YF5 CALIFORNIA EMISSIONS		
LM3 MM5	---	Std
MX1	Std	---

CAVALIER VL COUPE AND SEDAN

8,470.00 **Model 1JC37 Cavalier VL Coupe**
 8,745.00 **Model 1JC69 Cavalier VL Sedan**

PREFERRED VEHICLE MUST ORDER ONE GROUP -- NO DELETIONS ALLOWED

500.00	Preferred Equipment Group 1 Electronically Tuned AM/FM Stereo w/Seek-Scan and Digital Clock w/Extended Range Sound System Floor Covering: Carpeted Mats, Color-Keyed Front and Rear Sport Mirrors: LH Remote, RH Manual Tinted Glass	JPA1 x x x x
--------	--	--

Base Vehicles may be ordered by specifying Preferred Equipment Group Code JPAB (Incls LH Remote Sport Mirror, 2.2 Liter EFI L4 Eng, 5-Speed Manual Trans , P185/75 R14 Blackwall Radial Tires, 14" Styled Steel Wheels and Body Side Moldings).

REGIONALIZED OPTIONS ADDITIONAL OPTIONS MAY BE ORDERED FROM THIS LISTING ONLY

N.C.	ENGINE (Must Order) LM3 2.2 Liter EFI L4	V.P.S.	RADIO EQUIPMENT UM7 Electronically Tuned AM/FM Stereo Radio w/Seek-Scan and Digital Clock w/Extended Range Sound System (Only w/Group JPA1)
N.C.	TRANSMISSION (Must Order One) MM5 5-Speed Manual	N.C.	UM6 Electronically Tuned AM/FM Stereo Radio w/Seek-Scan, Stereo Cassette Tape and Digital Clock w/Extended Range Sound System
495.00	MX1 3-Speed Automatic	V.P.S.	--- Radio Delete (Base)
N.C.	EMISSION (Must Order One) NA5 Standard Emissions	N.C.	INTERIOR TRIM C**2 Cloth Bucket
100.00	YF5 California Emissions	N.C.	ADDITIONAL OPTIONS VK3 License Plate Bracket, Front
N.C.	TIRES ---- P185/75 R14 B/W (Base)	210.00	AU3 Power Door Lock System (1JC37 Model)
N.C.	WHEELS --- Styled Steel Wheels (Base)	250.00	AU3 Power Door Lock System (1JC69 Model)
745.00	CLIMATE CONTROL C60 Air Conditioning (N/A Group JPAB)	N.C.	R8T Priced Order Acknowledgement
20.00	K05 Heater, Engine Block	145.00	N33 Steering Wheel, Comfortilt
170.00	(Note: One of the Following Defogger Options must be Specified) C49 Defogger, Rear Window: Electric	105.00	A01 Tinted Glass (Incl w/ Group JPA1)
N.C.	R9W Defogger, Rear Window not Desired		

CAVALIER VL WAGON

COLOR AND TRIM SELECTION

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

Interior Trim Color		Black	Dk Blue	Camel	Gray
MODEL	SEAT TYPE				
1JC35	Cloth Bucket	CBB2	CDD2	CEE2	CQQ2

SOLID PAINT APPLICATION

Exterior Paint Color	Color Code 1	Color Code 2	Black	Dk Blue	Camel	Gray
Black	41	41	x			x
Blue, Dk Sapphire (Met)	29	29		x		
Blue, Lt Sapphire (Met)	22	22		x		
Gold, Lt (Met)	67	67			x	
Gray, Med (Met)	15	15	x			x
Red, Bright	81	81	x		x	x
White	40	40	x	x	x	x

POWER TEAMS

ENGINE OPTION CONDITION	FINAL DRIVE RATIO
	2.84
WITH NA5 STANDARD EMISSIONS	
LM3 MX1	Std
WITH YF5 CALIFORNIA EMISSIONS	
LM3 MX1	Std

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1991

Original

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

Direct questions concerning these specifications to the manufacturer listed above.

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

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



Motor Vehicle Manufacturers Association
of the United States, Inc.

Blank Forms Provided by Technical Affairs Division



MVMA Specifications

METRIC (U.S. Customary)

Table of Contents

○	1	Vehicle Models/Origin	○	Indicates Format Change From Previous Year
	2	Power Teams		
○	3	Engine		
	4	Lubrication System		
	4	Diesel Information		
	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		
	18	Restraint System		
	18	Glass		
	18	Headlamps		
	18	Frame		
	19-20	Convenience Equipment		
○	20	Trailer Towing		
	21-23	Vehicle Dimensions		
	24	Vehicle Fiducial Marks		
○	25	Vehicle Mass (Weight)		
	26	Optional Equipment Differential Mass (Weight)		
	27-33	Vehicle Dimensions Definitions - Key Sheets		
○	34	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) specs. are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.
4. Additional Vehicle Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications

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

METRIC (U.S. Customary)

Vehicle Origin

Design & development (company)	General Motors Corporation, L.A.D. Lansing
Where built (country)	United States
Authorized U.S. Sales marketing representative	Chevrolet Motor Division

o Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Make, Vehicle Models, Series, Body Type (Mfr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)	EPA Fuel Economy (City/Hwy)
CAVALIER				
4-DOOR STATION WAGON (FWD)	1JC35	2/3	40 (88)	24/31
2-DOOR NOTCHBACK COUPE (FWD)	1JC37	2/3	60 (132)	24/35
4-DOOR NOTCHBACK SEDAN (FWD)	1JC69	2/3	60 (132)	24/35
CAVALIER Z24				
2-DOOR NOTCHBACK COUPE (FWD)	1JF37	2/3	60 (132)	19/28

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

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description
 Engine Code

2.2 LITER L4 (133 CID)
 ELECTRONIC FUEL INJECTION RPO LM3

ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		Inline Front, Transverse - OHV	
Manufacturer		General Motors Engine Division	
No. of cylinders		4	
Bore		89.0 mm (3.50 in.)	
Stroke		88.0 mm (3.46 in.)	
Bore spacing (C/L to C/L)		99.0 mm (3.90 in.)	
Cyl block matl & mass kg(lbs.)(machined)		Cast Iron, 40 (88)	
Cylinder block deck height		216.65 mm (8.53 in.)	
Cylinder block length		443 mm (17.44 in.)	
Deck clearance (minimum) (above or below block)		.7 mm (.028 in.) Below	
Cyl. head material & mass kg (lbs.)		Aluminum, 9.7 (21.3)	
Cylinder head volume (cu. cm.)(cu.in.)		32.8 (2.00)	
Cylinder liner material		No Liner	
Head gasket thickness (compressed)		1.55 (.061)	
Minimum combustion chamber total volume (cm. cu.)(cu. in.)		67.34 (4.11)	
Cyl. no. system (front to rear)*	L. Bank	1-2-3-4	
	R. Bank	-	
Firing order		1-3-4-2	
Intake manifold matl & mass kg (lbs.)**		Aluminum, 3.9 (8.6)	
Exh. manifold matl & mass kg (lbs.)**		Cast Iron, 4.5 (10)	
Knock sensor (yes/no)		No	
Fuel required unleaded, diesel, etc.		Unleaded	
Fuel antiknock index (R + M) / 2		87	
Engine mounts	Quantity	3	
	Matl and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Elastomeric	
	Added isolation (sub-frame, crossmember, etc.)	No	
Total dressed engine mass (wt) dry***		147.7 kg (325 lbs.) Automatic	163.3 kg (359 lbs.) Manual

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum Alloy, 320 (11.26)
--	-----------------------------

Engine Camshaft

Location		In Block, Right Side
Material & mass kg (weight, lbs.)		Cast Iron, 3.1 (6.8)
Drive type	Chain/belt	Chain
	Width/pitch	19.3 x 9.5 mm (.76 x .37 in.)

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

MVMA Specifications

Vehicle Line CAVALIER
 Model Year 1991 Issued 6-80 Revised(*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 MULTI-PORT FUEL INJECTION RPO LHO

ENGINE - GENERAL

Type & description (in-line, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		60 deg. V, Front, Transverse, OHV
Manufacturer		General Motors Engine Division
No. of cylinders		6
Bore		89mm (3.6 in.)
Stroke		84mm (3.4 in.)
Bore spacing (C/L to C/L)		111.76mm (4.5 in.)
Cyl. block mat'l & mass kg(lbs.)(machined)		Cast Iron, 48.15 (107.0)
Cylinder block deck height		224.0mm (9.0 in.)
Cylinder block length		435.5mm (17.4 in.)
Deck clearance (minimum) (above or below block)		0.15mm (.006 in.), ABA
Cyl. head material & mass kg (lbs.)		Aluminum, 5.30 (11.7)
Cylinder head volume (cu. cm.)(cu. in.)		28.0 (1.71)
Cylinder liner material		Not Applicable
Head gasket thickness (compressed)		1.62mm (.062 in.)
Minimum combustion chamber total volume (cu. cm.)(cu. in.)		27.9 (1.70)
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 mat'l & mass kg (lbs.)**		Inlet Plenum - Aluminum Alloy, 3.5 (7.9) Inlet Manifold - Aluminum Alloy, 5.6 (12.4)
Exh. manifold mat'l & mass kg (lbs.)**		Nodular Cast Iron, Wt. Of Manifold, Fire Wall Side 3.76 (8.283); Wt. Of Other Manifold, 2.63 (5.786)
Knock sensor (yes/no)		Yes
Fuel required unleaded, diesel, etc.		Unleaded
Fuel antiknock index (R + M) / 2		87
Engine mounts	Quantity	4
	Mat'l and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Elastomeric
	Added isolation (sub-frame, crossmember, etc.)	None
Total dressed engine mass (wt) dry***		171.91 kg. (379 lbs.)

Engine - Pistons

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

Engine Camshaft

Location		Cylinder Block
Material & mass kg (weight, lbs.)		Cast Iron, 3.098 (6.83)
Drive type	Chain/belt	Chain
	Width/pitch	18.52 x 9.525mm (0.729 x 0.375 in.)

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

**Finished state.

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

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

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	2.2 LITER L4 (133 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LM3

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)	Standard	
Valves	Number intake/exhaust	4/4
	Head O.D. intake/exhaust	43.0 mm (1.69 in.) / 37.0 mm (1.48 in.)

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged Steel, .547 (1.2)
Length (axes centerline to centerline) mm	141.95 mm (5.59 in.)

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*	Nodular Cast Iron, 14.4 (31.7)	
End thrust taken by bearing (no.)	4	
Length & number of main bearings	5, 20.72 mm (.82 in.)	
Seal (material, one, two piece design, etc.)	Front	One Piece Fluoroelastomer
	Rear	One Piece Fluoroelastomer

Engine - Lubrication System

Normal oil pressure kPa(psi) @ eng rpm	435-530 (63-77) @ 1200
Type oil intake (floating, stationary)	Stationary
Oil filter sys. (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	3.8 (4.0)

Engine - Diesel Information

(NOT APPLICABLE)

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

Engine - Intake System

(NOT APPLICABLE)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished State

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	MULTI-PORT FUEL INJECTION RPO LHO

Engine - Valve System

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

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged Steel, .602 (1.33) Full Assembly.
Length(axis centerline to centerline)mm	144.78 (5.79)

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*	Nodular Cast Iron, 17.9 (39.5)	
End thrust taken by bearing (no.)	3	
Length & number of main bearings	** 4 Bearings	
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) @ eng rpm	345-450 (50-65) @ 2400
Type oil intake (floating, stationary)	Stationary
Oil filter sys. (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	3.8 (4.0)

Engine - Diesel Information

(NOT APPLICABLE)

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

Engine - Intake System

(NOT APPLICABLE)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished State

** Standard measurement for width only:

For 3.1L V6; #1,4 = 29.5mm (1.18 in.); #2,3 = 24.0mm (0.96 in.)

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description
 Engine Code

2.2 LITER L4 (133 CID)
 ELECTRONIC FUEL INJECTION RPO LM3

Engine - Cooling System

Coolant recovery system (std, opt, n.a.)		Standard
Coolant fill location (rad., bottle)		Bottle, Coolant Recovery
Radiator cap relief valve pressure kPa (psi)		109.6 (15.9)
Circulation thermostat	Type (choke, bypass)	Choke
	Starts to open @ deg's C(F)	94 (199)
Water Pump	Type (centrifugal, other)	Centrifugal
	GPM 1000 pump rpm	7.3
	Number of pumps	1
	Drive (V-belt, other)	Poly-Vee
	Bearing type	Sealed, Ball Roller
	Impeller material	Stamped Steel
Housing material		Aluminum
By-pass recirculation type (inter., ext.)		External - Thru Intake Manifold Internal
Cooling system capacity	With heater - L (qt.)	8.9 (9.4)
	With air conditioner-L(qt.)	8.9 (9.4)
	Opt. equip. specify-L(qt.)	
Water jackets full length of cyl(yes,no)		Yes
Water all around cylinder (yes, no)		Yes
Water jackets open at head face (yes,no)		Yes
Radiator core	Std., A/C, HD	Manual / Auto
	Type (cross-flow, etc.)	Cross-Flow
	Construction (fin & tube mechanical, braze, etc.)	Tube & Fin / Soldered
	Matl., mass kg (wt.,lbs.)	4.19 (9.2) / 4.62 (10.2), Copper-Brass
	Width	387 mm (15.24 in.)
	Height	500 mm (19.7 in.)
	Thickness	25 (1.0)
	Fins per inch	16.9
Radiator end tank material		Copper-Brass
Fan	Std., elec., opt.	Standard / A/C, Electric
	Number of blades & type (flex, solid, material)	5 / 6, Solid, Plastic
	Diameter & projected width	290 (11.4) / 373 (14.7)
	Ratio(fan to crnkshft.rev.)	Not Applicable
	Fan cutout type	ECM Controlled
	Drive type (direct, remote)	Direct - Electric Motor
	RPM at idle (elec.)	1800
	Motor rating(wattage)(elec)	100 / 150
	Motor switch (type & location/elec.)	Engine Block
	Switch point (temp.,/ pressure/elec.)	On At 108 Deg. C, Off At 101 Deg. C
	Fan shroud (material)	None / Plastic

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description
 Engine Code

3.1 LITER V6 (191 CID)
 MULTI-PORT FUEL INJECTION RPO LHO

Engine - Cooling System

Coolant recovery system (std, opt, n.a.)		Standard
Coolant fill location (rad., bottle)		Surge Tank
Radiator cap relief valve pressure kPa (psi)		89.6 - 103.4 (13-15)
Circulation thermostat	Type (choke, bypass)	Bypass
	Starts to open @ deg's C(F)	90 (195)
Water Pump	Type (centrifugal, other)	Centrifugal
	GPM 1000 pump rpm	12
	Number of pumps	1
	Drive (V-belt, other)	Serpentine
	Bearing type	Ball-Roller
	Impeller material	Cast Iron
	Housing material	Aluminum
By-pass recirculation type (inter., ext.)		External, Bypass
Cooling system capacity	With heater - L (qt.)	13.7 (14.5)
	With air conditioner-L (qt.)	13.7 (14.5)
	Opt. equip. specify-L (qt.)	None
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	Manual / Automatic
	Type (cross-flow, etc.)	Cross-Flow
	Construction (fin & tube mechanical, braze, etc.)	Tube & Fin/Brazed
	Matl., mass kg (wgt., lbs.)	Aluminum, 3.4 (7.5) / Aluminum, 4.08 (9.0)
	Width	360 (14.2 in.)
	Height	600 mm (23.6 in.)
	Thickness	34 mm (1.3 in.)
	Fins per inch	14.5
Radiator end tank material		Plastic
Fan	Std., elec., opt.	Electric
	Number of blades & type (flex, solid, material)	7 (Solid) Plastic
	Diameter & projected width	373 (14.7)
	Ratio (fan to crnkshft.rev.)	Not Applicable
	Fan cutout type	ECM Controlled
	Drive type (direct, remote)	Direct - Electric Motor
	RPM at idle (elec.)	2200
	Motor rating (wattage) (elec)	150
	Motor switch (type & location) (elec.)	None Engine Block
	Switch point (temp./ pressure/elec.)	On At 190, Off At 100 PSI A/C Pressure On At 106, Off At 100 Deg. C
	Fan shroud (material)	Plastic

* Mineral/Glass Filled Nylon.

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	2.2 LITER L4 (133 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LM3

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

Induction type: carburetor, fuel injection system, etc.		Fuel Injection
Manufacturer		AC/Rochester Products
Carburetor no. of barrels		None
Idle A/F mix.		Preset - No Adjustment Provided
Fuel Injection	Point of inj. (no.)	Throttle Body Above Throttle Blade (Single)
	Constant, pulse. flow	Pulse
	Control (elec., mech.)	Electronic
	Sys. press. kPa (psi)	68.95 - 92.74 (10-12)
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	900 In Neutral
	Automatic	800 In Drive.
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water
Air cleaner type		Single Snorkel
Fuel filter (type/location)		Replaceable/Inline Rear Of Tank
Fuel pump	Type (elec. or mech.)	Electric
	Location (eng., tank)	Fuel Tank
	Press. range kPa (psi)	Not Applicable
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	85.16 (22.5) @ 83 (12)

Fuel Tank

Capacity refill L (gallons)		51.5 (13.6)
Location (describe)		Rear Center Underside, R.H. Rear Quarter Panel
Attachment		Underbody Strap
Material & Mass kg (weight lbs.)		Steel
Filler pipe	Location & material	Right Rear Quarter Panel - Steel
	Connection to tank	Hoses
Fuel line (material)		Steel
Fuel hose (material)		Rubber
Return line (material)		Steel
Vapor line (material)		Steel
Extended range tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	
	Location & material	
	Attachment	
Auxiliary tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	
	Location & material	
	Attachment	
	Slctr switch or valve	
	Separate fill	

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	MULTI-PORT FUEL INJECTION RPO LHO

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

Induction type: carburetor, fuel injection system, etc.		Fuel Injection
Manufacturer		AC/Rochester Products
Carburetor no. of barrels		None
Idle A/F mix.		Preset—No Adjustment Provided
Fuel injection	Point of inj. (no.)	Fuel Injectors At Inlet Ports
	Constant, pulse, flow	Pulse
	Control (elec., mech.)	Electronic
	Sys. press. kPa (psi)	300 (43.5)
Idle spd.—rpm (spec. neutral or drive and propane if used)	Manual	Not Applicable
	Automatic	600 In Drive.
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water
Air cleaner type		Single Snorkel
Fuel filter (type/location)		Replaceable/Inline Rear Of Tank
Fuel pump	Type (elec. or mech.)	Electric
	Location (eng., tank)	Tank
	Press. range kPa (psi)	Not Applicable
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	62.4 (16.5) @ 350 (51)

Fuel Tank

Capacity refill L (gallons)		51.5 (13.6)
Location (describe)		Rear Center Underside, R.H. Rear Quarter Panel
Attachment		Underbody Strap
Material & Mass kg (weight lbs.)		Steel
Filler pipe	Location & material	Right Rear Quarter Panel - Steel
	Connection to tank	Hoses
Fuel line (material)		Steel
Fuel hose (material)		Rubber
Return line (material)		Steel
Vapor line (material)		Steel
Extended range tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	
	Location & material	
	Attachment	
Auxiliary tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	
	Location & material	
	Attachment	
	Sictr switch or valve	
	Separate fill	

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	2.2 LITER L4 (133 CID)
Engine Code	THROTTLE BODY INJECTION RPO LM3

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		CCC Control
	Air injection	Pump or pulse	Not
		Driven by	Applicable
		Air distribution (head, manifold, etc.)	"
		Point of entry	"
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Negative Back Pressure EGR Valve With Integral Transducer And Single Shaft Cross Hole
		Exhaust source	#4 Cylinder At Cylinder Head
		Point of exh.inj. (spacer, carb., manifold, other)	Inlet Manifold
	Catalytic Converter	Type	3-Way Monolith
		Number of	1
		Location(s)	Mounted To Center Underbody
		Volume L (cu.in)	1.8 (110)
		Substrate type	Monolith
		Noble metal type	Platinum (Pt), Rhodium (Rh)
Noble metal concentration (g/cu. cm.)		.000948	
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 inlt(breather cap, other)		Air Cleaner
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister
		Carburetor	-
Vapor storage provision		Canister	
Electronic System	Closed loop (yes/no)		Yes
	Open loop (yes/no)		No

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Tri-Flow, Single With Cross-Over
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs.)		1, Reverse Flow
Resonator no. & type		None
Exhaust pipe	Branch o.d., wall thickness	--
	Main o.d., wall thickness	50.8 x 1.37 mm (2.0 x .054 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel
Inter-mediate pipe	o.d. & wall thickness	50.8 x 1.37 mm (2.0 x .054 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel
Tail pipe	o.d. & wall thickness	50.8 x 1.37 mm (2.0 x .054 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	MULTI-PORT FUEL INJECTION RPO LHO

Vehicle Emission Control		Manual Transmission	Automatic Transmission	
Exhaust Emission Control	Type (air injection, engine modifications, other)	Air Injection	Not Applicable	
	Air injection	Pump or pulse	Pump	"
		Driven by	Belt	"
		Air distribution (head, manifold, etc.)	Exhaust Manifold	
		Point of entry	Manifold Facing Fire Wall, Single Port	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	3 Sized Orifices Which Are Opened Or Closed Using, Pintles And Solenoids. 8 Flow Combination.	
		Exhaust source Point of exh.inj. (spacer, carb., manifold, other)	Plenum, Near Throttle Body	
	Catalytic Converter	Type	Bed Monolith (Dual)	
		Number of	1	
		Location(s)	Mounted To Underbody	
		Volume L (cu.in)	2.79 (170)	
		Substrate type	Ceramic Monolith	
		Noble metal type	Platinum (Pt), Rhodium (Rh), Palladium (Pd)	
	Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)	Closed Induction System	
Energy source (manifold vacuum, carburetor, other)		Plenum Vacuum		
Discharges to (intake manifold, other)		Discharges To Plenum		
Air inlet (breather cap, other)		Duct Between Air Cleaner And Throttle Body		
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Fuel Tank To Canister To Throttle Body Port	
		Carburetor	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)	Tri-Flow, Single With Cross-Over	Dual Tailpipes On (Z24)
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs.)	1, Reverse Flow	
Resonator no. & type	None	
Exhaust pipe	Branch o.d., wall thickness	--
	Main o.d., wall thickness	50.8 x 1.37 mm (2.0 x .054 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel
Inter-mediate pipe	o.d. & wall thickness	50.8 x 1.37 mm (2.0 x .054 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel
Tail pipe	o.d. & wall thickness	50.8 x 1.37 mm (2.0 x .054 in.)
	Matl. & Mass kg (wght.lbs.)	Stainless Steel

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description
 Engine Code

2.2 LITER L4 (133 CID)
 THROTTLE BODY INJECTION RPO LM3

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

Manual 3-speed (manufacturer/country)	-
Manual 4-speed (manufacturer/country)	-
Manual 5-speed (manufacturer/country)	Isuzu, Japan (MK7)
Automatic (manufacturer/country)	Hydra-Matic/U.S.A. (MD9)
Auto. overdrive (manufacturer/country)	-

Manual Transmission/Transaxle

Number of forward speeds		5
Gear ratios	1st	3.91
	2nd	2.15
	3rd	1.45
	4th	1.03
	5th	0.74
	Reverse	3.58
Synchronous meshing (specify gears)		1-5
Shift lever location		Floor
Trans. case mat'l. & mass kg (lbs)*		Aluminum 36.5
Lubricant	Capacity L (pt.)	1.9 (4.0)
	Type recommended	Synchromesh Transmission Fluid (STF)

Clutch (Manual Transmission)

Clutch manufacturer		Daikin
Clutch type (dry, wet; single, multiple disc)		Dry Disc
Linkage (hyd., cable, rod, lever, other)		Hydraulic
Max. pedal effort (nom. spring load) N (lbs.)	Depressed	133.4 (30.0)
	Released	115.6 (26.0)
Assist (spring, power/percent, nominal)		Not Applicable
Type pressure plate springs		Diaphragm
Total spring load (nominal) N (lbs.)		5391 (1212)
Clutch facing	Facing mfg. & mat'l. coding	Daikin
	Facing mat'l. & construction	Non-Asbestos
	Rivets per facing	16
	Outside x inside dia. (nom.)	215.0 x 154.0 mm (8.46 x 6.06 in.)
	Total eff. area sq cm (sq in.)	176.6 (23.37)
	Thickness (pressure plate side/fly wheel side)	3.5 mm (.14 in.) Pressure Plate Side, 3.2 (.13) Flywheel Side
	Rivet depth (pressure plate side/fly wheel side)	1.3 mm (0.05 in.) / 1.2 mm (0.05 in.)
Engagement cushion method		Driven Plate, Wave Spoke Springs
Release bearing type & method lub.		Self Centering, Angular Contact Ball Bearing - Prepacked & Sealed
Torsional damping method, springs, hysteresis		Coil Springs With Non-Metal Friction Control

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

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	MULTI-PORT FUEL INJECTION RPO LHO

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

Manual 3-speed (manufacturer/country)	--
Manual 4-speed (manufacturer/country)	--
Manual 5-speed (manufacturer/country)	Base, New Venture Gear/U.S.A. (MG2)
Automatic (manufacturer/country)	Optional, Hydra-Matic/U.S.A. (MD9)
Auto. overdrive (manufacturer/country)	--

Manual Transmission/Transaxle

Number of forward speeds	5	
Gear ratios	1st	3.50
	2nd	2.05
	3rd	1.38
	4th	0.94
	5th	0.72
	Reverse	3.41
Synchronous meshing (specify gears)	1, 2, 3, 4 and 5	
Shift lever location	Floor Mount	
Trans. case mat'l. & mass kg (lbs)*	Aluminum 41.0 (90.2)	
Lubricant	Capacity L (pt.)	1.9 (4.01)
	Type recommended	Synchromesh Transmission Fluid (STF)

Clutch (Manual Transmission)

Clutch manufacturer	LUK	
Clutch type (dry, wet; single, multiple disc)	Dry Single Disc	
Linkage (hyd., cable, rod, lever, other)	Hydraulic	
Max. pedal effort (nom. spring load) N (lbs.)	Depressed	133.4 (30.0)
	Released	133.4 (30.0)
Assist (spring, power/percent, nominal)	Not Applicable	
Type pressure plate springs	Diaphragm	
Total spring load (nominal) N (lbs.)	6540 (1470)	
Clutch facing	Facing mfr. & mat'l. coding	LUK
	Facing mat'l. & construction	Non-Asbestos
	Rivets per facing	32
	Outside x inside dia. (nom.)	232 x 156mm (9.12 x 6.12 in.)
	Total eff. area sq cm (sq in)	232 (35.90)
	Thickness (pressure plate side/fly wheel side)	7.50 - 8.00mm (.295 - .315 in.)
	Rivet depth (pressure plate side/fly wheel side)	1.4mm (0.06 in.) / 1.4mm (0.06 in.)
	Engagement cushion method	Cushion Springs
Release bearing type & method lub.	Self Centering, Angular Contact Ball Bearing Pre-Packed & Sealed	
Torsional damping method, springs, hysteresis	Coil Springs With Non-Metal Friction Control	

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

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description
 Engine Code

2.2 LITER L4 (133 CID)
 ELECTRONIC FUEL INJECTION RPO LM3

Automatic Transmission/Transaxle

Trade Name		THM 125c (Hydra-Matic 3T40)
Type and special features (describe)		3-Speed Automatic
Gear selector	Location (column, floor, other)	Column & Floor
	Ltr./No. designation (e.g. PRND21)	P-R-N-D-2-1
	Shift interlock (yes, no, describe)	No
Gear ratios	1st	2.84
	2nd	1.60
	3rd	1.00 (Converter Clutch Engagement)
	4th	-
	Reverse	2.07
Max. upshift speed - drive range km/h (mph)		1 - 2 = 80 (50) 2 - 3 = 143 (89)
Max. kickdown speed - drive range km/h (mph)		3 - 2 = 135 (84) 2 - 1 = 71 (44)
Min. overdrive speed km/h (mph)		Not Applicable
Torque converter	Number of elements	3
	Max. ratio at stall	2.70
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 mm (9.65 in.)
Capacity factor "K"		237
Lubricant	Capacity (refill L(pt.))	8.5 (18), Dry Transmission
	Type recommended	Dexron II
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard, Integral With Radiator
Trans. mass kg (lbs) & case matl.**		65.7 (144.81), Aluminum

All Wheel / 4 Wheel Drive (NOT APPLICABLE)

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

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

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	MULTI-PORT FUEL INJECTION RPO LHO

Automatic Transmission/Transaxle

Trade Name		Hydra-Matic 3T40
Type and special features (describe)		3-Speed Automatic, Fully Automatic Shifted Planetary Gear W/Torque Converter And Lock-Up Clutch
Gear selector	Location (column, floor, other)	Column & Floor
	Ltr./No. designation (e.g. PRND21)	P-R-N-D-2-1
	Shift interlock (yes, no, describe)	No
Gear ratios	1st	2.84
	2nd	1.60
	3rd	1.00 (Converter Clutch Engagement)
	4th	--
	Reverse	2.07
Max. upshift speed - drive range [km/h (mph)]		1-2 = 61 (38) 2-3 = 119 (74)
Max. kickdown speed - drive range [km/h (mph)]		3-2 = 116 (72) 2-1 = 53 (33)
Min. overdrive speed [km/h (mph)]		Not Applicable
Torque converter	Number of elements	3
	Max. ratio at stall	2.35
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245mm (9.8 in.)
	Capacity factor "K"	177
Lubricant	Capacity (refill L(pt.))	8.5 (17.85) Dry Transmission, Original Filling
	Type recommended	Dexron II
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard, Integral Part Of Radiator
Trans. mass kg (lbs) & case matl.**		65.7 (144.54)

All Wheel / 4 Wheel Drive (NOT APPLICABLE)

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

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

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description	2.2 LITER L4 (133 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LM3

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

Effective final drive ratio (or overall top gear ratio)		MK7 3.45 (2.55)	MD9 2.84
Transr ratio and method(chain,gear,etc)		1.00 Chain	
Front drive unit	Ring gear o.d.	Not Applicable	
	No. of teeth	Pinion	"
		Ring gear	"

Front Drive Unit

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

Axle Shafts - Front Wheel Drive

Manufacturer and number used		Saginaw Division, 2		
Type (straight, solid bar, tubular, etc.)	Left	Straight - Solid		
	Right	Straight - Solid		
Outer diam. x length* x wall thickness	Manual transaxle	Left	23.8 x 320.0	
		Right	23.8 x 663.0	
	Automatic transaxle	Left	23.8 x 311.0	
		Right	23.8 x 364.3	
	Optional transaxle	Left		
		Right		
Slip yoke	Type			
	Number of teeth			
	Spline o.d.			
Universal joints	Make and mfg. no.	Inner	Saginaw Division	
		Outer	Saginaw Division	
	Number used	Inboard & Outboard On Each Axle Shaft		
	Type, size, plunge	Inner	Tripot - 61.0 Stroke	
		Outer	Rzeppa - Fixed Center	
	Attach (u-bolt, clamp, etc.)		Retaining Ring	
	Bearing	Type (plain, anti-friction)	Inner - Ball & Roller Outer - Ball	
Lubrication (fitting, prepack)		Prepacked		
Drive taken through (torque tube, arms or springs)		Wishbone Lower Control Arm, Upper McPherson 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 CAVALIER
 Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Engine Description	3.1 LITER V6 (191 CID)
Engine Code	MULTI-PORT FUEL INJECTION RPO LHO

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

Effective final drive ratio (or overall top gear ratio)	MG2 3.61 (2.60)	MD9 2.53	MD9 2.84
Transfr ratio and method(chain,gear,etc)			
Front drive unit	Ring gear o.d.	Not Applicable	
	No. of teeth	Pinion	"
		Ring gear	"

Front Drive Unit

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

Axle Shafts - Front Wheel Drive

Manufacturer and number used	Saginaw Division, 2			
Type (straight, solid bar, tubular, etc.)	Left	Straight - Solid		
	Right	Straight - Solid		
Outer diam. x length* x wall thickness	Manual transaxle	Left	27.1 x 308.0	
		Right	27.1 x 315.5	
	Automatic transaxle	Left	23.8 x 311.0	
		Right	23.8 x 364.3	
	Optional transaxle	Left		
		Right		
Slip yoke	Type			
	Number of teeth			
	Spline o.d.			
Universal joints	Make and mfg. no.	Inner	Saginaw Division	
		Outer	Saginaw Division	
	Number used	Inboard & Outboard On Each Axle Shaft		
	Type, size, plunge	Inner	Cross Groove - 61.2 Stroke (Manual) Free Motion - 61.5 Stroke (Auto)	
		Outer	Rzeppa - Fixed Center	
	Attach (u-bolt, clamp, etc.)	Retaining Ring		
	Bearing	Type (plain, anti-friction)	Inner - Ball (Manual) Ball & Roller (Auto) Outer - Ball	
Lubrication (fitting, prepack)		Prepacked		
Drive taken through (torque tube, arms or springs)	Wishbone Lower Control Arm, Upper McPherson 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 CAVALIER
 Model Year 1991 Issued 6-90 Revised(*) _____

METRIC (U.S. Customary)

Body Type And/Or

Engine Displacement

ALL

Suspension - General Including Electronic Controls

Car leveling	Std./opt./not avail.	
	Manual/automatic control	
	Type (air/hydraulic)	
	Primary/assist spring	
	Rear only/4 wheel leveling	
	Single/dual rate spring	
	Single/dual ride heights	
Provision for jacking	Body Jack & Pads On Rocker	
Shock absorber damping controls	Standard/option/not avail.	
	Manual/automatic control	
	Number of damping rates	
	Type of actuation (manual/ electric motor/air, etc.)	
	s e n s o r s	Lateral acceleration Deceleration Acceleration Road surface
Shock absorber (front & rear)	Type	Front - MacPherson Strut; Rear - Telescopic (Double-Acting)
	Make	Delco Products
	Piston diameter	Front: 32 (1.26); Rear: 25 (.98)
	Rod diameter	Front: 22 (.87); Rear: 13 (.51)

Suspension - Front

Type and description	MacPherson Strut With Coil Spring	
Travel*	Full jounce	95 (3.74) (From Design)
	Full rebound	84 (3.31) (From Design)
Spring	Type,(coil,leaf,other&matl)	Coil - Steel
	Insulators (type & matl)	Top & Bottom - Rubber
	Size (coil design height & i.d.)	Spring Computer Selected - Varies With Option Content
	Spring rate N/mm (lb./in.)	20 (Base Car)
	Rate @ wheel N/mm (lb./in)	17.5 (Base Car)
Stabilizer	Type (link,lnkless,frmless)	Link
	Material & bar diameter	Steel: 22 (.87) (Base Car)

Suspension - Rear

Type and description	Trailing Crank Arm With Twist Beam	
Travel*	Full jounce	93 (3.7) (Base Car From Design)
	Full rebound	99 (3.9) (Base Car From Design)
Spring	Type(coil,leaf,other&matl)	Coil - Steel
	Size (length x width, coil design height & i.d.)	Spring Computer Selected - Varies With Option Content
	Spring rate N/mm (lb/in)	23 @ Curb - Variable (Base Car)
	Rate @ wheel N/mm (lb/in)	11.1 @ Curb - Variable (Base Car)
	Insulators(type & material)	Top & Bottom - Rubber
If leaf	No. of leaves	Not Available
	Shackle(comp or tens)	"
Stabilizer	Type(link,lnkless,frmless)	Not Available (Base Car)
	Material & bar diameter	"
Track bar(type)	Not Available	

* Define load condition:

MVMA Specifications

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

METRIC (U.S. Customary)

Body Type And/Or

Engine Displacement

Brakes - Service

ALL

Description		Power Assisted Hydraulic Brakes			
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)	Standard - Disc			
	Rear (disc or drum)	Standard - Drum			
Valving type(prop, delay, metering, other)		Proportioning, Diagonal Split Circuit			
Power brake (std., opt., n.a.)		Standard			
Booster type(rmt, intri, vac., hyd., etc.)		Tandem Vacuum			
Vacuum	Source (inline, pump, etc.)	Inline			
	Reservoir (volume cu. in.)	None			
	Pump-type	Not Applicable			
Traction Control	Operational speed range	Not Applicable			
	Type engine intervention	"			
Anti-lock device	Front/rear (std., opt., n.a)	Not Applicable			
	Manufacturer	"			
	Type (electronic, mech.)	"			
	Number sensors or circuits	"			
	No. anti-lock hyd. circuits	"			
	Integral or add-on system	"			
	Yaw control (yes, no)	"			
Hydraulic power source	"				
Effective area sq. cm. (sq. in.)*		309 (47.9)			
Gross Lng area sq cm (sq in)** (F/R)		381 (59.1)			
Swept area sq cm (sq in)*** (F/R)		1624 (251.8)			
Rotor	Outer working diameter	F/R	F 247 (9.72)		
	Inner working diameter	F/R			
	Thickness	F/R	F 22.4 (.88)		
	Matl & type (vented/sld)	F/R	F - Vented Cast Iron		
Drum	Diameter & width	F/R	R 200 x 45 (7.87 x 1.77)		
	Type and material	F/R	Cast Iron		
Wheel cylinder bore		F 57 (2.24) R 16 (.63)			
Master cylinder	Bore/stroke	F/R	Bore - 22.2 (.874) Stroke 35.7 (1.41)		
Pedal arc ratio		3.7:1			
Line pressure at 445 N (100 lb.) pedal load kPa (psi)		10,900			
Lining clearance		F/R	Both - Self-Adjusting		
Brake lining	Front wheel	Bonded or riveted		Integrally Molded - Inboard And Outboard	
		Rivet size		Not Available	
		Manufacturer		Delco Moraine	
		Lining code *****		128 FE	
		Material		Semi-Metallic	
		****	Pri. or out-brd	116.7 x 47 x 10.92 mm (4.59 x 1.85 x .430 in.)	
		Size	Sec. or in-brd	125 x 47 x 10.2 mm (4.92 x 1.85 x .402 in.)	
	Shoe thcknss.(no lng)		Inboard 4.72 mm (.186 in.); Outboard 3.14 mm (1.23 in.)		
	Rear wheel	Bonded or riveted		Riveted	
		Manufacturer		Inland Division	
		Lining code *****		235 FE	
		Material		Organic	
		****	Pri. or out-brd	167.7 x 43.9 x 6 mm (6.60 x 1.73 x .236 in.)	
		Size	Sec. or in-brd	194 x 43.9 x 7 mm (7.64 x 1.73 x .276 in.)	
Shoe thcknss (no lng)		2.75 mm (.11 in.)			

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

MVMA Specifications

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

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

ALL

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P185/75R13
	Type (bias, radial, etc.)		Steel Belted Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	240 (35)
		Rear kPa (psi)	240 (35)
Rev/mile—at 70 km/h(45mph)		519	
Wheels	Type & material		Stamped/Styied Steel
	Rim (size & flange type)		14 x 6 J
	Wheel offset		47.0 (1.9)
	Attachment	Type(bolt,stud)	Stud
		Circle diameter	100.0 mm (3.94 in.)
Number & size		5-12 mm	
Spare	Tire and wheel		T115/70D14 Wheel Diameter 14 x 4, Inflation 415 (60 PSI)
	Storage position & location (describe)		Under Deck Of Luggage Compartment

Tires And Wheels (Optional)

Tire size (load range, ply)		
Type (bias, radial, steel, nylon, etc.)		
Wheel (type & material)		Aluminum
Rim (size, flange type and offset)		15 x 6 J
Tire size (load range, ply)		P205/60R15
Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial
Wheel (type & material)		
Rim (size, flange type and offset)		
Tire size (load range, ply)		P195/70R14
Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial
Wheel (type & material)		
Rim (size, flange type and offset)		
Tire size (load range, ply)		
Type (bias, radial, steel, nylon, etc.)		
Wheel (type & material)		
Rim (size, flange type and offset)		
Spare tire and wheel size		
(If configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)		

Brakes - Parking

Type of control		Grip Handle
Location of control		Between Front Seats
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	CAVALIER				
Model Year	1991	Issued	6-90	Revised(*)	9-90

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

ALL

Steering

Manual (std., opt., n.a.)		Not Applicable		
Power (std., opt., n.a.)		Standard		
Adjustable steering wheel/column (tilt, telescopic, other)	Type	Tilt		
	Manufacturer	Saginaw Division		
	(std., opt., n.a.)	Optional		
Wheel diameter** (W9) SAE J1100	Manual	375 mm (14.8 in.)		
	Power	375 mm (14.8 in.)		
Turning diameter m (ft.)	Out-side front	Wall to wall (l. & r.)	11.3 (37.2)	
		Curb to curb (l. & r.)	10.5 (34.3)	
	In-side rear	Wall to wall (l. & r.)	5.8 (19.2)	
		Curb to curb (l. & r.)	5.9 (19.4)	
Scrub Radius*		1.56 (13" Tires)		
Manual	Gear	Type	Not Applicable	
		Manufacturer		
		Ratios	Gear	
			Overall	
	No. wheel turns(stop to stop)			
Power	Type (coaxial, elec. hyd., etc.)		Rack & Pinion W/Integral Unit	
	Manufacturer		Saginaw Division	
	Gear	Type	Rack & Pinion	
		Ratios	Gear	--
			Overall	16.0:1
	Pump (drive)		Belt Off Crankshaft Pulley	
No. wheel turns(stop to stop)		2.88		
Linkage	Type		Center Take-Off Tie Rods, Rack & Pinion	
	Location (front or rear of wheels, other)		Rear	
	Tie Rods (one or two)		2	
Steering axis	Inclination at camber (deg.)		13.5	
	Bear-ings (type)	Upper	Ball Bearings	
		Lower	Ball Joint	
		Thrust	Incorporated In Upper Bearing	

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

o MVMA Specifications

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

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

ALL

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1.7 (+/-) 1.0 Cross Car Must Be Within 1.0
		Camber (deg.)	0 (+/-) .7 Cross Car Must Be Within 1.0
		Toe-in outside track - mm (in.)	0 (+/-) .2 Sum Toe
	Service reset*	Caster (deg.)	-0.8 To 4.2 Cross Car Must Be Within 0.75
		Camber (deg.)	0 (+/-) .7 Cross Car Must Be Within 1.0
		Toe-in - mm(in.)	-.1 to + .1 (Degrees Per Wheel)
Periodic M.V. inspection	Caster (deg.)	Not Applicable	
	Camber (deg.)	"	
	Toe-in - mm(in.)	"	
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	"
		Toe-in outside track - mm (in.)	"
	Service reset*	Camber (deg.)	"
		Toe-in - mm(in.)	"
	Periodic M.V. inspection	Camber (deg.)	"
		Toe-in - mm(in.)	"

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

o Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)		
	Trip odometer (std., opt., n.a.)		
Head-up display	Std., opt., not avail.		
	Type - Secondary, Opto-electronic		
	Speedometer	Digital	
	Status/warn. indicators - Turn signals, high beam, low fuel, check gauges		
	Brightness control	Day/night mode, adj.	
EGR maintenance indicator		Not Available	
Charge indicator	Type	Tell-Tale Warning Lamp	Gauge
	Warning device (light, audible)	Lamp	None
Temperature indicator	Type	Tell-Tale Warning Lamp	Gauge
	Warning device	Lamp	None
Oil pressure indicator	Type	Tell-Tale Warning Lamp	Gauge
	Warning device	Lamp	None
Fuel indicator	Type	Gauge	Gauge
	Warning device	None	None
Windshield wiper	Type (standard)	Electric 2-Speed	
	Type (optional)	Pulse Wiper	
	Blade length	432 (17)	
	Swept area sq cm (sq in)	5181 (803) Cpe/5230 (811) Sed & Wag	
Windshield washer	Type (standard)	Elec. Pump Mtd On Reservoir Bottle	
	Type (optional)	None	
	Fluid level indicator	None	
Rear window wiper, wiper/washer (std., opt., n.a.)		Not Available	
Horn	Type	Electric Vibrating	
	Number used	1	
Other	Indicator Lamps For Parking Brake And Brake Failure, Fasten Belt, Upshift, Check Engine, Low Coolant, High Beam, Left And Right Turn And Gate Ajar		

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description
 Engine Code

2.2 LITER L4 (133 CID)
 ELECTRONIC FUEL INJECTION RPO LM3

Electrical - Supply System

Battery	Manufacturer	Delco Remy
	Model, std., (opt.)	Standard
	Voltage	12
	Amps at 0 deg F cold crnk	630
	Minutes-reserve capacity	80
	Amps/hrs. - 20 hr. rate	54
	Location	Under Hood Front
Alternator	Manufacturer	Delco Remy
	Rating (idle/max. rpm)	30/80
	Ratio (alt. crank/rev.)	2.44:1
	Output at idle (rpm, park)	52 Amps @ 27 deg. C. (81 deg. F.) 875 RPM
	Optional (type & rating)	None
Regulator	Type	Integral To Alternator

Electrical - Starting System

Motor	Manufacturer	Delco Remy
	Current drain -20 deg C (F)	363 Amps
	Power rating kw (hp)	1.4 (1.9)
Motor drive	Engagement type	Solenoid Operated Shift Lever
	Pinion engages from (front, rear)	Front

Electrical - Ignition System

Type	Electronic (std, opt, n.a.)	Electronic - Direct Ignition	
	Other (specify)	-	
Coil	Manufacturer	Delco Remy	
	Model		
	Current	Engine stopped-A	Not Applicable
		Engine idling - A	"
Spark plug	Manufacturer	AC Spark Plug	
	Model	R44LTSM	
	Thread (mm)	14 mm (.551 in.)	
	Tightening torque Newton meters (lb. ft.)	10-20 (7-15)	
	Gap	0.9 mm (0.035 in.)	
	Number per cylinder	1	
Distributor	Manufacturer	Not	
	Model	Applicable	

Electrical - Suppression

Locations & type	Not Available
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MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description 3.1 LITER V6 (191 CID)
 Engine Code MULTI-PORT FUEL INJECTION RPO LHO

Electrical - Supply System

Battery	Manufacturer	Delco Remy
	Model, std., (opt.)	Standard
	Voltage	12
	Amps at 0 deg F cold crnk	630
	Minutes-reserve capacity	90
	Amps/hrs. - 20 hr. rate	54
	Location	Underhood Front
Alternator	Manufacturer	Delco Remy
	Rating(idle/max rpm dr.)	* 28/74, (36/100)
	Ratio (alt. crank/rev.)	2.65:1
	Output at idle (rpm, park)	51 Amps @ 27 Deg. C., 66 Amps @ 27 Deg. C. 850 RPM
	Optional (type & rating)	None
Regulator	Type	Integral To Alternator

Electrical - Starting System

Motor	Manufacturer	Delco Remy
	Curr.dr. -29 (-20) deg C(F)	323 Amps
	Power rating kw (hp)	1.4
Motor drive	Engagement type	Solenoid Operated Shift Lever
	Pinion engages from (front, rear)	Front

Electrical - Ignition System

Type	Electronic (std, opt, n.a.)	Electronic - Direct ignition	
	Other (specify)		
Coil	Manufacturer	Delco Remy	
	Model		
	Current	Engine stopped - A	Not
		Engine idling - A	Applicable
Spark plug	Manufacturer	AC/Rochester Products	
	Model	R43CTLSF	
	Thread (mm)	14 x 1.25	
	Tightening torque, Newton meters (lb. ft.)	8-20 (7-15)	
	Gap	1.14mm (.045 in.)	
	Number per cylinder	1	
Distributor	Manufacturer	Not	
	Model	Applicable	

Electrical - Suppression

Locations & type	Not Available
------------------	---------------

* First Model # Listed is for Heater Only, 2nd is for A/C.

MVMA Specifications

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

METRIC (U.S. Customary)

Body Type

ALL

Body

Structure	Unitized Body Construction Including Front End Structure With Bolted-On Fenders And Hood.
Bumper system Front - Rear	Bumper Fascias Are Attached To Steel Impact Bar And Plastic Honeycomb Energy Absorber For Collision Energy Absorption. (Meets G>M> 5 MPH Impact Standard.)
Anti-Corrosion Treatment	Special Anti-corrosion Materials Are Used On Interior And Exterior Metal Panel Surfaces. Materials Include One And Two-Sided Galvanized Steel Special Metal Conditioners, Primers, Protective Waxes And Sealers Are Used On Interior Surfaces. Chip Resistant Primer Or Plastic Material Is Applied To Exterior Lower Body.

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)	Acrylic Lacquer Or Base Coat/Clear Coat Enamel	
Hood	Material & mass	Steel Z-24 / SMC
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop Rod - Single Pivot Hinge
	Release control (int., ext.)	Internal
Trunk lid	Material & mass	Steel/Sedan 10.5 (23.1) Coupe 17.1 (37.6)
	Type (counterbalance, other)	Torque Rods On Coupe And Sedan
	Internal release control (elec., mech., n.a.)	Electrical (Optional)
Hatch-back lid	Material & mass	
	Type (counterbalance, other)	
	Internal release control (elec., mech., n.a.)	
Tailgate	Material & mass	Steel/10.66 kg (23.5 lbs.)
	Type (drop, lift, door)	Gas Rods
	Internal release control (elec., mech., n.a.)	Electrical Solenoid (Opt.)
Vent window control (crank, friction, pivot, power)	Front	Not Applicable
	Rear	"
Window regulator type (cable, tape, flex drive, etc.)	Front	"
	Rear	"
Seat cushion type (e.g., 80/40, bucket, bench wire, foam, etc.)	Front	Foam
	Rear	Foam
	3rd seat	Not Applicable
Seat back type (e.g., 80/40, bucket, bench, wire, foam, etc.)	Front	Foam
	Rear	Foam
	3rd seat	Not Applicable
		Left Topside Of I/P

MVMA Specifications

Vehicle Line CAVALIER

Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Body Type

ALL

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat			
		Second seat	Lap/Shoulder Combination	Lap Belt	Lap/Shoulder Combination
	Standard/optional	Third seat			
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt)	First seat	3-Point Manual		3-Point Manual
		Second seat			
	Standard/optional	Third seat			

Glass	SAE		
	Ref No	37	69
Windshield glass exposed surface area sq. cm. (sq. in.)	S1	7487 (1161)	7487 (1161)
Side glass exposed surface area sq. cm. (sq. in.) - total 2-sides	S2	9050 (1403)	10678 (1655)
Backlight glass exposed surface area sq. cm. (sq. in.)	S3	5154 (799)	5691 (882)
Total glass exposed surface area sq. cm. (sq. in.)	S4	21691 (3363)	23856 (3698)
Windshield glass (type)		Curved - Laminated Float	
Side glass (type)		Curved - Tempered Float	
Backlight glass (type)		Curved - Tempered Float	

Headlamps

Description - sealed beam, halogen, replaceable bulb, etc.	Replaceable Bulb - 2 Lamps - 1 Bulbs Each
Shape	Rectangular
Lo-beam type (2A1, 2B1, 2C1, etc.)	9004
Quantity	2
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	9004
Quantity	2

Frame

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

MVMA Specifications

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

METRIC (U.S. Customary)

Body Type

ALL

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat			
	Standard/ optional	Second seat	Lap/Shoulder Combination	Lap Belt	Lap/Shoulder Combination
		Third seat			
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt)	First seat	3-Point Manual		3-Point Manual
	Standard/ optional	Second seat			
		Third seat			

Glass	SAE Ref No	
Windshield glass exposed surface area sq. c. (sq. in.)	S1	7487 (1161)
Side glass exposed surface area sq. cm. (sq. in.) - total 2- sides	S2	16036 (2486)
Backlight glass exposed surface area sq. cm. (sq. in.)	S3	5399 (837)
Total glass exposed surface area sq. cm. (sq. in.)	S4	28922 (4484)
Windshield glass (type)		Curved - Laminated Float
Side glass (type)		Curved - Tempered Float
Backlight glass (type)		Curved - Laminated Float

Headlamps

Description - sealed beam, halogen, replaceable bulb, etc.	
Shape	
Lo-beam type (2A1, 2B1, 2C1, etc.)	
Quantity	
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	
Quantity	

Frame

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

MVMA Specifications

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

METRIC (U.S. Customary)

Body Type

ALL

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

Air conditioning (manual, auto, temp control)		(C60) Optional Manual
Clock (digital, analog)		Part of Radio Package
Compass / thermometer		
Console (floor, overhead)		(D06) Optional Floor
Defroster, elec. backlight		(C49) Optional
Electronic	Diagnostic monitor (integrated, individual)	
	Instrument cluster (list instruments)	(UB3) Standard JF Optional JC Oil, Temp, Volts, Trip Odom. & Tach. (UH6) Standard JC Oil, Temp & Volts
	Keyless entry	
	Tripminder (avg. spd. fuel)	
	Voice alert (list items)	
	Other	
Fuel door lock (remote, key, electric)		
Lamps	Auto head on/off delay, dimming	
	Cornering	
	Courtesy (map, reading)	(C95) Optional
	Door lock, ignition	
	Engine compartment	
	Fog	
	Glove compartment	
	Trunk	Standard
	Illuminated entry system (list lamps, activation)	
Other		
Mirrors	Day / night (auto. man.)	
	L.H. (remote, pwr., heated)	(D31) Standard JC Rem. (D35) Standard JF Rem. Optional JC
	R.H. (convex, rmt, pwr, htd)	(D35) Standard JF Direct Optional JC
	Visor vanity (RH/LH illum.)	
Navigation system (describe)		
Prkg. brake-auto release (warn. light)		

MVMA Specifications

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

METRIC (U.S. Customary)

Engine Description
 Engine Code

ALL

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

Power equipment	Deck lid (release, pull down)		(A90) Optional Electrical Rem. Release
	Door locks (manual, auto., describe system)		(AU3) Optional
	Seats	2-4-8 way, etc.	
		Reclining (R.H., L.H.)	(AR9) Standard
		Memory (R.H., L.H., preset, recline)	
		Support (lumbar, hip, thigh, etc.)	
		Heated (R.H., L.H., other)	
	Side windows		(A31) Optional
	Vent windows		
	Rear windows		
Radio systems	Antenna (location, whip, w/shield, power)		(US6) Standard Fixed RH Front Fender
	Stan.	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	(UM7) AM/FM Stereo, Seek/Scan, Clock & ETR
	Opt.		(UM6) Optional AM/FM Stereo, Seek/Scan, Clock, ETR & Cassette (UX1) Optional JF AM & FM Stereo, Seek/Scan, Clock, ETR, Cassette & Equalizer
	Speaker (number, location)		(U66) Standard 4 Cash & Rear Quarter
Roof: open air or fixed (flip-up, sliding, "T")			(AD3) Optional Hinged
Speed control device			(K34) Optional
Speed warn. dev. (light, buzzer, etc.)			
Tachometer (rpm)			(UB3) Standard JF Optional JC
Telephone system (describe)			
Theft deterrent system			

Trailer Towing

Towing capable	Yes / No	
Engine/transmission/axle	Std / Opt	
Tow class (I, II, III)*	Std / Opt	
Max. gross trailer wgt. (lbs.)	Std / Opt	
Max. trailer tongue load (lbs.)	Std / Opt	
Towing package available	Yes / No	

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

MVMA Specifications

Vehicle Line CAVALIER

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

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

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

Body Type

COUPE & ALL

SEDAN

WAGON

Width

SAE Ref. No.

	SAE Ref. No.			
Tread (front)	W101	1419 (55.9)		
Tread (rear)	W102	1407 (55.4)		
Vehicle width	W103	1684 (66.3)		
Body width at Sp RP (front)	W117	1652 (65.0)		
Vehicle width (front doors open)	W120	3640 (143.3)	3224 (126.9)	
Vehicle width (rear doors open)	W121	Not Applicable	3195 (125.8)	
Tumble-home (deg.)	W122	22		--
Outside mirror width	W410	1747 (68.8)		

Length

	SAE Ref. No.			
Wheelbase	L101	2573 (101.3)		
Vehicle length	L103	4630 (182.3)		4601 (181.1)
Overhang (front)	L104	1053 (41.5)		
Overhang (rear)	L105	1004 (39.5)		975 (38.4)
Upper structure length	L123	2513 (98.9)	2388 (94.0)	2949 (116.1)
Rear wheel C/L 'X' coordinate	L127	4356 (171.5)		

Height **

	SAE Ref. No.			
Passenger distribution (front/rear)	PD1,2,3	2/0		**
Trunk/cargo load		0		**
Vehicle height	H101	1321 (52.0)	1361 (53.6)	1375 (54.1)
Cowl point to ground	H114	931 (36.7)		939 (37.0)
Deck point to ground	H138	964 (38.0)	944 (37.2)	--
Rocker panel-front to ground	H112	227 (8.9)	208 (8.2)	221 (8.7)
Rocker panel-rear to ground	H111	206 (8.1)		224 (8.8)
Windshield slope angle (deg.)	H122	59	55	
Backlight slope angle (deg.)	H121	67	50	--

Ground Clearance **

	SAE Ref. No.			
Front bumper to ground	H102	239 (9.4)		242 (9.5)
Rear bumper to ground	H104	264 (10.4)		253 (10.0)
Bumper to ground front at curb mass (wt.)	H103	255 (10.0)		257 (10.1)
Bumper to ground rear at curb mass (wt.)	H105	294 (11.6)		277 (10.9)
Angle of approach (deg.)	H106	17		
Angle of departure (deg.)	H107	19		21
Ramp breakover angle (deg.)	H147	12		13
Axle differential to ground (front/rear)	H153	163 (6.4)		168 (6.6)
Min. running ground clearance	H158	140 (5.5)		145 (5.7)
Location of min. run. grd. clear.		Exhaust System /		

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

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Body Type

COUPE

Front Compartment

SAE Ref. No.

	SAE Ref. No.	
SgRP front, 'X' coordinate	L31	3128 (123.1)
Effective head room	H61	962 (37.9)
Max. eff. leg room (accelerator)	L34	1091 (43.0)
SgRP to heel point	H30	230 (9.1)
SgRP to heel point	L53	899 (35.4)
Back angle (deg.)	L40	25
Hip angle (deg.)	L42	89
Knee angle (deg.)	L44	133
Foot angle (deg.)	L46	87
Design H-point front travel	L17	183 (7.6)
Normal driving & riding seat track trvl.	L23	171 (6.7)
Shoulder room	W3	1340 (52.8)
Hip room	W5	1208 (47.6)
*** Upper body opening to ground	H50	1197 (47.1)
Steering wheel maximum diameter*	W9	364 (14.3)
Steering wheel angle (deg.)	H18	19
Accel. heel pt. to steer. whl. cntr	L11	Not Available
Accel. heel pt. to steer. whl. cntr	H17	Not Available
Undepressed floor covering thickness	H67	17 (.7)

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt.

(SgRP) 21 mm (1 Seat Adjuster Notch) Forward of Rearmost Seat Position.

Rear Compartment

SgRP point couple distance	L50	705 (27.8)
Effective head room	H63	917 (36.1)
Min. effective leg room	L51	779 (30.7)
SgRP (second to heel)	H31	258 (10.2)
Knee clearance	L48	-41 (-1.6)
Shoulder room	W4	1343 (52.9)
Hip room	W6	1256 (49.4)
*** Upper body opening to ground	H51	Not Applicable
Back angle (deg.)	L41	25
Hip angle (deg.)	L43	78
Knee angle (deg.)	L45	78
Foot angle (deg.)	L47	115
Depressed floor covering thickness	H73	19

Luggage Compartment

Usable luggage capacity L (cu. ft.)	V1	374 (13.2)
*** Lifter height	H185	641 (25.2)

Interior Volumes (EPA Classification)

Vehicle class		
Interior volume index (cu. ft)**		
Trunk / cargo index (cu. ft.)		(13.2)

* See page 14.

** Includes passenger and trunk / cargo index - see definition page 32.

*** EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

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

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Body Type

SEDAN

Front Compartment

SAE Ref. No.

	SAE Ref. No.	
SgRP front, 'X' coordinate	L31	3113 (122.6)
Effective head room	H61	994 (39.1)
Max. eff. leg room (accelerator)	L34	1072 (42.2)
SgRP to heel point	H30	233 (9.2)
SgRP to heel point	L53	873 (34.4)
Back angle (deg.)	L40	25
Hip angle (deg.)	L42	97
Knee angle (deg.)	L44	127
Foot angle (deg.)	L46	87
Design H-point front travel	L17	183 (7.6)
Normal driving & riding seat track trvl.	L23	172 (6.8)
Shoulder room	W3	1339 (52.7)
Hip room	W5	1221 (48.0)
*** Upper body opening to ground	H50	1236 (48.7)
Steering wheel maximum diameter*	W9	364 (14.3)
Steering wheel angle (deg.)	H18	19
Accel. heel pt. to steer. whl. cntr	L11	Not Available
Accel. heel pt. to steer. whl. cntr	H17	Not Available
Undepressed floor covering thickness	H67	17 (.7)

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt.
 (SgRP) 21 mm (1 Seat Adjuster Notch) Forward of Rearmost Seat Position.

Rear Compartment

SgRP point couple distance	L50	758 (29.8)
Effective head room	H63	950 (37.4)
Min. effective leg room	L51	837 (33.0)
SgRP (second to heel)	H31	271 (10.7)
Knee clearance	L46	-3 (-.1)
Shoulder room	W4	1338 (52.7)
Hip room	W6	1240 (48.8)
*** Upper body opening to ground	H51	1238 (48.7)
Back angle (deg.)	L41	26
Hip angle (deg.)	L43	82
Knee angle (deg.)	L45	83
Foot angle (deg.)	L47	118
Depressed floor covering thickness	H73	20

Luggage Compartment

Usable luggage capacity L (cu. ft.)	V1	369 (13.0)
*** Liftover height	H185	816 (32.1)

Interior Volumes (EPA Classification)

Vehicle class		
Interior volume index (cu. ft.)**		
Trunk / cargo index (cu. ft.)		13.0

* See page 14.

** Includes passenger and trunk / cargo index - see definition page 32.

*** EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

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

METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for Definitions

Body Type

STATION WAGON

Front Compartment

SAE Ref. No.

	SAE Ref. No.	
SgRP front, 'X' coordinate	L31	3113 (122.6)
Effective head room	H61	988 (38.9)
Max. eff. leg room (accelerator)	L34	1072 (42.2)
SgRP to heel point	H30	233 (9.2)
SgRP to heel point	L53	873 (34.4)
Back angle (deg.)	L40	25
Hip angle (deg.)	L42	97
Knee angle (deg.)	L44	127
Foot angle (deg.)	L46	87
Design H-point front travel	L17	193 (7.6)
Normal driving & riding seat track trvl.	L23	172 (6.8)
Shoulder room	W3	1339 (52.7)
Hip room	W5	1221 (48.1)
*** Upper body opening to ground	H50	1249 (49.2)
Steering wheel maximum diameter*	W9	364 (14.3)
Steering wheel angle (deg.)	H16	19
Accel. heel pt. to steer. whl. cntr	L11	Not Available
Accel. heel pt. to steer. whl. cntr	H17	Not Available
Undepressed floor covering thickness	H87	17 (.7)

Rear Compartment

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt. (SgRP) 21 mm (1 Seat Adjuster Notch) Forward of Rearmost Seat Position.

SgRP point couple distance	L50	741 (29.2)
Effective head room	H63	977 (38.5)
Min. effective leg room	L51	818 (32.2)
SgRP (second to heel)	H31	259 (10.2)
Knee clearance	L48	-11 (-.4)
Shoulder room	W4	1338 (52.7)
Hip room	W6	1245 (49.0)
*** Upper body opening to ground	H51	1254 (49.4)
Back angle (deg.)	L41	25
Hip angle (deg.)	L43	79
Knee angle (deg.)	L45	80
Foot angle (deg.)	L47	117
Depressed floor covering thickness	H73	20 (0.8)

Luggage Compartment

Usable luggage capacity L (cu. ft.)	V1	Not Applicable
*** Liftover height	H195	544 (21.4)

Interior Volumes (EPA Classification)

Vehicle class		
Interior volume index (cu. ft.)**		
Trunk / cargo index (cu. ft.)		34.1

* See page 14.

** Includes passenger and trunk / cargo index - see definition page 32.

*** EPA Loaded Vehicle weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

Vehicle Line CAVALIER

Model Year 1991 Issued 6-90 Revised(*)

METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for Definitions

Body Type

1JC35

Station Wagon - Third Seat

SAE Ref. No.

(NOT APPLICABLE)

	SAE Ref. No.	(NOT APPLICABLE)
Seat facing direction	SD1	
SgRP couple distance	L85	
Shoulder room	W85	
Hip Room	W86	
Effective leg room	L86	
Effective head room	H86	
SgRP to heel point	H87	
Knee clearance	L87	
Back angle (deg.)	L88	
Hip angle (deg.)	L89	
Knee angle (deg.)	L90	
Foot angle (deg.)	L91	

Station Wagon - Cargo Space

Cargo length (open front)	L200	Not Applicable
Cargo length (open second)	L201	Not Applicable
Cargo length (closed front)	L202	1676 (66.0)
Cargo length (closed second)	L203	995 (39.2)
Cargo length at belt (front)	L204	1516 (59.7)
Cargo length at belt (second)	L205	806 (31.7)
Cargo width (wheelhouse)	W201	946 (37.2)
Rear opening width at floor	W203	1226 (48.3)
Opening width at belt	W204	1207 (47.5)
Min. rear opening width above belt	W205	970 (38.2)
Cargo height	H201	852 (33.5)
Rear opening height	H202	764 (30.1)
* Tailgate to ground height	H250	Not Applicable
Front seat back to load floor height	H197	
Cargo volume index cu.m. (cu.ft.)	V2	1725
Hidden cargo vol. index cu.m. (cu.ft.)	V4	
Cargo volume index-rear of 2-seat	V10	918

Hatchback - Cargo Space

(NOT APPLICABLE)

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

* EPA Loaded Vehicle Weight, Loading Conditions

All Linear Dimensions Are In Millimeters (Inches)

MVMA Specifications

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

METRIC (U.S. Customary)

Body Type ALL

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location		
Front	X - Fiducial Mark To Vertical Zero Grid Line - Front Measured Horizontally, From The Zero Grid Line To The Front Fiducial Mark Located On Top Of The front Seat Adjuster Mounting Bolt. Y - Fiducial Mark To Centerline Of Car - Front, Width Measurement Made From Centerline Car To Fiducial Mark Located On Top Of The Front seat Adjuster Mounting Belt. 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 Belt.		
Rear	X - Fiducial Mark To Vertical Zero Grid Line - Rear, Measured Horizontally From The Zero Grid Line To Rear Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal). Y - Fiducial Mark To Centerline Of Car - Rear, Width Measurement Made From Centerline Of Car To Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal). Z - Fiducial Mark To Horizontal Zero Grid Line - Rear, Measured Vertically From The Zero Grid Line To Rear Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal).		
Fiducial Mark Number	ALL-COUPE	SEDAN	STATION WAGON
Front	W21*	504 (19.8)	
	L54*	2746 (108.1)	
	H81*	246 (9.7)	
	H161*	287 (11.3)	296 (11.7)
	** H163*	266 (10.5)	277 (10.9)
Rear	W22*	440 (17.3)	
	L55*	4900 (192.9)	4951 (194.9)
	H82*	362 (14.3)	4951 (194.9)
	H162*	407 (16.0)	425 (16.7)
	** H164*	377 (14.8)	401 (15.8)

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

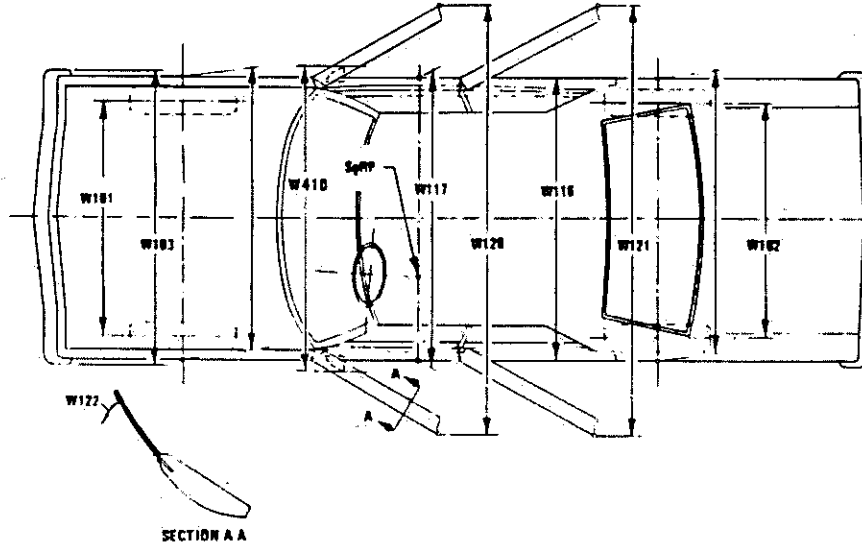
** EPA Loaded Vehicle Weight, Loading Conditions
 All Linear Dimensions Are In Millimeters (inches)

MVMA Specifications

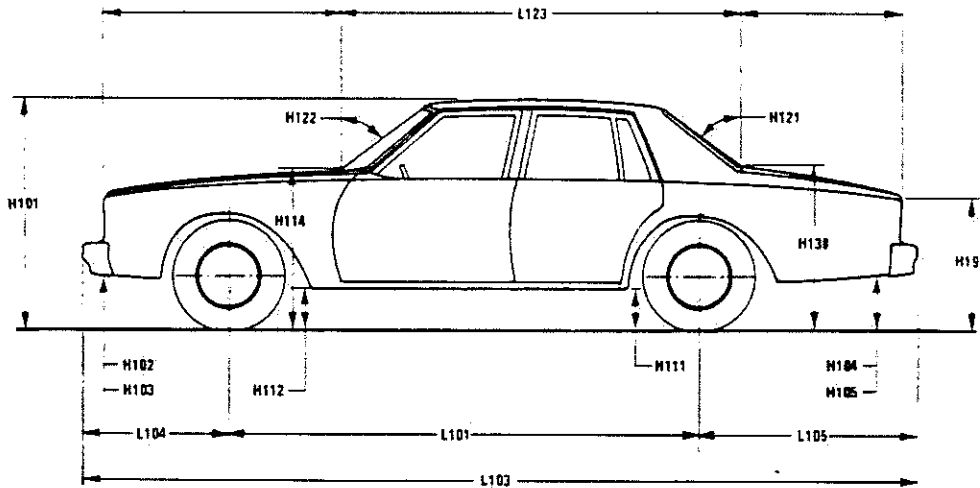
METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions – Key Sheet

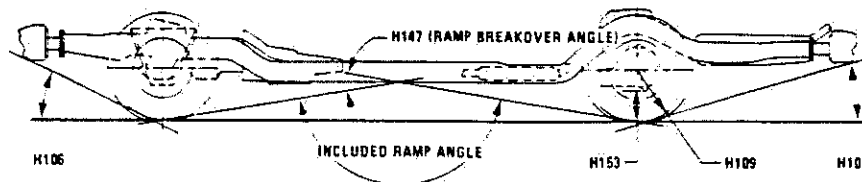
Exterior Width



Exterior Length & Height



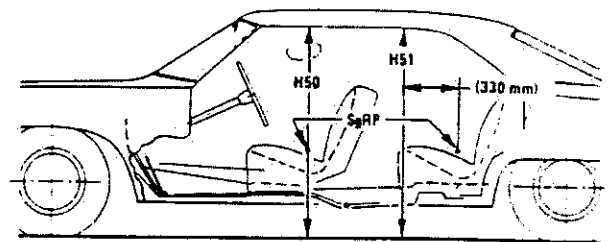
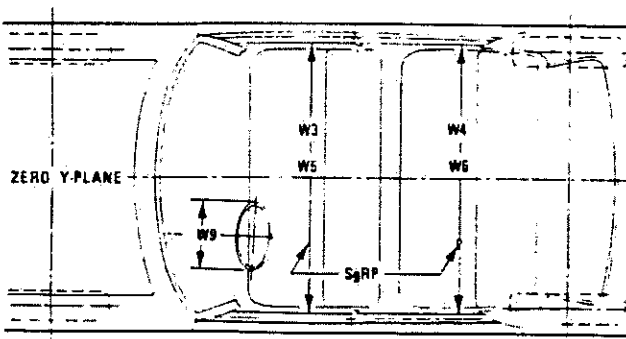
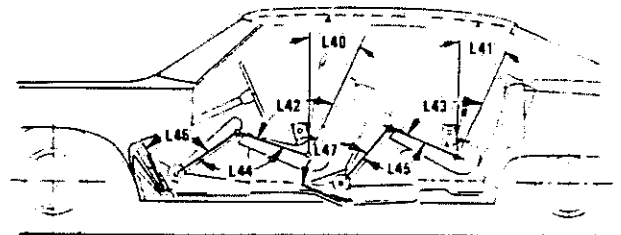
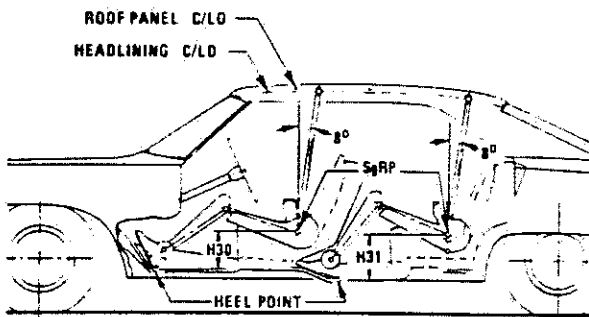
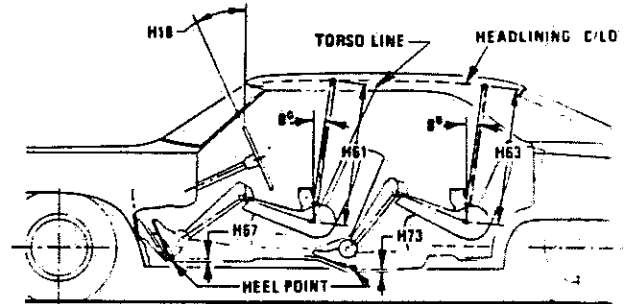
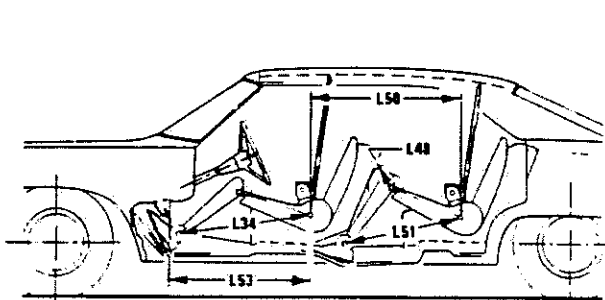
Exterior Ground Clearance



MVMA Specifications Form

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet

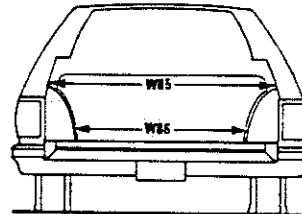
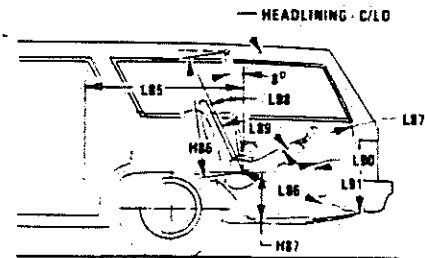


MVMA Specifications Form

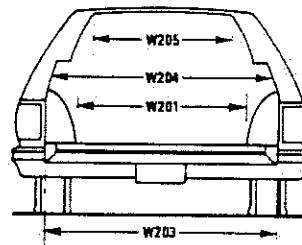
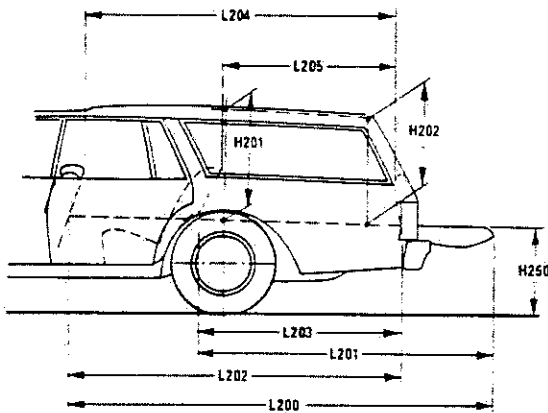
METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet

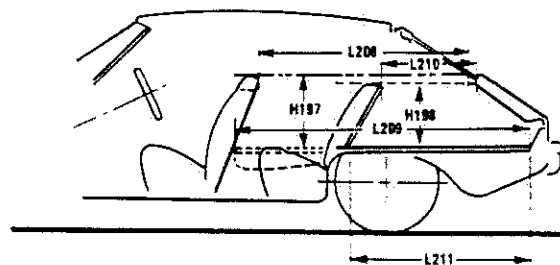
Third Seat



Cargo Space



Station Wagon



Hatchback

MVMA Specifications

METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Seating Reference Point

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

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

Width Dimensions

- W101 TREAD – FRONT. The dimension measured between the tire centerlines at the ground.
- W102 TREAD – REAR. The dimension measured between the tire centerlines at the ground. In case of dual wheels, the dimension will be measured to the centerline of tire and wheel assemblies.
- W103 VEHICLE WIDTH. The maximum dimension measured between the widest point on the vehicle, excluding exterior mirrors, flexible mud flaps, marker lamps, but including bumpers, moldings, sheet metal protrusions or dual wheels, if standard equipment.
- W117 BODY WIDTH AT SgRP – FRONT. The dimension measured laterally between the widest points on the body at the SgRP-front, excluding door handles, applied moldings, or appliques.
- W120 VEHICLE WIDTH – FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in maximum hold-open position.
- W121 VEHICLE WIDTH – REAR DOORS OPEN. The dimension measured between the widest point on the rear doors in maximum hold-open position. For vehicles with a rear door on only one side, this dimension is to the zero "Y" plane.
- W122 TUMBLE – HOME STRAIGHT SIDE GLASS. The angle measured from a vertical to the outside surface of the front door glass at the SgRP "X" plane.
CURVED SIDE GLASS. The angle measured from a vertical to a chord extending from the upper DLO to the lower DLO at the outside surface of the front door glass at the front SgRP "X" plane.
- W410 OUTSIDE MIRROR WIDTH: The dimension between the widest point on the outside mirrors. The standard right and left mirror adjusted for normal driving will be shown unless otherwise noted. When only one outside mirror is standard, the dimension will be to the zero "Y" plane.

Length Dimensions

- L101 WHEELBASE (WB). The dimension measured longitudinally between front and rear wheel centerlines. In case of dual rear axles, the dimension shall be to the midpoint of the centerlines of the rear wheels.
- L103 VEHICLE LENGTH. The maximum dimension measured longitudinally between the foremost point and the rearmost point on the vehicle, including bumper, bumper guards, tow hooks and or rub strips, if standard equipment.
- L104 OVERHAND – FRONT. The dimension measured longitudinally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow hooks and or rub strips, if standard equipment.
- L105 OVERHANG – REAR. The dimension measured longitudinally from the centerline of the rear wheels; or in the case of dual rear axles, the dimension shall be the midpoint of the centerlines of the rear wheels, to the rearmost point on the vehicle including rear bumpers, bumper guards, tow hooks and rub strips, if standard equipment.

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

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

Height Dimensions

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

Ground Clearance Dimensions

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

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Glass Areas

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

Fiducial Mark Dimensions

Fiducial Mark – Number 1

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

Fiducial Mark – Number 2

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

Front Compartment Dimensions

- L11 ACCELERATOR HEEL POINT TO STEERING WHEEL CENTER. The dimension measured horizontally from the AHP to the intersection of the steering column centerline and a plane tangent to the upper surface of the steering wheel rim.
- L17 DESIGN H-POINT – FRONT TRAVEL. The dimension measured horizontally between the design H-point – front in the foremost and rearmost seat track positions. (See SAE J1100)
- L23 NORMAL DRIVING AND RIDING SEAT TRACK TRAVEL. The dimension measured horizontally between a point on the design H-point travel line from the SgRP to the displaced point on the design H-point travel line with the seat moved to the foremost seat position, but not to include seat track travel used for purposes other than normal driving and riding positions. (See SAE J1100).
- L31 SgRP – FRONT. "X" COORDINATED.
- L34 MAXIMUM EFFECTIVE LEG ROOM – ACCELERATOR. The dimension measured along a line from the ankle pivot center to the SgRP – front plus 254 mm (10.0 in.) measured with right foot on the undepressed accelerator pedal. For vehicles with SgRP to heel (H30) greater than 18 in., the accelerator pedal may be depressed as specified by the manufacturer. If the accelerator is depressed, the manufacturer shall place foot flat on pedal and note the depression of the pedal.
- L-40 BACK ANGLE – FRONT. The angle measured between a vertical line through the SgRP – front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.
- L-42 HIP ANGLE – FRONT. The angle measured between torso line and thigh centerline.
- L44 KNEE ANGLE – FRONT. The angle measured between thigh centerline and lower leg centerline measured on the right leg.
- L46 FOOT ANGLE – FRONT. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the bare foot flesh line measured on the right leg. Ref SAE J826.
- L53 SgRP – FRONT TO HEEL. The dimension measured horizontally from the SgRP – front to the accelerator heel point.
- W3 SHOULDER ROOM – FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP – front at height between the belt line and 254 mm (10.0 in.) above the SgRP – front, excluding the door assist strap and attaching parts.

- W5 HIP ROOM – FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP – front within 25 mm (1.0 in.) below and 76 mm (3.0 in.) above the SgRP – front and 76 mm (3.0 in.) fore and aft of the SgRP – front.
- W9 STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.
- H7 ACCELERATOR HEEL POINT TO THE STEERING WHEEL CENTER. The dimension measured vertically from the AHP – front to the intersection of the steering column centerline to a plane tangent to the upper surface of the steering wheel rim.
- H18 STEERING WHEEL ANGLE. The angle measured from a vertical to the surface plane of the steering wheel.
- H30 SgRP – FRONT TO HEEL. The dimension measured vertically from the SgRP – front to the accelerator heel point.
- H50 UPPER BODY OPENING TO GROUND – FRONT. The dimension measured vertically from the trimmed body opening to the ground on the SgRP – front "X" plane.
- H61 EFFECTIVE HEAD ROOM – FRONT. The dimension measured along a line 8 deg. rear of vertical from the SgRP – front to the headlining plus 102 mm (4.0 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

- L-41 BACK ANGLE – SECOND. The angle measured between a vertical line through the SgRP – second and the torso line.
- L43 HIP ANGLE – SECOND. The angle measured between torso line and thigh centerline.
- L45 KNEE ANGLE – SECOND. The angle measured between thigh centerline and lower leg centerline.
- L47 FOOT ANGLE – SECOND. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the three-dimensional devices bare foot flesh line (Reference J826).
- L48 KNEE CLEARANCE – SECOND. The minimum dimension measured from the knee pivot center to the back of the front seatback minus 51 mm (2.0 in.).
- L50 SgRP COUPLE DISTANCE – SECOND. The dimension measured horizontally from the driver SgRP – front to the SgRP – second.
- L51 MINIMUM EFFECTIVE LEG ROOM – SECOND. The dimension measured along a line from the ankle pivot center to the SgRP – second plus 254 mm (10.0 in.).
- W4 SHOULDER ROOM – SECOND. The minimum dimension measured laterally between door or quarter trimmed surfaces on the "X" plane through the SgRP – second at height between 254-406 mm (10.0-16.0 in.) above the SgRP – second, excluding the door assist straps and attaching parts.
- W6 HIP ROOM – SECOND. Measured in the same manner as W5.
- H31 SgRP – SECOND TO HEEL. The dimension measured vertically from the SgRP – second to the two dimensional device heel point on the depressed floor covering.
- H51 UPPER BODY OPENING TO GROUND – SECOND. The dimension measured vertically from the trimmed body opening to the ground on the "X" plane 330 mm (13.0 in.) forward of the SgRP – second.
- H63 EFFECTIVE HEAD ROOM – SECOND. The dimension measured along a line 8 deg. rear of vertical from the SgRP to the headlining, plus 102 mm (4.0 in.).
- H73 FLOOR COVERING – DEPRESSED – SECOND. The dimension measured vertically from the heel point to the underbody sheet metal.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Luggage Compartment Dimensions

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

Interior Volumes (EPA Classification)

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

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

Station Wagon – Third Seat Dimensions

- L85 SgRP COUPLE DISTANCE—THIRD. The dimension measured horizontally from the SgRP—second to the SgRP—third.
- L86 EFFECTIVE LEG ROOM—THIRD. The dimension measured along a line from the ankle pivot center to the SgRP—third plus 254 mm (10.0 in.).
- L87 KNEE CLEARANCE—THIRD. The minimum dimension from the knee pivot center to the back of second seatback minus a constant of 51 mm (2.0 in.). With rear-facing third seat, dimension is measured to closure.
- L88 BACK ANGLE—THIRD. Measured in the same manner as L41.
- L89 HIP ANGLE—THIRD. Measured in the same manner as L43.
- L90 KNEE ANGLE—THIRD. Measured in the same manner as L45.
- L91 FOOT ANGLE—THIRD. Measured in the same manner as L47.
- W85 SHOULDER ROOM—THIRD. Measured in the same manner as W4.
- W86 HIP ROOM—THIRD. Measured in the same manner as W5.
- H86 EFFECTIVE HEAD ROOM—THIRD. The dimension measured along a line 8 deg. from the SgRP—third to the headlining rear of vertical plus a constant of 102 mm (4.0 in.).
- H87 SgRP—THIRD TO HEEL POINT.
- SD1 SEAT FACING DIRECTION—THIRD.

Station Wagon – Cargo Space Dimensions

- L200 CARGO LENGTH—OPEN—FRONT. The minimum dimension measured longitudinally from the back of the front seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate at the zero "Y" plane.
- L201 CARGO LENGTH—OPEN—SECOND. The dimension measured longitudinally from the back of the second seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo floor surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.

- L202 CARGO LENGTH—CLOSED—FRONT. The minimum dimension measured horizontally from the back of the front seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L203 CARGO LENGTH—CLOSED—SECOND. The dimension measured horizontally from the back of the second seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L204 CARGO LENGTH AT BELT—FRONT. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab backpanel at the height of the belt, on the zero "Y" plane.
- L205 CARGO LENGTH AT BELT—SECOND. The minimum dimension measured horizontally from the back of the second seatback at the seatback top to the foremost normal surface of the closed tailgate at the height of the belt, on the zero "Y" plane.
- W201 CARGO WIDTH—WHEELHOUSE. The minimum dimension measured laterally between the trimmed wheelhouses at floor level. For any vehicle not trimmed, measure to the sheet metal.
- W203 REAR OPENING WIDTH AT FLOOR. The minimum dimension measured laterally between the limiting interferences of the rear opening at floor level.
- W204 REAR OPENING WIDTH AT BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening at belt height or top of pick up box.
- W205 REAR OPENING WIDTH ABOVE BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening above the belt height.
- H197 FRONT SEATBACK TO LOAD FLOOR HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.
- H201 CARGO HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the headlining at the rear wheel "X" coordinate on the zero "Y" plane.
- H202 REAR OPENING HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the upper trimmed opening on the zero "Y" plane with rear door fully open.
- H250 TAILGATE TO GROUND CURB MASS (WT.). The dimension measured vertically from the top of the undepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.

V2 STATION WAGON

Measured in inches:

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

Measured in mm:

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

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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

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

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

Measured in mm:

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

V6 TRUCKS AND MPV'S WITH CLOSED AREA.

Measured in inches:

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

Measured in mm:

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

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

V10 STATION WAGON CARGO VOLUME INDEX.
Measured in inches:

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

Measured in mm:

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

Hatchback – Cargo Space Dimensions

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

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

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

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

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

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

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

V3 HATCHBACK.

Measured in inches:

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

Measured in mm:

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

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

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

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

Measured in mm:

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

MVMA Specifications

METRIC (U.S. Customary)

Index

Subject	Page No.	Subject	Page No.
Alternator	16	Passenger Capacity	1
Axle Drive, Front, Rear, All Four	2, 9, 10	Passenger Mass Distribution	25
Axle Shafts	10	Pistons	3
Battery	16	Power Brakes	12
Body and Miscellaneous Information	17	Power, Engine	2
Brakes - Parking Service	12, 13	Power Steering	14
Camber	15	Power Teams	2
Camshaft	3	Propeller Shaft	10
Capacities		Pumps - Fuel	6
Cooling System	5	Water	5
Fuel Tank	6	Radiator - Cap, Hoses, Core	.5
Lubricants		Ratios - Axle, Transaxle	2, 9, 10
Engine Crankcase	4	Compression	2
Transmission / Transaxle	8, 9	Steering	14
Rear Axle	10	Transmission / Transaxle	2, 8, 9
Carburetor	2, 6	Rear Axle	2, 10
Caster	15	Regulator - Alternator	16
Clutch - Pedal Operated	8	Restraint System	18
Coil, Ignition	16	Rims	13
Connecting Rods	4	Rods - Connecting	4
Convenience Equipment	19-20	Scrub Radius	14
Cooling System	5	Seats	17
Crankshaft	4	Shock Absorbers, Front & Rear	11
Cylinders and Cylinder Head	3	Spark Plugs	16
Diesel Information	4	Speedometer	15
Dimension Definitions		Springs - Front & Rear Suspension	11
Key Sheet - Exterior	27, 30, 31	Stabilizer (Sway Bar) - Front & Rear	11
Key Sheet - Interior	28, 29, 31, 32, 33	Starting System	16
Electrical System	15, 16	Steering	14
Emission Controls	7	Suppression - Ignition, Radio	16
Engine - General		Suspension - Front & Rear	11
Bore, Stroke, Type	3	Tail Pipe	7
Compression Ratio	2	Theft Protection	20
Displacement	2, 3	Thermostat, Cooling	5
Firing Order, Cylinder Numbering	3	Tires	13
General Information, Power & Torque	2	Toe-In	15
Intake System	4	Torque Converter	9
Power Teams	2	Torque - Engine	2, 8, 9
Exhaust System	7	Trailer Towing	20
Equipment Availability, Convenience	19	Transaxle	9
Fan, Cooling	5	Transmission - Types	2, 8, 9
Filters - Engine Oil, Fuel System	4	Transmission - Automatic	2, 9
Four Wheel Drive	10	Transmission - Manual	2, 8
Frame	18	Transmission - Ratios	2, 8, 9
Front Suspension	11	Tread	21
Front Wheel Drive Unit	10	Trunk Cargo Load	1
Fuel Economy, EPA	1	Trunk Luggage Capacity	22
Fuel Injection	6	Turning Diameter	14
Fuel System	6	Unitized Construction	18
Fuel Tank	6	Universal Joints, Propeller Shaft	10
Glass	18	Valve System	4
Headlamps	18	Vehicle Dimensions	
Headroom - Body	22, 23	Width	21
Heights	21	Length	2
Horns	15	Height	21
Horsepower - Brake	2	Ground Clearance	21
Ignition System	16	Front Compartment	22
Inflation - Tires	13	Rear Compartment	22
Interior Volumes	22	Luggage Compartment	22
Instruments	15	Station Wagon - Third Seat	23
Legroom	22, 23	Station Wagon - Cargo Space	23
Lengths	21	Hatchback - Cargo Space	23
Leveling, Suspension	11	Fiducial Marks	24
Lifters, Valve	4	Voltage Regulator	16
Linings - Clutch, Brake	8, 12	Water Pump	5
Lubrication - Engine Transmission / Transaxle	4, 8, 9	Weights	25, 26
Luggage Compartment	22	Wheel Alignment	15
Models	1	Wheelbase	21
Motor Starting	16	Wheels & Tires	13
Muffler	7	Wheel Spindle	14
Origin	1	Widths	21
		Windshield	18
		Windshield Wiper and Washer	15

MVMA Specifications

METRIC (U.S. Customary)

SUPPLEMENTAL PAGE

Vehicle Line _____

Model Year _____ Issued _____ Revised (+) _____
