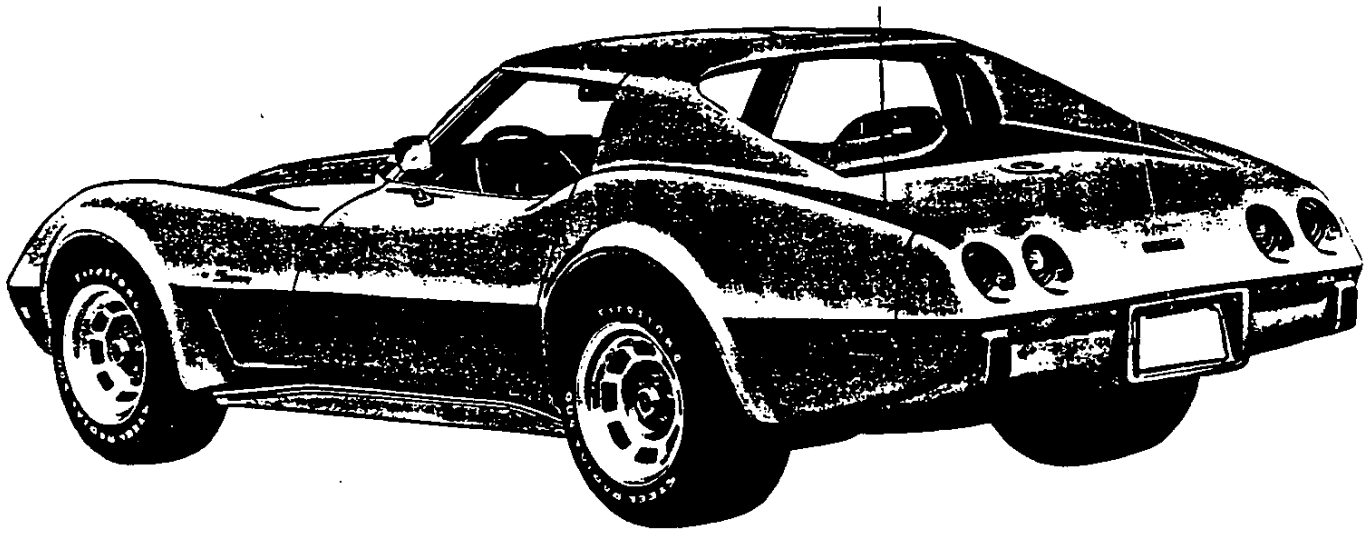
CHEVROLET

1977

CORVETTE

SPECIFICATIONS



GENUINE CHEVROLET™

GENERAL

ORIGINAL

MODEL IDENTIFICATION

BODY	SERIES NAME	BODY STYLE	MODEL DESIGNATION	PASS OR SEATS
Y–CAR	CORVETTE	2-Dr. Sport Coupe	1YZ37	2

ONLY BASIC DESIGNATIONS SHOWN

VEHICLE IDENTIFICATION NUMBER

Vehicle Designation Interpretation

1 Z 37 L 7 S 400001

- 400001 — Sequential Number
- S — Assembly Plant (*)
- 7 — Model Year 1977
- L — Engine Type (**)
- 37 — Body Style (last two digits of model Number)
- Z — Car line and Series (***)
- 1 — Make ("1" for Chevrolet)

*S – St. Louis–Chevrolet
**L – V8-350 (180 H.P.)
X – V8-350 (210 H.P.)
***Z – Corvette

EXAMPLE: The twenty-fifth Chevrolet vehicle built at Chevrolet–St. Louis if it were a 1YZ37 model (Coupe) with a V8-350 (180 H.P.) engine would bear– VIN Number 1Z37L7S400025.

Location . . . . . Stamped on plate attached to left hand windshield pillar.

TRANSMISSION IDENTIFICATION

Example: P7E01

Type Designation	Source Designation	Model Year 1977	Production[O] Month & Date
ZU	P (Muncie)	7	E01D*

ZU	4-Speed	V-8 engine	P - Muncie
CB	Turbo Hydra-matic	V-8 engine	H - Ypsilanti

Location:
4-Speed . . . . . Stamped on the right side of the case at adapter.
Turbo Hydra-matic . . . . . Nameplate tag on right hand side of the case.

[O]Month: E denotes May; 01 denotes 1st day.
-Alpha Characters used in identifying the Calendar Month

A - January	D - April	K - July	R - October
B - February	E - May	M - August	S - November
C - March	H - June	P - September	T - December

*-The letter "D" or "N" following the date numerals indicates day or night shift, on automatic only.

ENGINE IDENTIFICATION

Example: F1210CKZ

Source Designation	Production* Month & Date	Type Designation
F (Flint)	1210	CKZ

350 Cubic Inch 8-Cylinder

CKZ - Regular engine, 4-speed, 4-bbl. carb.
CLA - Regular engine, Turbo Hydra-matic

350 Cubic Inch 8-Cylinder (RPO L82)

CLD - Optional engine, 4-speed, 4-bbl. carb.
CLF - Optional engine, Turbo Hydra-matic

Location:
8-Cylinder engine . . . . . Stamped on top front of RH bank of cylinder and case.

*-Month: December, 12; 10th day of December, 10.

REAR AXLE IDENTIFICATION

OA – 3.08 Axle
OD – 3.36 Axle
OB – 3.55 Axle
OC – 3.70 Axle

Location, Identification Number
Bottom edge of differential carrier flange.

See Power Train Section for additional information.

STANDARD EXTERIOR EQUIPMENT

	SPORT COUPE 1YZ37
FRONT	
Radiator Grille – Black Injection Molded Plastic	X
Parking Lamps – Clear Lens, Amber Bulb	X
Retractable Headlamps, Painted Bezels	X
Front Panel Crossed Flags Emblem	X
Windshield Reveal Moldings, Black	X
Concealed Windshield Wipers with Integral Washers in Wiper Arms	X
Body Color Urethane Front Bumper Cover, Black Painted Bumper Guards	X
SIDE	
Front Fender and Rear Quarter Marker Lamps	X
Front Fender Air Slot	X
Outside Rear View Mirror	X
Rocker Panel Molding, Bright	X
Wheel Trim Ring and Hub Cap – Bright	X
Roof Drip Molding – Bright	X
Removable Roof Panels	X
Press-Flap Door Opening Handles – Bright	X
Key Locks – Bright	X
Door Belt Bead Molding – Bright	X
REAR	
Rear End Panel "Corvette" Nameplate	X
Single Outboard Tail Lamps	X
Single Inboard Back-Up Lamps	X
Body Color Urethane Rear Bumper Cover, Black Painted Bumper Guards	X
Fuel Tank Filler Door Crossed Flags Emblem	X

STANDARD INTERIOR EQUIPMENT

	SPORT COUPE 1YZ37
ROOF AND PILLARS	
Molded Headlining, Padded with Sun Visor Pockets	X
Windshield Garnish Moldings, Plastic, Interior Color-Keyed	X
Sunshades, Padded with Brushed Hardware and Swivel Feature	X
10" Rear View Mirror, Painted Black Back and with Brushed Finish Support, Windshield Mounted	X
Roof Center Strut, Padded with Bright Hardware	X
Top Header Release Latches, Bright	X
Fixed Rear Window, Painted Frame	X
Door Operated Center Dome Courtesy Light	X
Coat Hook, RH Side	X
SEATS AND FLOOR COVERING	
Bucket Seats – with Integral Head Restraints	X
Passenger and Stowage Compartment Floor Carpet with Sound Blanket	X
Seat Back Latch, Bright	X
Seat Adjuster Handle, Bright	X
Color Keyed 3-Point Seat Belts, Non Detachable Shoulder Belts, Locking Retractors	X
Floor Stowage Compartment – 3-Doors, Carpeted with Push Buttons and Painted Trim Rings	X
Floor Stowage Compartment Door Trim Rings and Push Buttons – Painted - Bright	X
Body Sill Plates – Bright and Painted	X
Roof Panel Stowage Vinyl Bag and Tie-Down Straps, Color-Keyed	X
DOOR AND QUARTER PANEL	
Molded Door Trim Panel with Built-In Armrest	X
Door Assist Handle – Vinyl	X
Door Remote Control Handle – Chrome and Painted	X
Door Locking Knobs and Escutcheons – Chrome and Painted	X
Door Trim Panel Applique	X
Door Locks – Free Wheeling	X
Window Control Handle – Black, Plastic Knob	X

STANDARD INTERIOR EQUIPMENT

INSTRUMENT PANEL, CONSOLE AND STEERING WHEEL	SPORT COUPE 1YZ37
Instrument Panel Pad – Trim Color	X
160 MPH Speedometer with Trip-O-Dometer	X
7000 RPM Tachometer	X
Headlamp Rotation and Main Light Switch	X
Air Outlets – Bright and Control Knobs – Black	X
Instrument Panel Map Pocket – R.H.	X
Electric Clock	X
Voltmeter, Generator Warning Light (Former headlamp-up light), Temperature, Fuel and Oil Pressure Gauges	X
Headlamp Hi-Beam Indicator	X
Hood Release Lever – Black-Painted	X
Ash Tray and Lighter	X
Parking Brake Warning Light	X
Heater Controls – Slide Lever Design	X
Air Vent Control Knobs – Trim Color Plastic (Relocated to cowl side)	X
Shift Quadrant – Black With Bright Lettering, Red Pointer	X
Floor Center Console and Trim Plate – Low Gloss Black Finish	X
Parking Brake Lever – Bright with Black Handgrip	X
4-Spoke Color Keyed Vinyl Steering Wheel Crossed Flags Emblem	X
Hazard Warning Switch – Black	X
'Smart' Switch Lever – Turn Signal, Headlamp Beam, W/S Wiper and Washer	X
Steering Column Ignition Switch and Lock – 5 Position Chrome	X
Floor Console Coin Pocket	X
Seat Belt Warning Indicator and Alarm	X
Instrument Panel and Console Soft Knobs with Graphics	X
GLASS (TINTED)	
Windshield, Laminated Safety Plate	X
Door Windows, Safety Solid Plate	X
Fixed Rear Window, Safety Solid Plate	X
GENERAL	
Anti-Theft Alarm System	X

EQUIPMENT	RPO	ACC
POWER TEAMS		
Turbo-Fire 350 V-8	L82	
4-Speed manual transmission – close ratio	M21	
Turbo Hydra-Matic automatic transmission	M40	
Rear Axle:		
Economy ratios	G95	
POWER ASSISTS		
Windows, power	A31	
OTHER OPTIONS		
Air conditioning, Four Season (See page 8 for content)	C60	
Battery, heavy duty	UA1	
Carrier, rear deck includes roof panel adapters	V54	ACC
Compass		ACC
Convenience package	ZX2	
Defogger, rear window Electro-Clear	C49	
Floor mats, clored keyed with carpeting	B32	
Floor mats, black rubber		ACC
Mirror, right hand		ACC
Mirrors, dual sport	D35	
Radio equipment: Radios, pushbutton – includes rear deck antenna		
Radio, AM/FM (Includes fixed height rear antenna and 2-speakers)	U69	
Radio, AM/FM, FM Stereophonic (Includes fixed height rear antenna and 2-speakers)	U58	
Radio, Stereophonic AM/FM with tape player	UM2	
Speed and cruise control	K30	
Spotlight, hand portable		ACC
Sport Steering wheel, tilt and telescope	N37	
Suspension, Gymkhana – front and rear	FE7	
Trailering package	ZN1	
Wheels, cast aluminum	YJ8	
FACTORY INSTALLED REGULAR PRODUCTION TIRES		
GR70 x 15B (2+2) – HWY-Radial – White Lettered	QRZ	

AIR CONDITIONING

FOUR-SEASON (RPO C60)

Heater integrated; manually controlled by two sliding lever controls on instrument control panel, plus a 4-speed fan switch. Left thumb wheel uses vacuum supply and electrical switches to operate mode doors and compressor. Right thumb wheel uses bowden cable to temperature door in selector duct assembly.

BASIC COMPONENTS

Evaporator, blower, condenser, receiver - dehydrator, refrigerant (freon) tank, air intake assembly and duct assembly for both systems.

EQUIPMENT (Used in addition to or in place of base equipment)

CHASSIS

Front and Rear Springs	Heavy duty
Rear Axle Ratio - Refer to Power Trains Section	

POWER TRAINS

Fan Blade	7 blade
Crankshaft Pulley	Single, two grooves
Water Pump & Fan Pulley	Single, three grooves
Compressor & Crankshaft Belt	One
Generator	61 Ampere

DIMENSIONS AND WEIGHTS

INTERIOR DIMENSIONS

FRONT COMPARTMENT

CODE	DESCRIPTION	1YZ37 COUPE
H30	H point to heel point	6.4
H37	Headlining to roof height	.64
H58	H point rise	0.4
H61	Effective headroom	32.2
H67	Depressed floor covering thickness	.79
H70	Body zero line to H point (vert.)	7.0
L17	H point travel	4.5
L31	Body zero line to H point (horiz.)	44.7
L34	Maximum effective leg room - accelerator	42.1
L40	Back angle (degrees)	33°
L42	Hip angle (degrees)	99°
L44	Knee angle (degrees)	126.0°
L46	Foot angle (degrees)	88.0°
L53	H point to accelerator floor point	34.9

SEAT AND ENTRANCE

H3	Seat chair height	8.7
H11	Entrance height	29.0
H26	Interior body height, M/M @ car centerline	32.3
H27	Interior body, M/M @ C/LO	38.4
H32	Seat cushion deflection	2.3
H50	Upper body opening to ground	44.5
W3	Shoulder room	47.9
W5	Hip room	48.8
W16	Seat width (each seat)	20.0
L14	Seat back thickness	3.6
L18	Entrance foot clearance	13.2

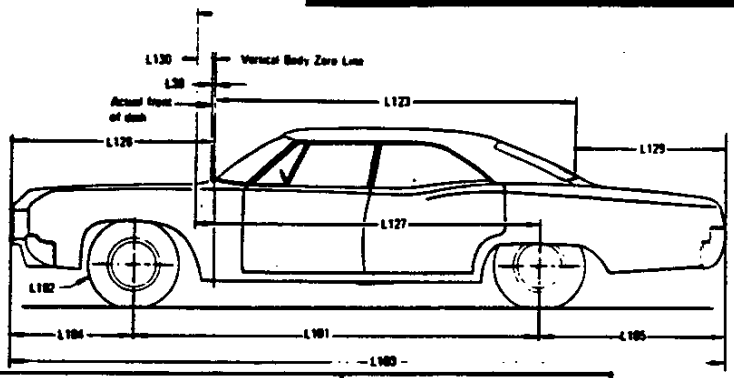
VISION AND CONTROL

H6	H point to W/S bottom DLO	19.6
H13	Steering wheel thigh clearance	3.1
H18	Steering column angle (degrees) horizontal	14°38'
H25	Belt height	17.4
H49	H point to top of steering wheel	1.1
W7	Steering wheel center to car centerline	12.7
W9	Steering wheel maximum O.D.	14.25 x 14.75 oval
W122	Tumble-home (degrees)	25.0°
L7	Steering wheel torso clearance	12.9
L13	Brake pedal knee clearance	24.4
L52	Brake pedal to accelerator	3.4

LUGGAGE COMPARTMENT

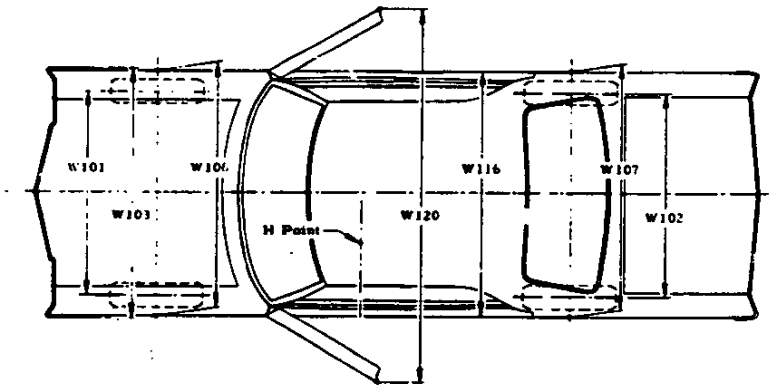
V1	Luggage Capacity - Usable (Cu.Ft.)	7.8

EXTERIOR DIMENSIONS



LENGTHS

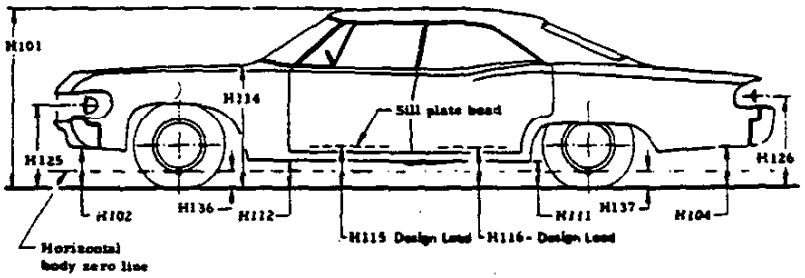
CODE	DESCRIPTION	1YZ37 COUPE
L101	Wheelbase	98.0
L102	Tire size (standard)	GR70-15
L103	Overall length	185.2
L104	Overhang - front	42.4
L105	Overhang - rear	44.8
–	Overall length - less bumpers	173.7
L123	Body upper structure length at car center line	57.2
L127	Body O line to C/L of rear wheels	72.0
L128	Body O line to C/L of front wheels	26.0
L129	Rear end length at center line	47.8
L125	Body zero plane to windshield cowl point	16.5
L30	Body O line to actual front of dash	1.7



WIDTHS

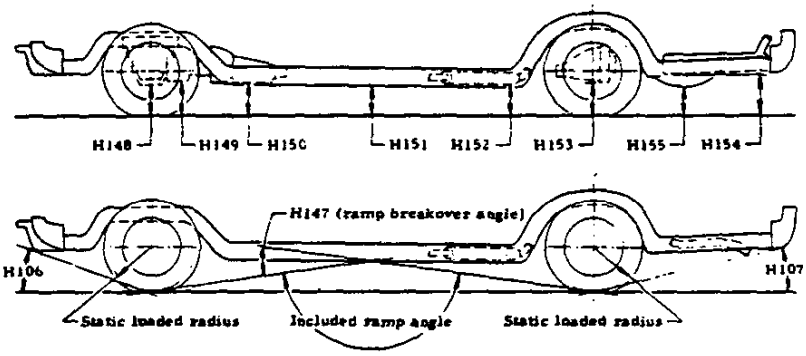
W101	Tread - front	58.7
W102	Tread - rear	59.5
W103	Maximum overall width of car	69.2
W106	Front fender overall width	69.0
W107	Rear fender overall width	68.8
W116	Maximum overall width of body	69.2
W120	Overall car width, front doors open	136.5

EXTERIOR DIMENSIONS



HEIGHTS

CODE	DESCRIPTION	1YZ37 COUPE
H101	Overall height (design)	48.0
H102	Front bumper to ground	11.1
H104	Rear bumper to ground	12.1
H111	Rocker panel to ground - rear	7.9
H112	Rocker panel to ground - front	7.9
H114	Hood at rear to ground	36.6
H115	Step height - front (design)	14.5
H116	Step height - rear (design)	--
H125	Headlamp to ground	26.1
H126	Tail lamp to ground	25.6
H136	Body O line to ground - front	8.4
H137	Body O line to ground - rear	7.7



CLEARANCES

H106	Angle of approach (degrees)	17°03'
H107	Angle of departure (degrees)	18°12'
H147	Ramp breakover angle (degrees)	14°04'
H148	Front suspension to ground	6.4
H149	Oil pan to ground	5.5
H150	Flywheel housing to ground	5.5
H151	Frame to ground	5.4
H152	Exhaust system to ground	4.3
H153	Rear axle to ground	5.7
H154	Fuel tank to ground	19.0
H155	Tire well to ground	4.3
H156	Minimum ground clearance	4.3 (a)

(a) Catalytic converter.

CORVETTE

MODEL DESIGNATION	BASE ENGINE	VEHICLE TYPE Description	SHIPPING WEIGHT			CURB WEIGHT		
			Front	Rear	Total	Front	Rear	Total
1YZ37	350 Cu.In. V8 (L48)	2-Door Sport Coupe	1710	1738	3448	1690	1844	3534

SHIPPING WEIGHT: Weight of basic vehicle with regular equipment, including grease, oil, engine coolant to capacity and (3) gallons of gasoline.

CURB WEIGHT: Shipping weight plus gasoline to capacity.

For total shipping, and curb weights of vehicles equipped with the following options, add to, or deduct from, the base vehicle weight (lbs.)

RPO	OPTION	WITH	WEIGHT
A31	Power Windows		+ 7
B32	Floor Mats		+ 5
C49	Defogger, Rear Window		+ 3
C60	Air Conditioning		+ 63
FE7	Suspension–Gymkhana	All Engines	+ 6
K30	Speed & Cruise Control	With M38/M40 and N37	+ 6
N37	Tilt, Steering Wheel		+ 1
UM2	Radio Stereophonic AM/FM	With Tape Player	+ 20
U58	Radio AM/FM Stereophonic		+ 17
U69	Radio AM/FM Pushbutton		+ 14
Base	350 Cu. In. V8 Engine	With Turbo Hydra-Matic Trans.	+ 34
L82	350 Cu. In. V8 Engine	With 4-Speed Transmission (RPO M21)	+ 6
		With Turbo Hydra-Matic Trans.	+ 58

BODY

EXTERIOR PAINT PROCESSING PROCEDURES

PUTTY RUB AND SPRAY BODY PRIMER

Operation No.

1. Dry sand all plastic surfaces of body, exterior and interior to be finish painted except interior of top compartment, engine compartment and underside of front and rear fenders.
2. Vacuum all body surfaces, exterior and interior.
3. Solvent clean all surfaces with thinner applied with clean cloth.
4. Wipe on red rubbing putty on all exterior surfaces with substantial pressure to work putty into pits of the fiberglass.
5. Vacuum all surfaces to remove excess putty.
6. Spray primer-surfaces on all exterior surfaces, underside of front and rear fenders, engine compartment and top compartment.
7. Bake 45 minutes at 275° F.
8. Putty glaze where necessary with gray putty.
9. Water sand all exterior and interior surfaces except interior of top compartment and engine compartment.
10. Blow-off body surfaces to remove excessive moisture.
11. Putty glaze where necessary with gray putty.

ACRYLIC LACQUER PAINTING

Operation No.

1. Spray all exterior and interior surfaces with sealer.
2. Air dry 1 minute.
3. Spray Acrylic Lacquer over the exterior surfaces of the body, inside edges of the hood, inner compartment lid, engine compartment drain gutters, lock and hinge pillar facings, doors and headlamp openings.
4. Flash 3 minutes minimum.
5. Bake 30 minutes at 180°F.
6. Cool body to room temperature and repair cracks or defects with resin mixture patch.
7. Wet sand body where necessary and repair defects using water for lubricant and gray putty for filling.
8. Vacuum body.
9. Spray dark gray repair primer-surfaces on body top coat areas sanded through to the primer or bare plastic.
10. Repeat operation No. 3.
11. Flash 3 minutes minimum.
12. Repeat operation No. 3.
13. Flash 3 minutes minimum.
14. Bake 30 minutes at 180° F.
15. Cool body to room temperature.
16. Mask off and spray areas outlined in Corvette Paint Instruction Drawing No. 334789.
17. Bake 30 minutes at 180° F.
18. Cool body to room temperature.
19. Using an extension gun, insert to maximum length through door access holes, spray right and left sides of door inners with aluminum preservative coating.
20. Machine sand with grit paper using mineral spirits liberally applied as the lubricant.
21. Machine polish body to a high lustre.

1977 CORVETTE INTERIOR/EXTERIOR COLOR COMBINATIONS

EXTERIOR COLOR		INTERIOR TRIM											
Color	Code	Black		Medium Red		Smoke Gray		Buckskin		Dark Blue		Dark Brown	
		Cloth/ Leather	Leather	Cloth/ Leather	Leather	Cloth/ Leather	Leather	Cloth/ Leather	Leather	Cloth/ Leather	Leather	Cloth/ Leather	Leather
White C/O	10	19C	192L	72C	722L	15C	152L†	64C	642L	27C	272L	69C	692L
Silver Metallic	13	19C	192L	72C	722L	15C	152L†			27C	272L		
Black	19	19C	192L	72C	722L	15C	152L†	64C	642L				
Lt. Blue Metallic	26	19C	192L			15C	152L			27C	272L†		
Dark Blue	28	19C	192L			15C	152L	64C	642L	27C	272L†		
Yellow	52	19C	192L									69C	692L
Orange	66	19C	192L					64C	642L			69C	692L
Red	72	19C	192L	72C	722L†	15C	152L	64C	642L				
Tan Buckskin	80	19C	192L					64C	642L†			69C	692L
Dark Red	83	19C	192L			15C	152L	64C	642L				

† – Available with White Seats, Door Trim Panels, Headlining, Front and Rear Window Garnish Moldings and Rear Quarter Trim Panels.

BODY CONSTRUCTION AND GLASS AREA

GENERAL

Construction . . . . . Uniconstruction: fiber glass reinforced plastic body backboned by a steel cage outlining the passenger compartment. Principal members – steel front and plastic rear – underbody, front and rear end assemblies, dash panel and hinge pillars are bonded, riveted, or bolted together and to each other. Hood is plastic with bonded plastic reinforcement. Two removable roof panels.

DOORS AND LOCKS

Construction . . . . . Plastic, double paneled, reinforced with steel at hinge and lock locations. Front hinged.

Door handles . . . . . Press-flap handles with fork-type latches. Inside door locking knob on each door, free-wheeling 2-position inside door handles.

HOOD

Operation . . . . . Internal release lever. Front hinged with telescoping link on right side. Ratchet-type lock for hold open.

VENTILATION

Type . . . . . Cowl top air inlets channel air to cowl side kick panel outlets controlled by bowden cable and slide type levers mounted in instrument panel center console. Water drainage at base of "saddlebag" plenum chambers.

GRILLE . . . . . Black plastic

SEAT CONSTRUCTION

Type and construction . . . . . Bucket with integral head restraints with leather or leather and cloth covering over plyurethane padding.

WINDSHIELD WIPERS AND WASHERS

Type . . . . . Concealed, dual, two-speed, electric integral washers provided in wiper arms.

HEADLIGHTS

Type . . . . . Dual, retractable. Headlamp door retraction system vacuum operated.

SPARE TIRE

Location . . . . . In well under fuel tank; accessible from underside of car. Cover with key lock provided.

TOOLS

Type . . . . . Scissors jack, and combination jack handle and lug wrench.

Stowage . . . . . In well in luggage area directly behind passenger seat; carpeted door over well.

BODY GLASS VISIBILITY AREA

	MODELS 1YZ37
Windshield	977.4
Door Window	800.8
Back window	392.5
Total area (sq.in.)	2170.7

Windshield – Laminated safety plate (tinted)
Doors and Rear Window – solid safety plate (tinted).

CHASSIS

FRAME AND FRONT SUSPENSION

FRAME

Description . . . . . All welded, full length, ladder constructed frame with (5) cross-members. Side rails and intermediate cross-members box section; front crossmember box girder section. Eight body mounting points.

FRONT SUSPENSION

Description . . . . . Independent, SLA type, coil springs with center mounted shock absorbers, spherical joint steering knuckle pivots.

Wheel travel (design)

Total 7.70

Jounce 4.76

Rebound 2.94

Wheel to spring, travel ratio 1.92:1

CONTROL ARMS

Description . . . . . Reinforced steel stamping with pre-loaded steel encased rubber bushings at pivot.

GENERAL SUSPENSION PROVISIONS

Car leveling . . . . . Front stabilizer bar

Anti-drive control . . Angle of front upper control arm

STEERING KNUCKLES

Description . . . . . Forged steel, with integral brake caliper mounting pads and detachable steering knuckle arm

Spindle diameters

Inner bearing 1.3743-1.3748

Outer bearing 0.8428-0.8433

Spindle thread size . . . . . 27/32-20 NEF-3 (modified)

Wheel bearings

Type . . . . . Taper roller

SPHERICAL JOINTS

Type . . . . . Ball stud

Upper and Lower . . . . . Compression

Bearing surfaces

Upper and Lower . . . . . Teflon-coated phenolic

SHOCK ABSORBERS

Type . . . . . Direct, double-acting, hydraulic

Piston diameter 1.00

STABILIZER BAR

Type . . . . . Link

Material . . . . . HR steel

Diameter 0.875

Bushing material . . . . . Rubber

FRONT WHEEL ALIGNMENT (CURB)

Camber (degrees) . . . . . P0.709 ± 1/2

Caster (degrees) . . . . . P2.405 ± 1/2

Toe-in (total) . . . . . 0 ± 1/32

Steering Axis Inclination (degrees) . . 7.683 @ 5° camber

FRONT SPRINGS

Part Number	Assy. Code	Cut-Off Length	Wire Dia.	Total Coils	Deflection Rate (Lbs./In.)	HEIGHTS	
						Free	Working (In. @ Lbs.)
340519	AA	104.16	.680	7.25	550	13.14	10.27 @ 1550
346938	AD	121.14	.594	8.00	295	15.14	10.49 @ 1355
346939	AH	133.83	.609	9.00	295	15.45	10.49 @ 1445
346940	AJ	134.31	.624	9.00	320	15.33	10.49 @ 1530
346941	AK	134.61	.638	9.00	345	15.23	10.49 @ 1624
346942	AN	134.99	.652	9.00	370	15.14	10.49 @ 1700
346943	AY	135.40	.664	9.00	370	15.38	10.49 @ 1790
346944	AZ	149.75	.676	9.00	370	15.63	10.49 @ 1880
354131	AHY	104.19	.680	7.25	550	13.34	10.27 @ 1660
362150	ANY	104.22	.680	7.25	550	13.54	10.27 @ 1770
362151	ANZ	104.25	.680	7.25	550	13.74	10.27 @ 1880

STEERING

- Wheel
  - Type ..... 4 spoke with center horn button
  - Diameter ..... 14.75 x 14.25
- Column ..... Energy absorbing
- Gear – Type .... Integral, recirculating ball nut with hydraulic pressure provided from a vane type pump
- Ratios 16.1:1
- Overall Ratios 17.6:1
- Number of wheel turns, lock to lock 2.92
- Linkage ..... Parallelogram, rear of wheels, two tie rods
- Turning Diameters
  - Outside front, wall to wall 38.6
  - Outside front, curb to curb 37.0
  - Inside rear, wall to wall 11.4
  - Inside rear, curb to curb 10.5
- Outside wheel angle with inside wheel
  - @ 15 degrees 13.96
  - @ 20 degrees 18.04
  - @ 33.9° (limit of turn) 27.01

DRIVELINE

- Type ..... Tubular propeller shaft
- Number used ..... One
- Diameter (OD) 2.50
- Length (C/L of U-joints)
  - Manual 29.50
  - Turbo Hydra-matic
    - RPO L48 ..... 29.81
    - RPO L82 ..... 29.50
- Wall thickness 0.083
- Universal joints
  - Type ..... Cross
  - Number used ..... Two
  - Bearings ..... Prepack, anti-friction
- Torque forces ..... Through differential to frame members

WHEELS

- Type ..... Short spoke spider
- Attachment to hub ... 5 hex nuts, 7/16-20 UNF 2-B, arranged on a 4.75 diameter bolt circle
- Offset N-0.50
- Rim size ..... 15 x 8.00

TIRES, STANDARD EQUIPMENT

- Construction ..... Steel belted radial
- Size and ply rating ..... GR70 x 15B (2+2)
- Specifications
  - Static Loaded Radius 12.23
  - Loaded rev/mi @ 45 MPH 760
  - Capacity @ 24 psi 1380

REAR AXLE AND SUSPENSION

REAR AXLE – POSITRACTION

Description . . . . . Fixed differential housing hypoid ring and pinion gear set, tubular articulating inner axle shafts and short solid outer shafts with integral drive flange, independently sprung rear wheels.
Pinion offset 1.5
Pinion bearing adjustment . . . . . Shim
Hypoid gear PD 8.375
Lubricant
Type . . . . . Military Spec, *MIL-L-2105-B*
Viscosity 80W-90
Capacity (pts) 3.75

RING AND PINION GEARS & TOOTH COMBINATIONS

3.08 40,13
3.36 37,11
3.55 32,9
3.70 37,10

AXLE SHAFTS

Inner . . . . . Welded steel tubing with universal joint attachments to short shafts at each end.
Outer . . . . . Short, splined high-alloy steel with integral wheel mounting flange
Axle bearings . . . . . Inner and outer tapered roller, steel encased rubber bearing seals

STABILIZER BAR (optional)

Diameter 0.440

SHOCK ABSORBERS

Type . . . . . Direct, double-acting, hydraulic
Piston diameter 1.00

REAR SUSPENSION

Description . . . . . Full independent with frame-anchored differential. Position of each wheel established by 3 links; tubular axle drive shafts, transverse strut rods, torque control arms. Vertical suspension loads taken by transverse *leaf spring. Built-in camber* adjustment at strut rod inner ends.
Wheel travel (design height)
Total 6.50
Jounce 3.70
Rebound 2.80

REAR WHEEL ALIGNMENT

Curb
Camber (degrees) . . . . . N7/8° ± 1/4
Toe-in (total) . . . . . 0 ± 1/32

REAR SPRING

Type . . . . . Variable rate, 9-leaf
Material . . . . . Chrome carbon steel, heat treated
Length (developed) between eye centers 48.60
Width 2.25
Design load, lb @ camber . . . . . 1420 @ .352
Spring liners
Number 8
Location . . . . . Between all leaves except 7
Material . . . . . Polyethylene with graphite

General	Type – Power		Disc Front and Rear
	System		4-wheel caliper disc brake dual hydraulic system with pressure differential and warning light.
Front Brakes	Type		Double faced disc spaced by integrally cast radial cooling passages
	Material		Cast iron
	Diameter and Width		11.75 x 1.25
	Lining material		Molded asbestos
	Method of attachment		Riveted
	Lining size (length x width x thickness)	Inboard	5.40 x 1.93 x 0.41
		Outboard	5.40 x 1.93 x 0.41
	Lining area (sq. in.)		43.15
	Effective area (sq. in.)		37.46
	Swept area (sq. in.)		249.14
	Piston diameter		1.875
Rear Brakes	Type		Same as front brakes
	Material		Cast iron
	Diameter and Width		11.75 x 1.25
	Lining material		Molded asbestos
	Method of attachment		Riveted
	Lining size (length x width x thickness)	Inboard	5.40 x 1.93 x 0.41
		Outboard	5.40 x 1.93 x 0.41
	Lining area (sq. in.)		43.15
	Effective area (sq. in.)		37.46
	Swept area (sq. in.)		249.14
	Piston diameter		1.375
Apply System	Master cylinder diameter		1.125
	Piston travel		1.139
	Pedal travel		4.00
	Pedal ratio		3.51:1
	Line pressure @ 100 lb. pedal load		576
Parking Brake	Type		Drums; inboard of disc rotors on axle shafts Internal expanding shoes, mechanically actuated
	Control		Lever; floor mounted between bucket seats
	Size (L x W x T)		6.78 x 1.25 x .175
	Total effective area (sq. in.)		33.9

BULBS AND LAMPS

BULBS AND LAMPS	NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
Back-up	2-1156	32
Courtesy - Instrument panel	2-631	6
Door ajar indicator	1-1895	2
Direction signal indicator	2-1895	2
Dome	1-214-2	4
Headlamp Outer	2-5001	High beam 37.5W
		Low beam 55.0W
Headlamp Inner	2-4000	High beam 37.5W
Headlamp hi-beam indicator	1-1895	2
Headlamp warning indicator	1-1895	2
Heater or air conditioning control	1-194	2
Instrument cluster	8-1895	2
License plate rear	1-168	3
Parking – Front	2-1157 NA	
Park		2.2
Turn		24
Parking brake alarm & warning light	1-1895	2
Radio RPO U69	1-216	1
Radio Dial & Indicator	1-216 (dial)	1 - dial
RPO U58	1-66 (indicator)	.1 - indicator
Radio - UM2	1-1893 (dial)	2
	1-DS410 (ind.)	led (a)
Seat belt warning indicator	1-1895	2
Side Marker - Front	2-168	3
Side Marker - Rear	2-168	3
Tail	2-1157	
Stop and turn		32
Tail		3
Transmission indicator	1-1445	.7
Underhood lamp	1-93	15

(a) Light emitting diode.

CIRCUIT	TYPE OF PROTECTION	LOCATION AND CIRCUIT*
Air conditioning	30 amp fuse	In line
	25 amp fuse	Fuse panel (h)
Anti-theft horn and relay	20 amp fuse	Fuse panel (e)
Back-up lamps	20 amp fuse	Fuse panel (b)
Brake warning lamp	10 amp fuse	Fuse panel (c)
Cigarette lighter	20 amp fuse	Fuse panel (e)
Clock	20 amp fuse	Fuse panel (e)
Courtesy lamps	20 amp fuse	Fuse panel (e)
Defogger, rear window	20 amp fuse	Fuse panel (g)
Direction signal indicator	20 amp fuse	Fuse panel (b)
Direction signal lamps	25 amp fuse	Fuse panel (b)
Dome lamp	20 amp fuse	Fuse panel (e)
Door ajar warning	10 amp fuse	Fuse panel (c)
Fuel gauge	10 amp fuse	Fuse panel (c)
Glove compartment lamp	20 amp fuse	Fuse panel (e)
Headlamp hi-beam indicator lamp	Circuit breaker	Light switch (i)
Headlamps	Circuit breaker	Light switch (i)
Heater	25 amp fuse	Fuse panel (h)
Heater dial lamp	5 amp fuse	Fuse panel (f)
Instrument cluster lamps	5 amp fuse	Fuse panel (f)
Key warning buzzer	20 amp fuse	Fuse panel (a)
License plate, rear	20 amp fuse	Fuse panel (d)
Oil gauge	10 amp fuse	Fuse panel (c)
Override relay – (headlight)	10 amp fuse	Fuse panel (c)
Parking lamps	20 amp fuse	Fuse panel (d)
Power windows motor	10 amp fuse	Fuse panel (c)
Radio	20 amp fuse	Fuse panel (g)
Radio lamp	5 amp fuse	Fuse panel (f)
Seat belt warning buzzer	10 amp fuse	Fuse panel (c)
Seat belt warning lamp	10 amp fuse	Fuse panel (c)
Side Marker lamp - Front	20 amp fuse	Fuse panel (d)
Side Marker lamp - Rear	20 amp fuse	Fuse panel (d)
Stop lamps	20 amp fuse	Fuse panel (a)
Tail lamps	20 amp fuse	Fuse panel (d)
Temperature gauge	10 amp fuse	Fuse panel (c)
Traffic hazard indicator	20 amp fuse	Fuse panel (a)
Trans. shift indicator lamp	5 amp fuse	Fuse panel (f)
Trans. down shift	20 amp fuse	Fuse panel (g)
Windshield wiper	25 amp fuse	Fuse panel (j)
Windshield wiper lamp	5 amp fuse	Fuse panel (f)
W/S washer pump	25 amp fuse	Fuse panel (j)

* Letter suffix indicates same circuit

POWER TRAINS

POWER TEAM COMBINATIONS

ENGINE	TRANSMISSION	MODEL APPLICATION	POSITRACTION AXLE RATIOS (*)		
			BELOW 4000 FEET		ABOVE 4000 FT.
			BASE	OPTIONAL	
350 Cu.In. V-8 (5.7 litres) – (L48) Base – all states	4-Spd. (2.64:1 low) (a)	Sport Coupe	3.36:1	3.08:1	—
	Turbo Hydra-matic		3.08:1	—	3.08:1
350 Cu.In. V-8 (5.7 litre – (L82) Optional – all states except Calif.	4-Spd. (2.64:1 low)	Sport Coupe	3.70:1	3.55:1	—
	4-Spd. (2.43:1 low)		3.70:1	3.55:1	
	Turbo Hydra-matic		3.55:1	—	

(*) Air conditioning available with all transmission/axle combinations.
(a) Not available in California.

MULTIPLICATION FACTORS

WITH MANUAL TRANSMISSION

ENGINE	CARBURETION	TRANSMISSION	TOTAL GEAR REDUCTION					AXLE RATIO
			1st	2nd	3rd	4th	Rev	
350 Cu.In. V-8 Standard (L48)	4-Barrel	4-Speed (2.64:1)	8.87	5.88	4.46	3.36	8.57	3.36
350 Cu.In. V-8 RPO L82	4-Barrel	4-Speed (2.64:1)	9.77	6.47	4.96	3.70	9.43	3.70
		4-Speed (2.43:1)	8.99	5.96	4.55	3.70	8.69	3.70

WITH AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE* MULTIPLICATION	AXLE RATIO
350 Cu.In. V-8 Standard (L48)	Turbo Hydra-matic	Drive	15.52:1 - 3.08:1	3.08:1
		Low	15.52:1 - 7.76:1	
		Second	15.52:1 - 4.68:1	
		Reverse	11.95:1 - 5.96:1	
350 Cu.In. V-8 RPO L82	Turbo Hydra-matic	Drive	18.49:1-3.55:1	3.55:1
		Low	18.49:1 - 8.80:1	
		Second	18.49:1 - 4.19:1	
		Reverse	15.51:1 - 7.38:1	

*–*Axle ratio x transmission ratio.*

GENERAL DATA

Engine Type		V-8 OHV	
Piston Displacement (Cu.In.)		350	
Availability		Standard (L48)	RPO L82
Number of cylinders		Eight	
Bore and Stroke (nominal)		4.00 x 3.48	
Compression Ratio		8.5:1	9.00:1
Taxable (SAE) Horsepower		51.2	
Firing Order		1-8-4-3-6-5-7-2	
Idling Speed	Manual Trans. (In Neutral)	800	900
	Automatic Trans. (In Drive)	600	700
Compression Press. (PSI) @ Cranking Speed, Engine Hot		150	
Power Plant Mounting		Two front and one rear, compression type	
Measurements	Fan to rear of engine block	31.55	30.86
	Top air cleaner to bottom oil pan	28.52	29.42
	Exhaust manifold to generator (width)	28.53	28.53

ADVERTISED ENGINE RATING

Engine	350 Cu. In.	
Availability	Standard (L48)	RPO L82
Net Brake HP @ RPM	180 @ 4000	210 @ 5200
Net Torque @ RPM (lb-ft)	270 @ 2400	255 @ 3600

ENGINE SPEED AND PISTON TRAVEL

Engine		Standard (L48)		RPO L82		
Transmission		4-Speed	Trb/Hyd	4-Speed		Trb/Hyd
Rear Axle Ratio		3.36:1	3.08:1	3.70:1		3.55:1
Tire Size		GR70 x 15B				
Crankshaft Revolutions per Mile		2553.6	2340.8	2812.0		2698.0
Crankshaft RPM @ MPH	Low	112.4	98.3	123.8	114.0	111.6
	Second	74.5	59.3	82.1	75.5	66.6
	Third	56.6	39.2	62.8	57.7	45.0
	Fourth	42.6	—	46.9	46.9	—
	Reverse	108.5	74.9	119.6	110.2	93.6
Piston Travel (Ft/Mile)		1481.1	1357.7	1631.0		1564.8

VEHICLE PERFORMANCE FACTORS

ENGINE	L48 180 HP	L82 210 HP
MODEL	1YZ37	1YZ37

4-SPEED TRANSMISSION

Performance Weight (pounds)	3834	3838
Pounds per Net Horsepower	21.30	18.28
Pounds per Cu.In. Displacement	10.95	10.96
Net HP per Cu.In. Displacement	.514	.600
Power Displacement (cu.ft./mile)	258.61	284.78
Displacement Factor (cu.ft./ton mile)	134.90	148.40

TURBO HYDRA-MATIC

Performance Weight (pounds)	3868	3896
Pounds per Net Horsepower	21.50	18.55
Pounds per Cu.In. Displacement	11.05	11.13
Net HP per Cu.In. Displacement	.514	.600
Power Displacement (cu.ft./mile)	237.06	273.23
Displacement Factor (cu.ft./ton mile)	122.57	140.26

GLOSSARY

Performance Weight	Curb Weight plus 300 Lb (weight of two 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi x Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

CYLINDER BLOCK
- Material . . . . . Cast alloy iron
- Bore 3.9995-4.0025
- Bore Spacing (Centerline to Centerline) 4.4
- Bearing Caps (Number, material & attachment)
  - V8-350 Cu.In. (L48) . . . . . 5, cast iron; 2-bolt
  - V8-350 Cu.In. (L82) . . No. 1 & 5, cast iron; 2-bolt
    No. 2, 3 & 4, nodular iron; 4-bolt
- Water Jackets . . . . . Full length around each cylinder

CYLINDER HEAD
- Material . . . . . High chrome cast alloy iron
- Bolt Number 34
- Bolt Size . . . . . .4375 dia.; 14 threads/inch

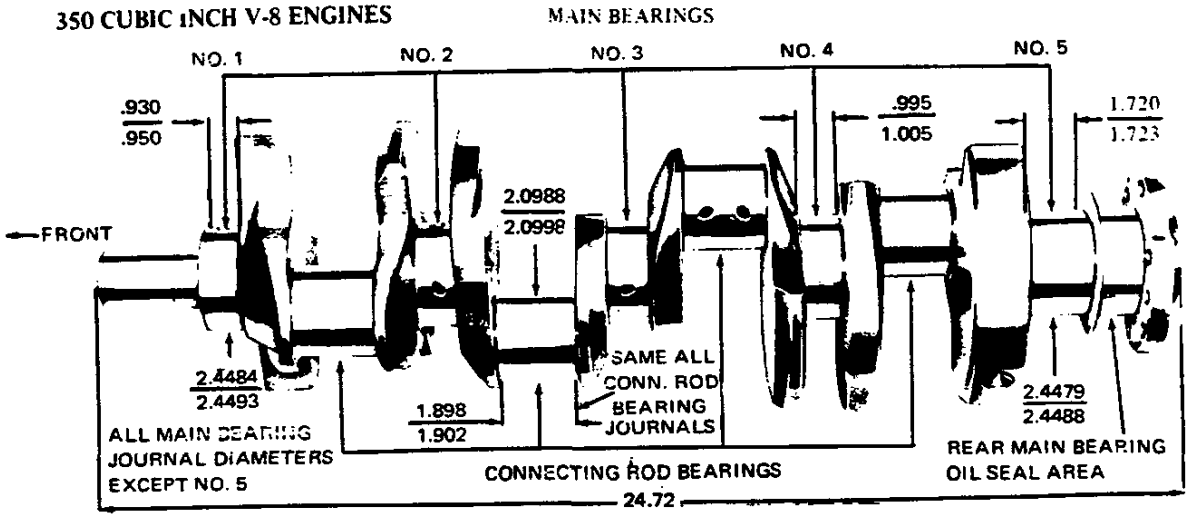
COMBUSTION CHAMBER VOLUME
(Total chamber volume of assembled engine with piston at top center)
- V8-350 Cu.In. (L48) . . . . . 6.27 Cu.In.
- V8-350 Cu.In. (L82) . . . . . 5.55 Cu.In.

INLET MANIFOLD
- Material . . . . . Cast alloy iron
- Type . . . . . 8 port, double deck

EXHAUST MANIFOLD
- Material . . . . . Cast alloy iron
- Type . . . . . Dual, 4 port, exhaust emission to a single runner with center takedown collector
- Outlet Diameter (Nominal) 2.50

CRANKSHAFT
- Material
  - V8-350 Cu.In. (L48) . . . . . Nodular iron
  - V8-350 Cu.In. (L82) . . . . . Forged steel
- End Play 002-.007
- Counter Weights 6
- Crank Arm Length 1.74
- Torsional Damper . . . . . Sintered iron
- Timing Gear . . . . . Steel; sprocket & chain
- Pulley Pitch Diameter 6.64

350 CUBIC INCH V-8 ENGINES



PRINCIPAL COMPONENTS

MAIN BEARINGS

Material ..... Premium aluminum
Type ..... Precision removable
Thrust Against Bearing No. 5
Clearance ..... (No. 1) .0008–.0020;
(No. 2, 3 & 4) .0011–.0023; (No. 5) .0017–.0033

Dimensions	Theoretical Inner Dia.	Effective Length	Projected Area
Bearing No. 1-4	2.4502	.752	1.8425
Bearing No. 5	2.4508	1.180	2.8919

CAMSHAFT

Material ..... Cast alloy iron
Drive ..... Chain
Gear ..... Nylon teeth with aluminum hub
Lobe Lift
V8-350 Cu.In. (L48) .. .2600 Inlet; .2733 Exhaust
V8-350 Cu.In. (L82) .. .3000 Inlet; .3067 Exhaust
Bearings ..... 5; steel backed babbitt

VALVE LIFT

V8-350 Cu.In. (L48) .... .3900 Inlet; .4100 Exhaust
V8-350 Cu.In. (L82) .... .4500 Inlet; .4600 Exhaust

VALVE TRAIN

Type ..... Individually mounted overhead rocker arms, push rod actuated
Lifters ..... Hydraulic
Push Rods
Type ..... Hollow steel
Ends
V8-350 Cu.In. (L48) ..... Hardened
V8-350 Cu.In. (L82) ..... Hardened steel insert on rocker arm ends
Rocker Arms
Material ..... Stamped steel
Ratio 1.50:1
Rotators ..... Exhaust

VALVE SPRINGS

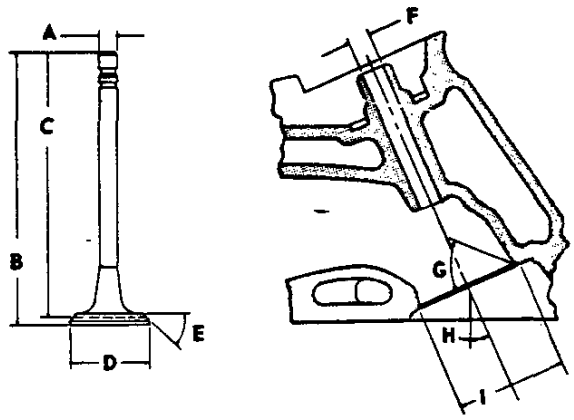
Diameter (I.D.)
V8-350 Cu.In. ..... .868–.884
Installed Length (lb. @ in.)
Valve Closed
V8-350 Cu.In. (L48)
Inlet ..... 76-84 @ 1.70
Exhaust ..... 76-84 @ 1.61
V8-350 Cu.In. (L82) ..... 76-84 @ 1.70
Valves Opened
V8-350 Cu.In. (L48)
Inlet ..... 194-206 @ 1.25
Exhaust ..... 194-206 @ 1.16
V8-350 Cu.In. (L82) ..... 194-206 @ 1.25
Free Length 2.03
Valve Spring Damper ..... Flat steel, 4 coils

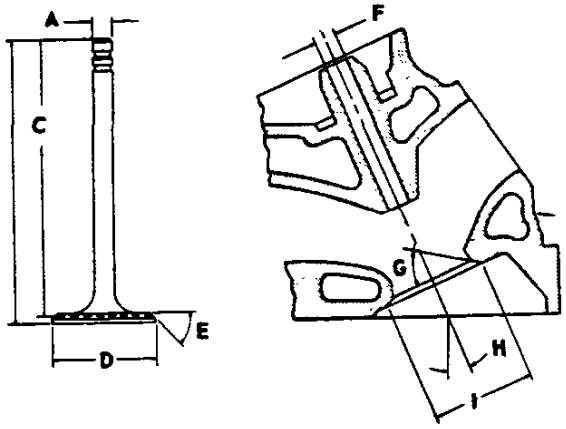
INLET VALVES

Material	Alloy steel
Coating	
Type	None
All Stems	Chrome flash

EXHAUST VALVES

Material	High alloy steel
Coating	
Type	Aluminum face
All Stems	Chrome flash





A – Stem Diameter	.3410-.3417
B – Overall Length	4.870-4.889
C – Gage Length	4.785-4.795
D – Overall Head Diameter	
V8-350 Cu.In. (L48)	1.935-1.945
V8-350 Cu.In. (L82)	2.017-2.023
E – Angle of Face	45°
F – Guide Diameter	.3427-.3437
G – Angle of Seat	46°
H – Valve Angle	23°
I – Valve Seat Diameter	
V8-350 Cu.In. (L48)	1.591-1.597
V8-350 Cu.In. (L82)	1.949-1.979

A – Stem Diameter	.3410-.3417
B – Overall Length	
V8-350 Cu.In. (L48)	4.910-4.930
V8-350 Cu.In. (L82)	4.891-4.910
C – Gage Length	4.781-4.791
D – Overall Head Diameter	
V8-350 Cu.In. (L48)	1.495-1.505
V8-350 Cu.In. (L82)	1.595-1.605
E – Angle of Face	45°
F – Guide Diameter	.3427-.3437
G – Angle of Seat	46°
H – Valve Angle	23°
I – Valve Seat Diameter	
V8-350 Cu.In. (L48)	1.321-1.327
V8-350 Cu.In. (L82)	1.512-1.551

PRINCIPAL COMPONENTS

PISTONS
- Material
  - V8-350 Cu.In. (L48) ..... Cast aluminum alloy
  - V8-350 Cu.In. (L82) .... Alum. impact extruded
- Head Type
  - V8-350 Cu.In. (L48) ..... Sump
  - V8-350 Cu.In. (L82) ..... Flat, notched
- Skirt Type ..... Slipper
- Top Land Clearance
  - V8-350 Cu.In. (L48) ..... .0235–.0325
  - V8-350 Cu.In. (L82) ..... .0305–.0395
- Skirt Clearance
  - V8-350 Cu.In. (L48) ..... .0007–.0017
  - V8-350 Cu.In. (L82) ..... .0046–.0056
- Compression Ring Groove Depth ..... .2218–.2308
- Oil Ring Groove Depth ..... .2038–.2128
- Pin Bore Offset
  - V8-350 Cu.In. (L48) ..... .055–.065
  - V8-350 Cu.In. (L82) ..... On center
- Compression Height
  - V8-350 Cu.In. (L48) 1.558–1.562
  - V8-350 Cu.In. (L82) 1.553–1.567

PISTON PINS
- Material ..... Chromium steel
- Length 2.990–3.010
- Diameter ..... .9270–.9273
- Clearance in Piston
  - V8-350 Cu.In. (L48 - Base) ..... .00025–.00035
  - V8-350 Cu.In. (L82) ..... .00045–.00055
- Pin Mounting ..... Locked in rod by shrink fit

VALVE TIMING (Crankshaft Degrees - Excluding Ramps)
- V8-350 Cu.In. (L48)
  - Inlet Valve
    - Opens - BTC ..... 28°
    - Closes - ABC ..... 72°
    - Duration ..... 280°
  - Exhaust Valve
    - Opens - BBC ..... 78°
    - Closes - ATC ..... 30°
    - Duration ..... 288°
- V8-350 Cu.In. (L82)
  - Inlet Valve
    - Opens - BTC ..... 52°
    - Closes - ABC ..... 114°
    - Duration ..... 346°
  - Exhaust Valve
    - Opens - BBC ..... 98°
    - Closes - ATC ..... 62°
    - Duration ..... 340°

COMPRESSION RING – UPPER

Material	Cast alloy iron
Type	Straight edge inside of ring
Face	Tapered
Coating	
V8-350 Cu.In. (L48)	Chrome flash
V8-350 Cu.In. (L82)	Wear resistant coating molybdenum inlay
Width	
V8-350 Cu.In. (L48)	.0775–.0780
V8-350 Cu.In. (L82)	.0770–.0775
Wall Thickness	.190–.200
Gap	.010–.020

COMPRESSION RINGS – LOWER

Material	Cast alloy iron
Type	Reverse twist (top of ring 30 degrees to piston vertical axis)
Face	Tapered
Coating	Wear resistant
Width	
V8-350 Cu.In. (L48)	.0770–.0775
V8-350 Cu.In. (L82)	.0770–.0775
Wall Thickness	.190–.200
Gap	.013–.025

OIL CONTROL RINGS

Type	Multi-piece (two rails and one spacer)
Material	
Rails	Steel
Spacer	Alloy steel
Width (assembled)	.1850–.1870
Wall Thickness	.150–.156
Gap	.015–.055
Rail Coatings	Chrome plated

CONNECTING RODS

Material	Drop forged steel
Length (center to center)	5.695–5.705

CONNECTING ROD BEARINGS

Material	Premium aluminum
Type	Precision removable
Clearance	.0013–.0035
Theoretical I.D.	2.1012
Effective Length	.797
End Play	.006–.016

FUEL SYSTEM

FUEL TANK
- Capacity (Gal) . . . . . 17 (approximately)
- Location . . . . . In body cavity at rear of deck area
- Filler Location . . . . . Center of rear deck area

FUEL FILTERS, DUAL
- In Fuel Tank . . . . . Mesh strainer
- Carburetor Inlet . . . . . Paper

FUEL PUMP
- Type . . . . . Deep cover with vapor return lines.
- Drive . . . . . Camshaft eccentric
- Location . . . . . Lower right front of engine
- Pressure Range (shut off pressure at 1800 RPM)
  - All Engines . . . . . 7.50–9.00 PSI at pump outlet

AIR CLEANER
- Type . . . . . Cylindrical dual air horns
- Filter Element . . . . . Oil-wetted paper

CHOKE
- Type . . . . . Automatic

CARBURETORS
- Make & Type . . . . . 4-barrel, quadrajet
- SAE Flange Size 1.50
- Throttle Bore
  - Primary 1.38
  - Secondary 2.25
- Venturi
  - Primary 1.04
  - Secondary . . . . . Air valve
- Secondary Throttle Actuation . . . . . By linkage approximately when primary valves are opened half between closed and open.

EXHAUST SYSTEM

MUFFLERS
- Type . . . . . Dual, exhaust, single converter with crossover
- Construction . . . . . Heads and body joined by rolled lock seam construction
- Shell . . . . . .036 sheet steel aluminum coating
- Wrap . . . . . .030 indented asbestos sheet
- Cover . . . . . stainless steel outer wrap
- Heads . . . . . .048 sheet steel aluminum coating
- Length, Body 16.00
- Width (I.D.) 9.00
- Height (I.D.) 7.00

EXHAUST PIPES
- Type . . . . . Two piece; front and rear assemblies
- Material . . . . . Seamless steel tubing
- DIMENSIONS – O.D. & WALL THICKNESS
  - Front Pipes – Laminated (Exhaust to Converter)
    - V8-350 Cu.In. (L48) . . . . . 2.50 x .071
    - V8-350 Cu.In. (L82) . . . . . 2.50 x .071
  - Rear Pipes – Laminated (Converter to Muffler)
    - V8-350 Cu.In. (L48) . . . . . 2.25 x .072
    - V8-350 Cu.In. (L82) . . . . . 2.25 x .072

TAIL PIPES
- Type . . . . . Steel tubing 2.25 x .062

SYSTEM APPLICATION

System Type	Engine Adaptation			
	L48			L82
	Federal			
	Below 4000 Ft.	Above 4000 Ft.	Calif.	
PCV – Positive Crankcase Ventilation	X	X	X	*
EGR – Exhaust Gas Recirculation	X	X	X	*
CHA – Carburetor Hot Air	X	X	X	*
MAI – Manifold Air Injection		X	X	*
FEC – Fuel Evaporation Control System	X	X	X	*
CCS – Controlled Combustion System	X			*
UFC – Underfloor Converter	X	X	X	*
EFE – Early Fuel Evaporation			X	*

* – Not available in California.

BASIC FUNCTION OF SYSTEMS

POSITIVE CRANKCASE VENTILATION

Withdraws oil and gas vapors from the various cavities throughout the engine for burning in the combustion cycle.

EXHAUST GAS RECIRCULATION SYSTEM

Meters exhaust gas into induction system for recirculation throughout the combustion cycle to reduce oxides of nitrogen emissions.

CARBURETOR HOT AIR

Meters and mixes heated air with incoming cold air to optimize fuel evaporation.

MANIFOLD AIR INJECTION

Compresses, regulates and distributes quantities of air to more completely burn carbon monoxide and hydrocarbon emissions to the exhaust pipe in front of the converter.

EARLY FUEL EVAPORATION

System is designed to produce a very short engine warm-up cycle to improve vehicle driveability and reduce exhaust emission.

FUEL EVAPORATION CONTROL SYSTEM

Controls emission of gasoline vapors to the atmosphere by means of an integral separator with the fuel tank that separates vapor from liquid fuel - a filler cap that doesn't permit venting into the atmosphere - a canister for storage of vapors - lines, hoses and valves to control and transport vapors from fuel tank to storage, and finally, to the carburetor for utilization in running the engine.

CONTROLLED COMBUSTION SYSTEM

Increased combustion efficiency through leaner carburetor mixtures and revised distributor calibration. Special thermostatically controlled damper, in the air cleaner snorkel maintains warm air intake to carburetor.

UNDERFLOOR CONVERTER

The flow of exhaust gases down through the catalyst within the converter, effectively controls the hydrocarbon and carbon monoxide to a more desirable emission.

LUBRICATION SYSTEM

GENERAL

Type	Controlled full pressure
Main Bearings	Pressure
Connecting Rods	Pressure
Piston Pins	Splash
Cylinder Walls	Pressure, jet cross sprayed
Camshaft Bearings	Pressure
Valve Lifters	Pressure
Rocker Arms	Pressure
Timing Gears	Centrifugally oiled from front camshaft bearing
Oil Pressure Sending Unit	Electric
Oil Filler	
Cap	Positive seal
Location	Top rear of left rocker cover

OIL PUMP

Type	Gear
Normal Oil Pressure	32-40 PSI @ 2000 RPM
Intake Type	Fixed
Capacity (GPM @ Eng. RPM)	4.3 @ 2000
Regulator Valve	Opens between 40–45 lbs

OIL DIP STICK

Location	Left side, rear of engine block

OIL PAN CAPACITY (Quarts)

Refill	4.0
Refill with Filter Change	4.5

OIL FILTER

Type	Full flow, throwaway canister
Location	Left rear underside of engine
Capacity	One pint
By-pass Valve	Opens between 9 to 11 PSI

LUBRICANT GRADES AND TEMPERATURES

20°F and Above	10W-30, 10W-40, 20W-20, 20W-40, 20W-50
0°F to 60°F	10W, 5W-30, 10W-30, 10W-40
Below 20°F	5W-20, 5W30

OIL PAN

Type of Drain Plug	Hex head
Location	Lower rear face of oil pan sump
Size Hex Head	.860–.875
Thread	1/2-20 UNF 2A
Length	0.81
Diameter	.410–.430

GENERAL

Type	Pressure, vented thru coolant recovery system
Capacity (with Heater)	20.7

RADIATOR

Type	Copper brass, cross flow
Core Constant and Thickness	
Distance between Fins	.20
Distance between Tubes	.55
Thickness of Core	1.96
Frontal Area (Sq.In.)	446
Overflow	Separate coolant bottle

RADIATOR HOSE

Outlet, Lower (Radiator to Water Pump)	1.75 I.D.
Inlet, Upper (Thermostat Housing to Radiator)	1.50 I.D.

RADIATOR CAP RELIEF VALVE

Opens at	Approximately 15 PSI

FAN

Number of Blades	5, staggered
Diameter	17.50
Fan Pulley Pitch Diameter	7.00
Fan Cutout	Thermomodulated fluid coupling

THERMOSTAT

Type	Pellet
Begins to Open at	192-198°
Fully Opened at	227°

BELTS; CRANKSHAFT, FAN AND GENERATOR

Number Used	Two
Angle of "V"	38°-42°
Pitch Line	
Fan, Generator and Water Pump Belt	52.50
Fan and Water Pump Belt	32.46
Air Injection	32.50
Width	.380

WATER PUMP

Tyoe	Centrifugal
Capacity (GPM @ Engine RPM)	22.7 @ 2000
Bearing	Permanently lubricated double row ball
Drive	Fan belt
Ratio (Pump to Engine RPM)	0.949:1

DRAIN LOCATIONS AND TYPE

Engine Block	Plug; right and left center

ELECTRICAL SYSTEM

SUPPLY SYSTEM
BATTERY
Voltage Rating and Watts
V8-350 Cu.In. . . . . 12 & 3500
Heavy Duty . . . . . 12 & 4000
Number of Cells and Plates
V8-350 Cu.In. . . . . 6 & 78
Heavy. Duty . . . . . 6 & 90
Cold Cranking Rating
V8-350 Cu.In. . . . . 0° 430 amps; – 20° @ 330 amps @ 100 minute reserve capacity
Heavy Duty . . . . . 0° @ 465 amps; – 20° @ 375 amps @ 125 minute reserve capacity
Terminal Grounded . . . . . Negative
Location . . . . . In stowage compartment behind driver

GENERATOR
Type . . . . . Diode rectified with integral regulator
Rating
Amps 42
Volts 12
Drive . . . . . By fan belt
Pulley Pitch Diameter 2.70
Ratio (Gen to Engine Speed) 2.46:1

REGULATOR
Type . . . . . Micro-circuit unit, integral with generator
Voltage Regulator
Voltage . . . . . 13.8-14.8 @ 85° F

STARTING SYSTEM
STARTING MOTOR
Rotation (Drive End View) . . . . . Clockwise
Test Conditions . . . Engine at operating temperature
No Load Test
Amps 70-99
Volts 12
RPM 7800-12000
Motor Drive
Engagement . . . . . Solenoid
Pinion Meshes at . . . . . Rear
Pinion Tooth No. 9
Flywheel Tooth No. . . . . Manual Trans. – 153; Automatic Trans. – 168
Mounting . . . . . Bolted to clutch housing

IGNITION SYSTEM
TYPE . . . . . High Energy Ignition (H.E.I.)
DISTRIBUTORS . . . . . Refer to chart below

COIL
Type . . . . . Integral with distributor

SPARK PLUGS
Make & Type ACR45TS
Thread Size (mm) 14
Gap 045
Torque . . . . . 25 lb. ft.

CABLE . . . . . *Linen core impregnated* with electrical conducting material and insulation of rubber with neoprene jacket

	L48		L82
DISTRIBUTORS	Except Calif.	Calif. Only	Except Calif.
Model	1103246	1103248	1103256
Type	High Energy Ignition		
Centrifugal Advance Begins (RPM)	0° @ 1200	0° @ 1200	0° @ 1200
Max Degrees @ RPM	22° @ 4200	22° @ 4200	16° @ 2000
Vacuum Advance Begins (In. Hg.)	0° @ 4	0° @ 4	0° @ 4
Max Degrees @ In. Hg.	18° @ 12	10° @ 8	10° @ 8
Timing (Initial Design Setting) Crankshaft Degrees @ RPM (with vacuum spark line disconnected)	8° BTC @ 800 Manual 600 Automatic	6° BTC @ 600 Automatic	12° BTC @ 800 Manual 700 Automatic
Timing Mark Location	Torsional Damper		

CLUTCHES

Engine	Type		V8-350 Cu.In.	
	Availability		L48 - Base	RPO L82
Clutch for			4-Speed	
Type			Single dry disc, semi-centrifugal	
Clutch cover & pressure plate	Eff. plate load, lbs.		2100-2300	2450-2750
	Press. plate matl.		Nodular iron	
	Clutch spring type		Circular plate diaphragm, bent finger design	
	Clutch spring matl.		Heat treated spring steel	
Driven plate	Type		Single disc with two friction surfaces	
	Cushions		Flat spring steel between friction rings	
	Dampers		10 coil springs (5 sets of two) each plate	
	Friction rings	OD	10.40	11.00
		ID	6.50	
		Total sq. in.	101.5	123.70
		Material	Woven type asbestos	
Flywheel	Flywheel	Material	Nodular iron	
	Ring gear	Material	Heat treated HR steel	
		No. of teeth	168	
		PD	14.00	
		Attachment	Shrink fit	
Bearings	Release	Type	Single row ball	
		Lubrication	None, prepacked	
	Pilot	Type	Bronze bushing	
		Lubrication	None, sintered and oil impregnated	
Controls	Clutch fork		Drop forged steel, pivot mounted on ball	
	Pedal mounting		Pendant, from brace on dash	
	Lubrication		Crossover shaft	
Clutch housing material			Aluminum alloy	

4-SPEED TRANSMISSIONS

Transmission Type			4-Speed RPO M20	4-Speed RPO M21
Engine Application			L48 & L82	L82
Case material			Aluminum	
Gear Shift	Type		Remote	
	Control		Lever	
	Location		Floor, mounted between seats	
Gears	Type		Helical	
	Material		Forged steel, hardened	
	Synchronization		All forward gears	
	Constant mesh gear		All forward gears	
	Sliding gears		Reverse	
	Ratios	First	2.64	2.43
		Second	1.75	1.61
		Third	1.34	1.23
		Fourth	1.00	1.00
		Reverse	2.55	2.35
Lubricant	Type		Meeting Military Specifications MIL-L-2105-B	
	Capacity (pts)		3	
Extension	Material		Aluminum	
	Oil Seal		Steel encased seal of spring loaded Silicone	

TURBO HYDRA-MATIC

Engine			L48	L82
General Data	Type		Automatic hydraulic torque converter with compound planetary gear system - three forward speeds and reverse.	
	Selector lever	Location	Center floor console	
		Operation	Actuates controls by a hydraulic system from pressurized gear type pump	
		Quadrant pattern	P-R-N-D-L2-L1	
	Parking Lock	Type	Locking pawl	
		Operation	Applied by selector lever through manual linkage	
	Method of cooling		Water	
	Flywheel assembly		Steel stamping with welded on ring gear	
	Oil pressure pump		Supplies hydraulic pressure from an engine driven gear type pump	
Hydraulic System	Type		Steel spool valve	
	Valves	Manual	Establishes range of transmission operation	
		Pressure regulator	Provides main line pressure	
		Shift (1-2)	Controls oil pressure for transmission shift from 1-2 or 2-1	
		Shift (2-3)	Controls oil pressure for transmission shift from 2-3 or 3-2	
	Modulator		Regulates line pressure with modulator oil pressure which varies with torque to transmission	
	Accumulator		Provides greater flexibility in attaining desired shift quality for various engine requirements	
	Pressure @ Idle (a)	Drive	60	70
		L2	87	150
		L1	87	150
		Reverse	91	107.5
Converter Assembly	Pump (Drive member)		Multivane type, sheet metal blade spot welded to steel pump housing that is an integral part of the converter housing	
	Turbine (Driven member)		Steel axial flow blades assembled between inner & outer steel shells	
	Stator assembly		Aluminum multivane type blades mounted on a one way (overrunning) roller clutch	
	Stall ratio		2.00	2.10
	Stall speed (RPM)		2110	
	Diameter (nominal)		11.75	12.20
Planetary Gear Set	Reaction carrier assembly		4 steel pinion gears	
	Output carrier assembly		4 steel pinion gears	
	Front band			Circular steel with organic lining
	Rear band			Double wrap circular steel
	Intermediate band		Circular steel with organic lining	
	Range	D (Drive)	2.52:1 - 1.52:1 - 1.00:1	2.48:1 - 1.48:1 - 1.00:1
		L2 (Low two)	2.52:1 - 1.52:1	2.48:1 - 1.48:1
		L1 (Low one)	2.52:1	2.48:1
		R (Reverse)	1.94:1	2.08:1
	Servo Unit		Piston with release spring and inner cushion spring	
Case	Material		Aluminum	
Clutches	Type		Four, multiple disk	Three, multiple disk
	Material	Drive plates	Steel with bonded organic facings	
		Driven plates	Flat steel	
	Forward clutch		5 each drive & driven plates	5 each drive & driven plates
	Direct clutch		4 each drive & driven plates	5 each drive & driven plates
	Intermediate clutch		3 each drive & driven plates	3 each drive & driven plates
	Low & Reverse clutch		5 each drive & driven plates	
	Release spring		Radial row steel coil	
Torque Multiplication	Drive (maximum)		5.04:1 to 1.00	5.21:1 to 1.00
	Low 2		5.04:1 to 1.52	5.21:1 to 1.48
	Low 1		5.04:1 to 2.52	5.21:1 to 2.48
	Reverse		3.88:1 to 1.94	4.37:1 to 2.08
Governor	Type		Cross-axis centrifugal	
	Operation		Regulates a pressure proportional to car speed which acts upon the (1-2) (2-3) shift and modulator valves	
Lubricant	Type		Dexron II	
	Capacity (pints)	Dry	20	22
		Refill	8	9

(a) Condition 600 RPM input

CORVETTE

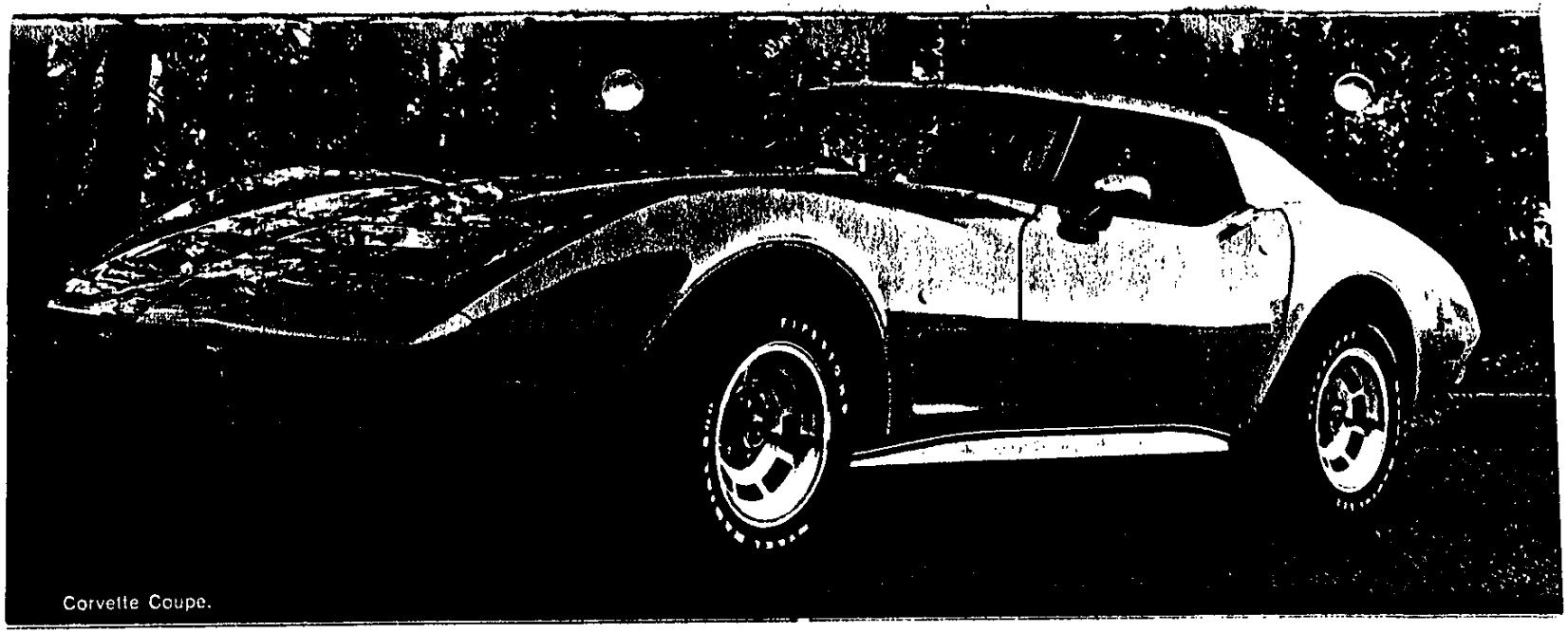
The only one.

America's only true production sports car remains Chevrolet's ultimate road car. Rich in performance and prestige, this year's Corvette doesn't just retain its heritage, it betters it with its combination of '77 features that include:

□ New thin-pillar-style windshield posts give the windshield and side windows a sleek wraparound look □ Real leather on the seating area of the deep-contoured bucket seats □ Fiber glass body and removable top sections will never rust or corrode □ New rear deck luggage carrier available. Has provisions for stowing roof panels □ Independent suspension at all four wheels □ Retracting dual headlights □ Power disc brakes front and rear □ Power steering □ Steel-belted radial ply tires □ Wide-ratio 4-Speed transmission standard, close-ratio 4-Speed or Turbo Hydra-matic available.

Leather seat interior.

Instruments, console and available Tilt-Telescopic steering wheel.



Corvette Coupe.

ALPHABETICAL OPTION INDEX

(Not for Ordering Purposes)

Option Number	Description
A31	WINDOWS: Power
B32	FLOOR COVERING: Mats, Color-Keyed Floor
C49	DEFOGGER, REAR WINDOW: Electro-Clear
C60	AIR CONDITIONING: Four-Season
✓D35	MIRRORS: Sport, LH Remote and RH Manual
FE7	SUSPENSION EQUIPMENT: Suspension, Gymkhana
G95	AXLE, REAR: Highway Ratio
K30	SPEED CONTROL: Cruise-Master
L48	ENGINE: 350-4 BBL V8
L82	ENGINE: Special 350-4 BBL V8
M20	TRANSMISSION: 4-Speed Manual
M21	TRANSMISSION: 4-Speed Close-Ratio Manual
M40	TRANSMISSION: Turbo Hydra-matic
NA2	EMISSION SYSTEMS: Standard Emission Equipment
NA6	EMISSION SYSTEMS: High Altitude Emission Equipment
N37	STEERING WHEEL: Tilt-Telescopic
QRN	TIRES: GR70-15/B Blackwall (Radial)
QRZ	TIRES: GR70-15/B White Lettered (Radial)
UA1	BATTERY, HEAVY-DUTY
UL5	RADIO EQUIPMENT: Radio Not Desired
UM2	RADIO EQUIPMENT: Stereo Tape System w/AM/FM Stereo Radio
U58	RADIO EQUIPMENT: AM/FM Stereo Radio
U69	RADIO EQUIPMENT: AM/FM Radio
V54	CARRIER, LUGGAGE AND ROOF PANEL
YF5	EMISSION SYSTEMS: California Emission Certification
YJ8	WHEEL TRIM: Wheels, Aluminum
✓ZN1	CHASSIS EQUIPMENT, TRAILERING
ZP2	EXTERIOR/INTERIOR OVERRIDE
ZX2	CONVENIENCE GROUP

COLOR AND TRIM SELECTION

PLEASE NOTE: The exterior and interior combinations shown in the chart below and designated as recommended (R), represent the ideal combinations. Those that are shown as acceptable (A), are attractive, but less desirable than the recommended combinations. Orders for additional combinations may be submitted, provided the dealer initials the appropriate order form box (ZP2), as verification that the requested combination is definitely desired.

√	Seat, Door Trim Color and Headliner	Black	Blue	Brown	Buck-skin	Red	Smoke Gray	White	White	White	White
	Instrument Panel Pad and Carpet Color	Black	Blue	Brown	Buck-skin	Red	Smoke Gray	Blue	Buck-skin	Red	Smoke Gray

Model	Seat Type										
1YZ37	Leather Bucket	ABB2	ADD2	AHH2	AUS2	AFF2	AMM2	AWD2	AWS2	AWF2	AWM2
	Cloth/Leather Bucket	HBB2	HDD2	HHH2	HUS2	HFF2	HMM2				

	Exterior Paint Color	Color Code L	Color Code U										
√	Black	19	19	R			R	R	R				R
	Blue, Corvette Dark	28	28	R	R		R		R	R			
	Blue, Corvette Light (Met)	26	26	R					R				R
	Orange, Corvette	66	66	R		R	R						
	Red, Corvette Dark	83	83	R			R		R				
	Red, Medium	72	72	R			R	R	R			R	
	Silver	13	13	R	R			R	R				R
	Tan, Corvette	80	80	R		R	R	R			R		
	White, Classic	10	10	R	R	R	R	R	R				R
	Yellow, Corvette	52	52	R		R							

L=Lower U=Upper

POWER TEAMS

(Refer to next page for option availability and application)

ENGINE	OPTION CONDITION	AXLE RATIO 3.08	3.36	3.55	3.70
L48	M20	G95	Std	-	-
	M40	Std	-	-	-
L82	M20	-	-	G95	Std
	M21	-	-	G95	Std
	M40	-	-	Std	-

CORVETTE

REFER STOPS UPDATE

Model

1YZ37 Corvette Coupe

←COLOR AND TRIM SELECTION

MUST ORDER ONE: ENGINES

ALL EXCEPT CALIFORNIA REGISTRATION (N/A YF5)
Below 4000 Foot Altitude (REQS NA2)
___ L48 350-4 BBL V8
___ L82 Special 350-4 BBL V8

Above 4000 Foot Altitude (REQS NA6)
___ L48 350-4 BBL V8 (Reqs M40 Trans)

CALIFORNIA REGISTRATION ONLY (REQS YF5)
___ L48 350-4 BBL V8 (Reqs M40 Trans)

QUICK-SPEC

IF TIRE AND/OR TRANSMISSION IN QUICK-SPEC IS NOT DESIRED YOU MUST "PLUS" ANOTHER TIRE AND/OR TRANSMISSION OPTION.

		66 11 56 AA
Air Conditioning, Four-Season	C60	X X
Steering Wheel, Tilt-Telescopic	N37	X X
Transmission, Turbo Hydra-matic	M40	X X
Windows, Power	A31	X X
Tires, GR70-15/B White Lettered	QRZ	X X
Radio, AM/FM	U69	X NOT INCL
Radio, AM/FM Stereo	U58	X
Battery, Heavy-Duty	UA1	X
Defogger, Rear Window	C49	X
Speed Control	K30	X
Mats, Color-Keyed Floor	B32	X
Convenience Group	ZX2	X

PLEASE REVIEW OPTION RESTRICTIONS BEFORE ORDERING

Q-S		OPTION
615		C60 AIR CONDITIONING: Four-Season
___		G95 AXLE, REAR: Highway Ratio (See Power Teams Chart)
616		UA1 BATTERY, HEAVY-DUTY
___		V54 CARRIER, LUGGAGE AND ROOF PANEL
___	√	ZN1 CHASSIS EQUIPMENT, TRAILERING: (Reqs L48 Eng and M40 Trans) (Incls FE7 Susp)
616		ZX2 CONVENIENCE GROUP
616		C49 DEFOGGER, REAR WINDOW: Electro-Clear
		EMISSION SYSTEMS: (MUST ORDER ONE)
___		YF5 --California Emission Certification (Reqs M40 Trans) (N/A NA6 Altitude)
___		NA6 --High Altitude Emission Equipment (Reqs M40 Trans) (N/A L82 Eng)
___		NA2 --Standard Emission Equipment (N/A YF5 Calif or NA6 Altitude)
616		B32 FLOOR COVERING: Mats, Color-Keyed Floor
___	√	D35 MIRRORS: Sport, LH Remote and RH Manual
		RADIO EQUIPMENT: (MUST ORDER ONE)
615		U69 --AM/FM Radio
616		U58 --AM/FM Stereo Radio
___		UM2 --Stereo Tape System w/AM/FM Stereo Radio
___		UL5 --Radio Not Desired
616		K30 SPEED CONTROL: Cruise-Master (Reqs M40 Trans and N37 Steering Wheel)
615		N37 STEERING WHEEL: Tilt-Telescopic
___		FE7 SUSPENSION EQUIPMENT: Suspension, Gymkhana. Front and Rear
		TIRES: (B/W: Blackwall, W/L: White Lettered) --Steel Belted Radial Ply (15/B)
		ORN ---GR70 B/W (Base)
615		QRZ ---GR70 W/L
		TRANSMISSIONS:
___		M20 --4-Speed Manual
___		M21 --4-Speed Close-Ratio Manual (Reqs L82 Eng)
615		M40 --Turbo Hydra-matic
		YJ8 WHEEL TRIM: Wheels, Aluminum
615		A31 WINDOWS: Power

NOTES

SECTION 0A

GENERAL INFORMATION

UNIT AND SERIAL NUMBER LOCATIONS

For the convenience of servicemen when writing up certain business papers, such as Warranty Claims Product Information Reports, or reporting product failures in any way, we are showing on a chart, the location of various unit numbers. These unit numbers and their prefixes and suffixes are necessary on these papers for various reasons–such as accounting, follow-up on productions, etc.

The prefixes on certain units identify the plant in which the unit was manufactured, and thereby permits proper follow-up of the plant involved to get corrections made when necessary.

ENGINE AND TRANSMISSION NUMBER

The Vehicle Identification Number is stamped on the engine and transmission of each vehicle (see chart for location).

At multi-car plants where more than one Chevrolet series is produced, the VIN sequence numbers will be staggered to eliminate duplication of component identification numbers.

BODY NUMBER PLATE

The body number plate identifies the model year, car division, series, style, body assembly plant, body number, trim combination, modular seat code, paint code and date build code (fig. 0A-1). On all bodies except "X" and "Y",

MODEL IDENTIFICATION

CAR LINE	SERIES NAME	BODY STYLE	MODEL DESIGNATION	PASS. OR SEATS
CHEVROLET	IMPALA	4-Dr. Sedan	1BL69	6
		2-Door Coupe	1BL47	6
		4-Dr. Station Wagon	1BL35	2-Seat*
	CAPRICE CLASSIC	4-Dr. Sedan	1BN69	6
		2-Door Coupe	1BN47	6
		4-Dr. Station Wagon	1BN35	2-Seat*
CHEVELLE	MALIBU	4-Dr. Sport Sedan	1AC29	6
		2-Dr. Sport Coupe	1AC37	6
	MALIBU CLASSIC	4-Dr. Sport Sedan	1AD29	6
		2-Dr. Sport Coupe	1AD37	6
		4-Dr. Station Wagon	1AD35	2-Seat*
	EL CAMINO	2-Dr. Pickup Delivery	1AC80	3
	EL CAMINO CLASSIC	2-Dr. Pickup Delivery	1AD80	3
MONTE CARLO	MONTE CARLO "S"	2-Dr. Sport Coupe	1AH57	6
NOVA	NOVA	4-Dr. Sedan	1XX69	6
		2-Dr. Coupe	1XX27	6
		2-Dr. Hatchback Coupe	1XX17	6
	CONCOURS	4-Dr. Sedan	1XY69	6
		2-Dr. Coupe	1XY27	6
		2-Dr. Hatchback Coupe	1XY17	6
CAMARO	CAMARO	2-Dr. Sport Coupe	1FQ87	4
	CAMARO "TYPE LT"	2-Dr. Sport Coupe	1FS87	4
CORVETTE	CORVETTE	2-Dr. Sport Coupe	1YZ37	2

*Third seat available as RPO on station wagon

VEHICLE COMPONENT SERIAL AND UNIT NUMBER LOCATION

Component	Model	Location
Vehicle Identification Number Plate	All except Corvette Corvette	Top of instrument panel left, front Inside left windshield pillar
Engine Transmission Identification Code	6 Cylinder 8 Cylinder 3-Speed (Muncie) 4-Speed (Muncie) 3-4 Speed (Saginaw) Turbo Hydra-Matic 250, 350 Turbo Hydra-Matic 375 400	On pad at right-hand side of cylinder block at rear of distributor On pad at front, right-hand side of cylinder block On boss above filler plug On right side of case at lower rear of cover flange On lower right side of case adjacent to rear of cover Right vertical surface of oil pan On blue tag right side of transmission
Vehicle Identification Number	Turbo Hydra-Matic 250 Turbo Hydra-Matic 350 Turbo Hydra-Matic 375 400 6 and 8 Cylinder Engines	On boss lower right side of converter housing On boss left side to rear of manual control lever Same as engine identification code
Rear Axle Number	All except Corvette Corvette	On right or left axle tube adjacent to carrier On bottom surface of carrier at cover mounting flange
Delcotron	All	On top drive end frame
Starter	All	Stamped on outer case, toward rear
Battery	All	On cell cover segment, top of battery

the I.D. plate is located on upper horizontal surface of shroud. On "X" models, plate is located on vertical surface of shroud. On "Y" models, it is located on the upper left hand door hinge pillar.

KEYS AND LOCKS

Four keys (two rectangular head and two oval head) are provided with each vehicle. The rectangular head key operates the ignition switch only. The oval-head key operates all other locks and arms the anti-theft alarm on Corvette).

Manufacturer Identity ①	Series Code Letter ②	Body Style ③	Engine Model ④	Model Year ⑤	Assembly Plant ⑥	Unit Number ⑦
1	H	57	V	7	B	100025

1. Manufacturer's identity number assigned to all Chevrolet built vehicles.
2. Series (See Model Identification in this section.)
3. Body Style (See Model Identification in this section.)
4. Engine Code (See Table).
5. Last number of model year (1977).
6. B — Baltimore.
7. Unit numbering will start at 000001 or 100001 depending on the Vehicle.

ENGINE CODE LETTER	DISPLACEMENT CU. IN.	TYPE	CARBURETOR
D	250	L-6	1-BBL
U	305	V-8	2-BBL
L	350	V-8	4-BBL
X	350	V-8	4-BBL (DUAL EXH.)

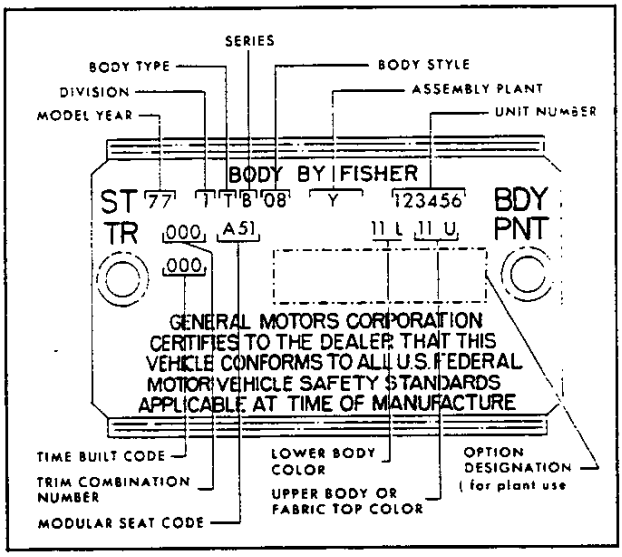


Fig. 0A-1–Body Number Plate

LIFTING VEHICLES

CAUTION: *When jacking or lifting vehicle from frame side rails, be certain lift pads do not contact catalytic converter as damage to converter will result.*

Many dealer service facilities and service stations are now equipped with a type of automotive hoist which must bear upon some part of the frame in order to lift the vehicle. In Figures 0A-2 through 0A-6 the shaded areas indicate areas recommended for hoist contact.

NOTE: The vehicle should never be lifted by the rear lower control arms.

LIFTING THE CORVETTE

Shaded areas in Figure 0A-6 indicate recommended points for hoist or jack contact. When using a single post hoist, place hoist on frame side rail behind kickup at front, and forward of #3 body mount at rear. When using a twinpost hoist, two methods are recommended.

a. If no rear axle or suspension work is contemplated, use either suspension adapters or drive-on adapters at the front, and drive-in adapters at the rear. If a need for axle work develops, use jack stands beneath the frame side rails on each side and lower rear post.

b. If rear axle work is contemplated, use either suspension adapters or drive-on adapters at the front and frame lift adapters as shown in Figure 0A-7. If frame lift adapters are not available, use jack stands.

NOTE: Wooden blocks, bolted to a steel beam shown in Figure 0A-7 are necessary to allow beam to clear exhaust system.

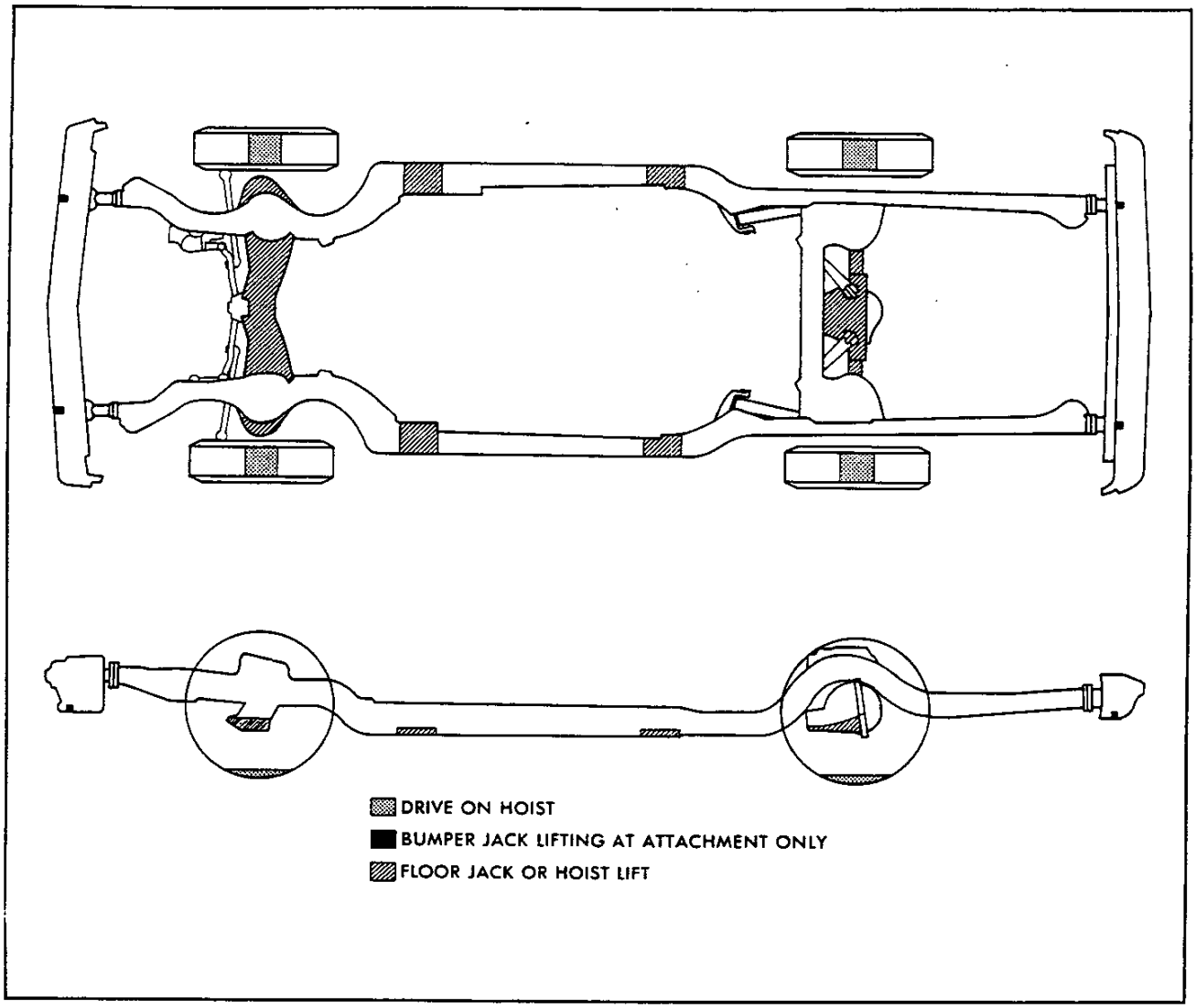


Fig. 0A-2–Vehicle Lfting Points - Chevrolet

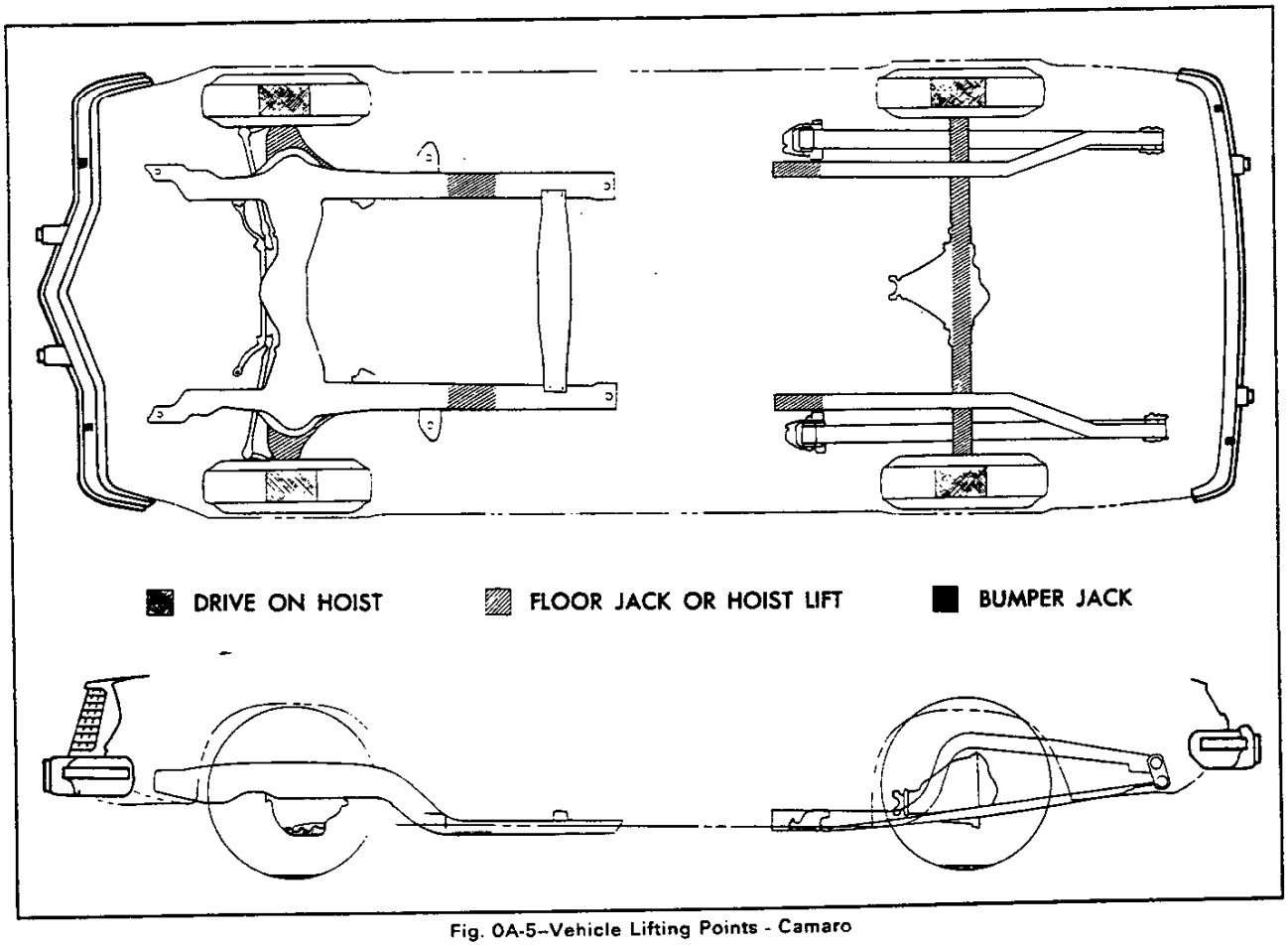


Fig. 0A-5–Vehicle Lifting Points - Camaro

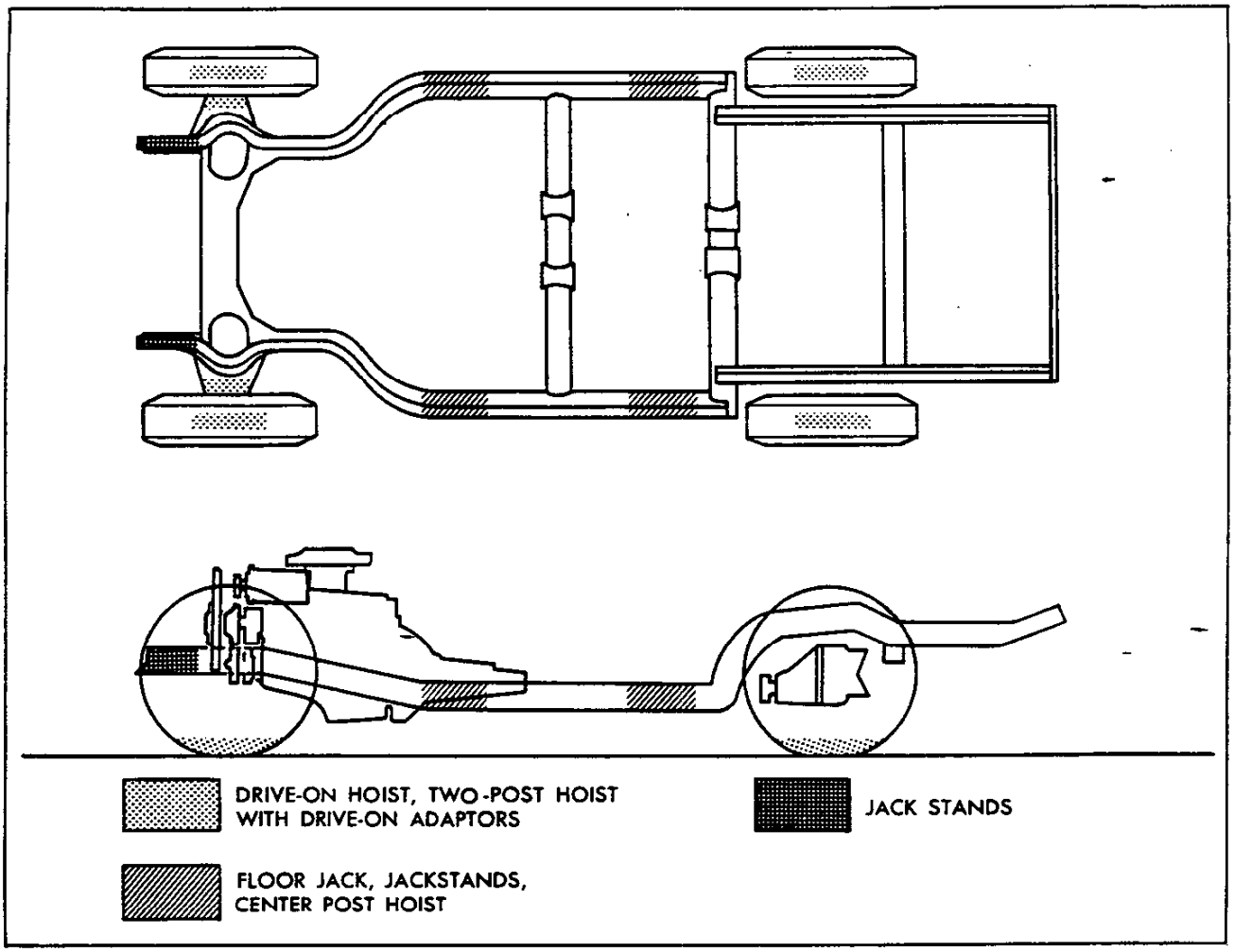


Fig. 0A-6–Vehicle Lifting Points - Corvette

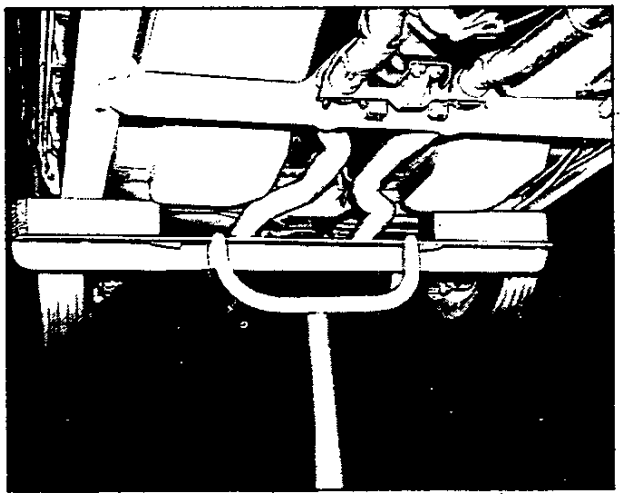


Fig. 0A-7–Frame Lift Adapters - Corvette

RECOMMENDED FLUIDS & LUBRICANTS

USAGE	FLUID/LUBRICANT
Power steering system and pump reservoir	GM power steering fluid Part No. 1050017 or equivalent
Differential—standard	SAE-80W or SAE-80W-90 GL-5 gear lubricant (SAE-80W in Canada)
Differential—Positraction	Lubricant GM Part No. 1050081
Manual steering gear	Lubricant GM Part No. 1051052 except Corvette, use Part No. 1052084 or equivalent
Manual transmission 3 & 4 speed	SAE-80W or SAE-80W-90 GL-5 gear lubricant (SAE-80W in Canada)
5 speed	DEXRON® II automatic transmission fluid
Brake system and master cylinder	Delco Supreme 11 fluid or DOT-3
Clutch linkage (Man. trans. only) a. Pivot points b. Push rod to clutch fork joint, and cross shaft pressure fitting	 Engine oil Chassis grease meeting requirements of GM 6031-M
Manual transmission shift linkage, column shift	Engine oil
Shift linkage, floor shift	Engine oil
Hood Latch assembly a. Pivots and spring anchor b. Release pawl	 Engine oil Chassis grease
Hood and Door hinges	Engine oil
Automatic transmission shift linkage	Engine oil
Chassis lubrication	Chassis grease meeting requirements of GM 6031-M
Automatic transmission	DEXRON® II automatic transmission fluid
Parking brake cables	Chassis grease
Front wheel bearings	Wheel bearing lubricant GM Part No. 1051344
Rear wheel inner bearing—Corvette	Lubricant GM Part No. 1050679
Body door hinge pins, station wagon tailgate hinge and linkage, station wagon folding seat, fuel door hinge, rear compartment lid hinges	Engine oil
Windshield washer solvent	GM Optikleen washer solvent Part No. 1051515 or equivalent
Battery	Colorless, odorless, drinking water
Engine coolant	Mixture of water and a high quality Ethylene Glycol base type anti-freeze conforming to GM Spec. 1899-M

NOTE: Fluids and lubricants identified with GM part numbers or GM specification numbers may be obtained from your Chevrolet dealer.

Weatherstrips and Rubber Bumpers–Coat lightly with a rubber lubricant.

COMPLETE VEHICLE MAINTENANCE SCHEDULE

Two separate Maintenance Schedules (Schedule I and Schedule II) are used for the 1977 models. Section "A" (Lubrication and General Maintenance) and Section "B" (Safety Maintenance) are the same for both schedules. Section "C" (Emission Control Maintenance) differs for the two schedules. The proper schedule for each vehicle can be determined by the engine identification code as described on the schedule. The Maintenance Schedules and an explanation are included on the following pages.

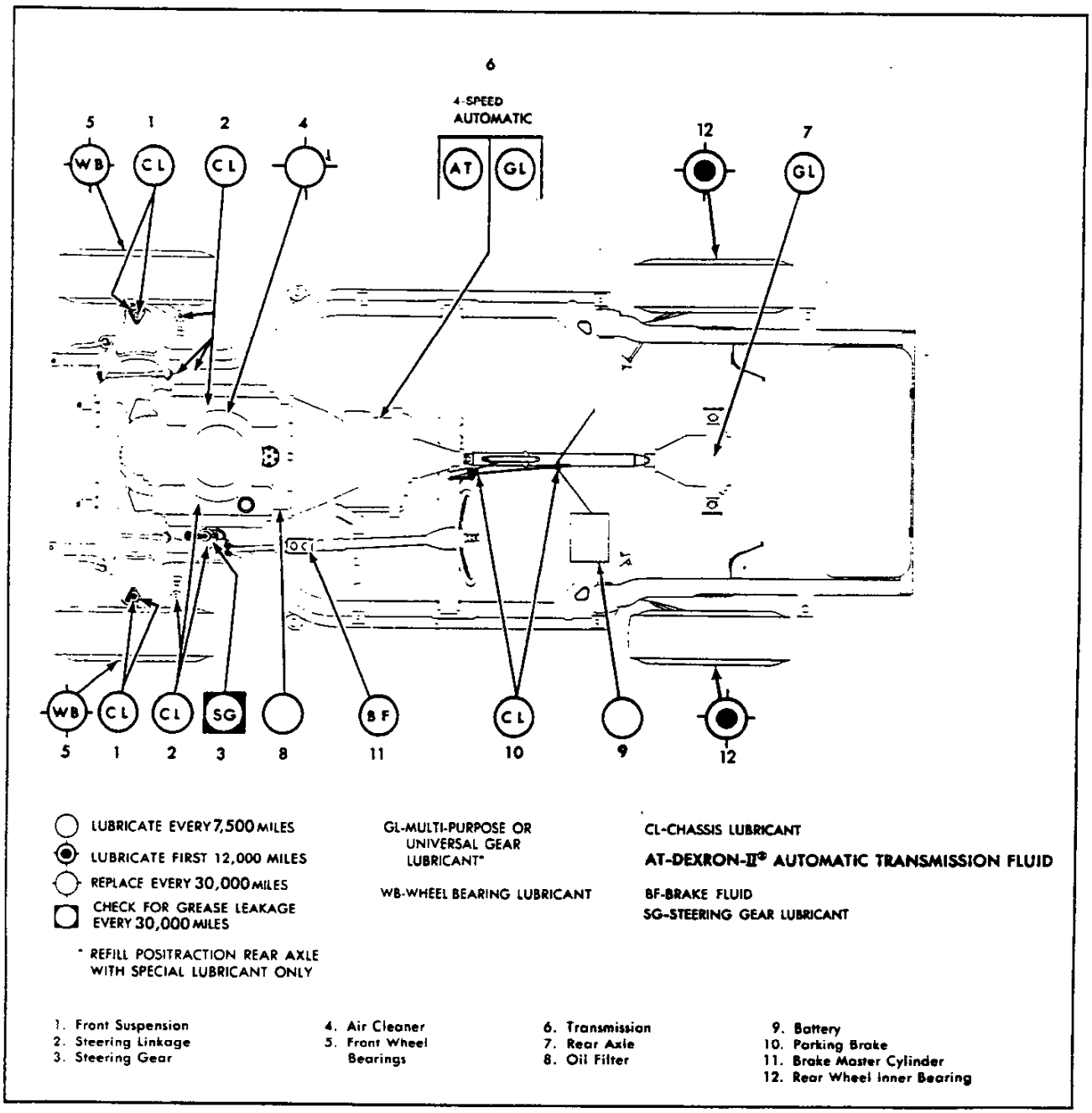


Fig. 0B-6–Lubrication Diagram - Corvette Models

BODY LUBRICATION

See Body Service Manual for Body Lubrication. (Except Corvette).

BODY LUBRICATION POINTS (CORVETTE)

Lubricate the following items when possible.

Hood Latch Mechanism and Hinges–Apply light engine oil to pivot points. Don't oil lock pins or catch plates.

Side Door Hinge Pins–Apply light engine oil.

Door Lock Rotor and Striker Plate–Apply light engine oil or stainless stick lubricant.

Lock Cylinders–Lubricate with powdered graphite.

Window Regulators and Controls and Door Lock Remove Link–Apply light engine oil.

Gas Tank Filler Cap Hinge–Apply light engine oil.

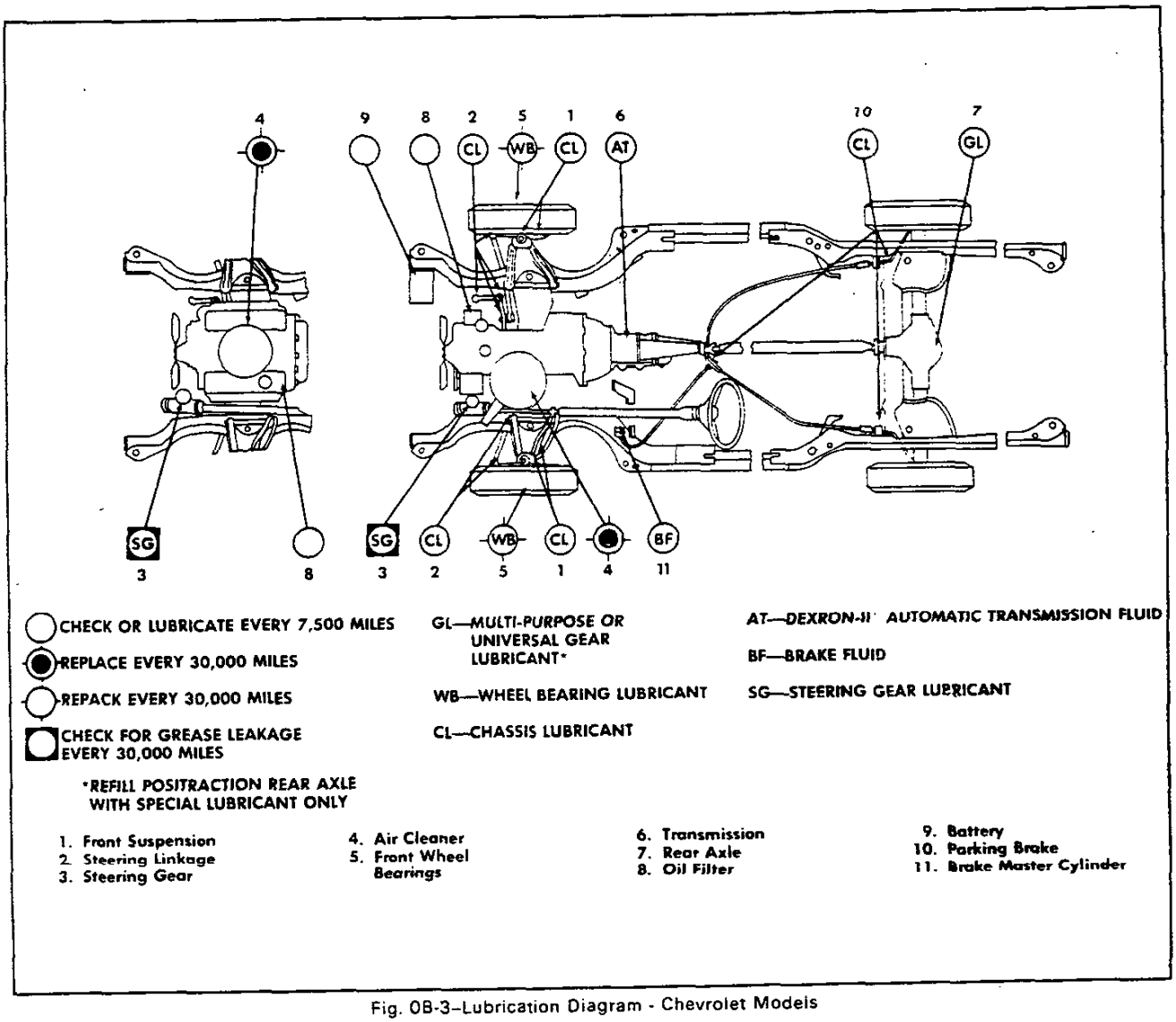


Fig. 0B-3–Lubrication Diagram - Chevrolet Models

bearing lubricant. On units equipped with disc brakes, use wheel bearing lubricant GM Part No. 1051344 or equivalent. This is a premium high melting point lubricant.

> **CAUTION:** *"Long fibre" or "viscous" type lubricant should not be used. Do not mix wheel bearing lubricants. Be sure to thoroughly clean bearings and hubs of all old lubricant before repacking.*

The proper adjustment of front wheel bearings is one of the important service operations that has a definite bearing on safety. A car with improperly adjusted front wheel bearings lacks steering stability, has a tendency to wander or shimmy and may have increased tire wear. The adjustment of these bearings is very critical. The procedure is covered in Section 3 of the 1974 Service Manual under Front Wheel Bearings–Adjust.

Brake Master Cylinder

Check level every 7,500 miles or 12 months and maintain 1/4" below lowest edge of each filler opening with DOT-3 or GM Hydraulic Brake Fluid Supreme No. 11 or equivalent.

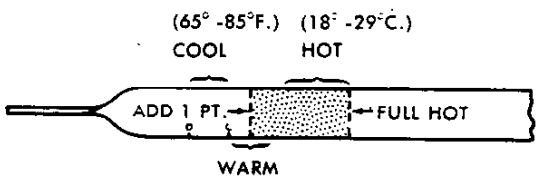
Parking Brake

Every 7,500 miles or 12 months, apply water resistant lubricant which meets GM Specification GM 6031M to parking brake cable, cable guides and at all operating links and levers.

Steering Gear

Manual

The steering gear is factory-filled with steering gear lubricant. Seasonal change of this lubricant should not be performed and the housing should not be drained - **no lubrication is required for the life of the steering gear.**



NOTE: DO NOT OVERFILL. It takes only one pint to raise level from ADD to FULL with a hot transmission.

Fig. 0B-1–Automatic Transmission Dipstick

NOTE: If the vehicle has recently been operated for an extended period at high speed or in city traffic in hot weather or the vehicle is being used to pull a trailer, an accurate fluid level cannot be determined until the fluid has cooled down - usually about 30 minutes after the vehicle has been parked.

Remove the dipstick and touch the transmission end of the dipstick cautiously to find out if the fluid is cool, warm or hot.

Wipe it clean and re-insert until cap seats. Remove dipstick and note readings.

- If the fluid feels cool, about room temperature 65°F to 85°F the level should be 1/8 to 3/8 inch below the **ADD** mark. The dipstick has two dimples below the **ADD** mark to show this range.
- If it feels warm, the level should be close to the **ADD** mark (either above or below).
- If it feels hot (cannot be held comfortably), the level should be between the **ADD** and **FULL** marks.

Drain Intervals

The transmission operating temperature resulting from the type of driving conditions under which your vehicle is used is the main consideration in establishing the proper frequency of transmission fluid changes.

Change the transmission fluid and filter every 15,000 miles if the vehicle is usually driven under one or more of the following conditions which are considered severe transmission service:

- In heavy city traffic.
- Where the outside temperature regularly reaches 90°F.
- In very hilly or mountainous areas.
- Frequent trailer pulling.
- Commercial uses, such as taxi, police car or delivery service.

If you do not use your vehicle under any of these conditions, change the fluid and filter every 60,000 miles.

Remove fluid from the transmission sump and add 2.5 qts. U.S. measure and 2.0 qts. Imperial measure. Operate transmission through all ranges and check fluid level as described above.

Turbo Hydra-Matic 375, 400

Lubrication for the Turbo Hydra-Matic 375, 400 will, except for fluid capacity and filter change listed below, follow the recommendations above. After checking transmission fluid level it is important that the dipstick be pushed all the way into the fill tube.

Every 60,000 miles after removing fluid from the transmission sump, approximately 7-1/2 pints U.S. measure (6.25 pints Imperial measure) of fresh fluid will be required to return level to proper mark on the dipstick.

Every 60,000 miles the transmission sump filter should be replaced.

CHASSIS

Chassis Lubrication

For chassis lubrication, consult the lubrication charts (figs. 0B-3 thru 0B-6). They show the points to be lubricated and how often the lubricant should be applied.

The term "chassis lubricant" as used in this manual, describes a water resistant EP chassis lubricant which meets GM Specification GM 6031M designed for application by commercial pressure gun equipment.

Corvette Rear Wheel Bearings (Inner)

The inner rear wheel bearings should be lubricated every 30,000 miles with EP chassis lubricant part number 1050679 or equivalent.

Front Wheel Bearings

It is necessary to remove the wheel and hub assembly to lubricate the bearings. The bearing assemblies should be cleaned before repacking with lubricant. Do not pack the hub between the inner and outer bearing assemblies or the hub caps, as this excessive lubrication results in the lubricant working out into the brake drums or discs and linings.

Front wheels of all passenger car models are equipped with tapered roller bearings and should be packed every 30,000 miles with a high melting point water resistant front wheel

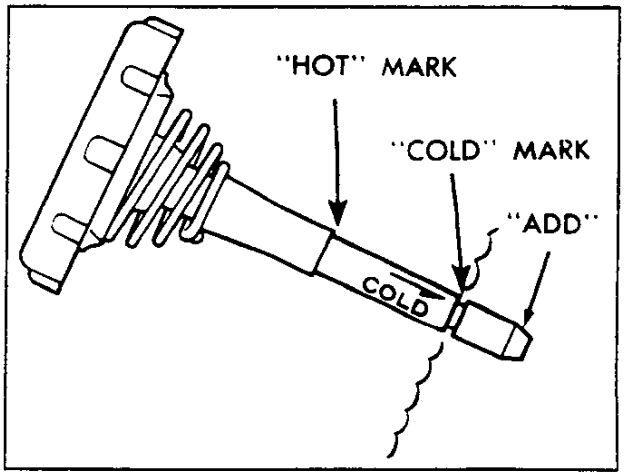


Fig. 0B-2–Power Steering Filler Cap Indicator

Early Fuel Evaporation System (E.F.E.)

Every 7,500 miles or 12 months, check valve for freedom of operation. Check switch for proper operation. Check hoses for cracking, abrasion or deterioration. Replace parts as necessary.

Air Cleaner

NOTE: Do not remove the engine air cleaner unless temporary removal is necessary during repair or maintenance of the vehicle. When the air cleaner is removed, backfiring can cause fire in the engine compartment.

Under prolonged dusty driving conditions, it is recommended that these operations be performed more often.

First 15,000 miles inspect element for dust leaks, holes or other damage. Replace if necessary. If satisfactory, rotate element 180° from originally installed position. Replace at 30,000 miles. Element must not be washed, oiled, tapped or cleaned with an air hose.

Crankcase Ventilation Filter

(Located Within Air Cleaner)

If so equipped, inspect at every oil change and replace if necessary. Replace at least every 30,000 miles; more often under dusty driving conditions.

Fuel Filter

Replace filter element located in carburetor inlet every 12 months or 15,000 miles whichever occurs first, or, if an in-line filter is also used, every 30,000 miles.

Replace in-line filter every 30,000 miles.

REAR AXLE, 3 SPEED AND 4-SPEED TRANSMISSIONS

The passenger car operates under the most severe lubrication conditions at high speed and requires a hypoid lubricant which will meet this condition.

Recommended Lubricants

Standard Rear Axles–SAE 80W or SAE 80W-90 GL-5 Gear Lubricant (For vehicles normally operated in Canada use SAE 80W GL-5 gear lubricant).

Positraction Rear Axles–Use special positraction lubricant. Drain and refill at first 15,000 miles then maintain same as standard axle.

CAUTION: *Straight Mineral Oil gear lubricants must not be used in hypoid rear axles.*

Manual transmissions–SAE 80W or SAE 80W-90 GL-5 gear lubricant (For those vehicles normally operated in Canada, use SAE 80W GL-5 Gear Lubricant.)

Lubricant Additions–Manual Transmission

The lubricant level in the transmission housing should be checked periodically. (Every 7,500 miles or 12 months).

It is recommended that any additions required to bring up the lubricant level be made using the same type lubricant already in the housing (SAE 80W or SAE 80W-90 GL-5 Gear Lubricant).

When checking lubricant level in transmission the unit being checked should be at operating temperature. With unit at operating temperature the lubricant should be level with bottom of the filler plug hole. If the lubricant level is checked with the unit cold the lubricant level should be 1/2 inch below the filler plug hole.

Lubrication Additions–Rear Axle–Standard

Every 12 months or 7,500 miles, whichever occurs first: Check lubricant level, and add lubricant if necessary to fill to level of filler plug hole. Use SAE 80W or SAE 80W-90 GL-5 Gear Lubricant (For those vehicles normally operated in Canada, use SAE 80W GL-5 Gear Lubricant).

Lubricant Changes

The rear axle lubricant does not normally require changing for the life of the vehicle. If additions are needed or when refilling the axle after service procedures, use lubricants described above. However, if vehicle is used to pull a trailer, change lubricant every 15,000 miles.

Transmission Shift Linkage (Manual and Automatic)

Every 7,500 miles or 12 months, lubricate shift linkage and manual transmission floor control lever contacting faces with water resistant EP chassis lubricant which meets GM Specification 6031M.

Clutch Cross-Shaft

Periodic lubrication of the clutch cross shaft is not required. At 30,000 miles or sooner, if necessary, remove plug, install lube fitting and apply EP Chassis Lubricant which meets GM Specification GM6031M.

AUTOMATIC TRANSMISSIONS

NOTE: At first transmission fluid change, it is recommended that the Turbo-Hydramatic 250 intermediate band be adjusted as specified in Section 7 of the 1974 Service Manual.

Turbo Hydra-Matic 250 and 350

Fluid Recommendations

Use automatic transmission fluids identified with the mark DEXRON® II.

Check the fluid level at each engine oil change period.

Automatic transmissions are frequently overfilled because the fluid level is checked when the fluid is cold and the dipstick indicates fluid should be added. However, the low reading is normal since the level will rise as the fluid temperature increases. A level change of over 3/4 inch will occur as fluid temperature rises from 60°F to 180°F.

Overfilling can cause foaming and loss of fluid through the vent. Slippage and transmission failure can result.

Fluid level too low can cause slipping, particularly, when the transmission is cold or the car is on a hill.

Check the transmission fluid level with *engine running*, the shift lever in **Park** and the car level.

The above recommendations apply to the first change as well as subsequent oil changes. The oil change interval for your Chevrolet engine is based on the use of SE oils and quality oil filters. Oil change intervals longer than those listed above will seriously reduce engine life and may affect Chevrolet's obligation under the provisions of the New Vehicle Warranty.

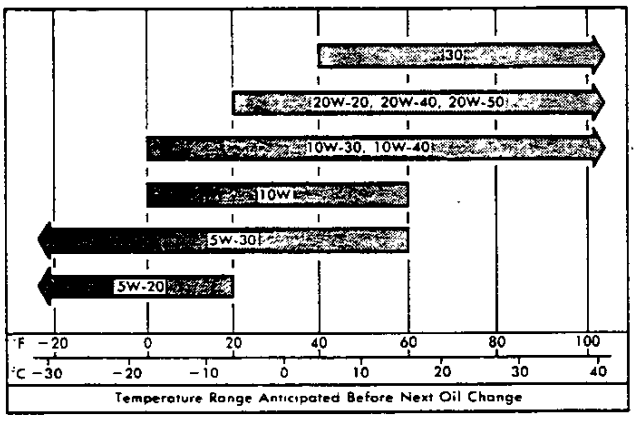
A high quality SE oil was installed in your engine at the factory. It is not necessary to change this factory-installed oil prior to the recommended normal change period. However, check the oil level more frequently during break in period since higher oil consumption is normal until the piston rings become seated.

NOTE: Non-detergent and other low quality oils are specifically not recommended. Only the use of SE engine oils and proper oil and filter change intervals assure you of continued reliability and performance from your Chevrolet engine.

Checking Oil Level

The engine oil should be maintained at proper level. The best time to check it is before operating the engine or as the last step in a fuel stop. This will allow the oil accumulation in the engine to drain back in the crankcase. To check the level, remove the oil gauge rod (dipstick), wipe it clean and reinsert it firmly for an accurate reading. The oil gauge rod is marked "FULL" and "ADD". The oil level should be maintained in the safety margin, neither going above the "FULL" line nor below the "ADD" line. Reseat the gauge firmly after taking the reading.

To help assure good cold and hot starting, as well as maximum engine life, fuel economy, and oil economy, select the proper viscosity from the temperature range anticipated from the following chart:



NOTE:

SAE 5W-30 oils are recommended for all seasons in vehicles normally operated in Canada. SAE 5W-20 oils are not recommended for sustained high-speed driving.

Supplemental Engine Oil Additives

The regular use of supplemental additives is specifically not recommended and will increase operating costs. However, supplemental additives are available that can effectively and economically solve certain specific problems without causing other difficulties. For example, if higher detergency is required to reduce varnish and sludge deposits resulting from some unusual operational difficulty, a thoroughly tested and approved additive - "G.M. Super Engine Oil Supplement" (or equivalent) is available at your Chevrolet dealer. In the event of an operational problem, consult your dealer for advice before using supplemental additives.

Types of Oil

The Letter Designation "SE" has been established to correspond with the requirements of GM 6136-M as revised. "SE" engine oils will be better quality and perform better than those identified with "SA" through "SD" designations, and are recommended for all Chevrolet passenger cars regardless of model year and previous engine oil quality recommendations.

The letter designations for passenger car service and their relationship to GM specifications are described on the following chart.

ENGINE OIL PERFORMANCE AND ENGINE SERVICE CLASSIFICATION SYSTEM CHEVROLET PASSENGER CARS

Letter Designation	GM Specification	Applicable Chevrolet Model Year
SA	None	None
SB	None	None
SC	GM 4745-M	1967 and Prior Years
SD	GM 6041-M (1968 Release)	1970 and Prior Years
SE	GM 6136-M 1972	1977 and Prior Years

Positive Crankcase Ventilation Valve (P.C.V.)

Every 30,000 miles or 24 months the valve should be replaced. Connecting hoses, fittings and flame arrestor should be cleaned and inspected (Also see maintenance schedule at end of this section).

Evaporation Control System (E.C.S.)

Every 24 months or 30,000 miles (More often under dusty conditions) the filter in the base of the canister must be replaced and the canister inspected.

SECTION 0B

LUBRICATION

INDEX

The time or mileage intervals on the following pages are intended as a general guide for establishing regular maintenance and lubrication periods for your Chevrolet built vehicle. Sustained heavy duty or high speed operations or operation under adverse conditions may necessitate more frequent servicing.

ENGINE

Crankcase Capacity

6 cylinder= 4 qt. (US meas.); 3.25 qt. Imperial meas.

8 cylinder (305)= 4 qt. (US meas.); 3.25 qt. Imperial meas.

8 Cylinder (350)= 4 qt. (US meas.); 3.25 qt. Imperial meas.

With filter change; add 1 qt. (US measure) .75 qt. Imperial measure for 6 and 8 Cyl. engines.

Lubrication

Crankcase oil should be selected to give the best performance under the climatic and driving conditions in the territory in which the vehicle is driven.

During warm or hot weather, an oil which will provide adequate lubrication under high operating temperatures is required.

During the colder months of the year, an oil which will permit easy starting at the lowest atmospheric temperature likely to be encountered, should be used.

When the crankcase is drained and refilled, the crankcase oil should be selected, not on the basis of the existing temperature at the time of the change, but on the lowest temperature anticipated for the period during which the oil is to be used.

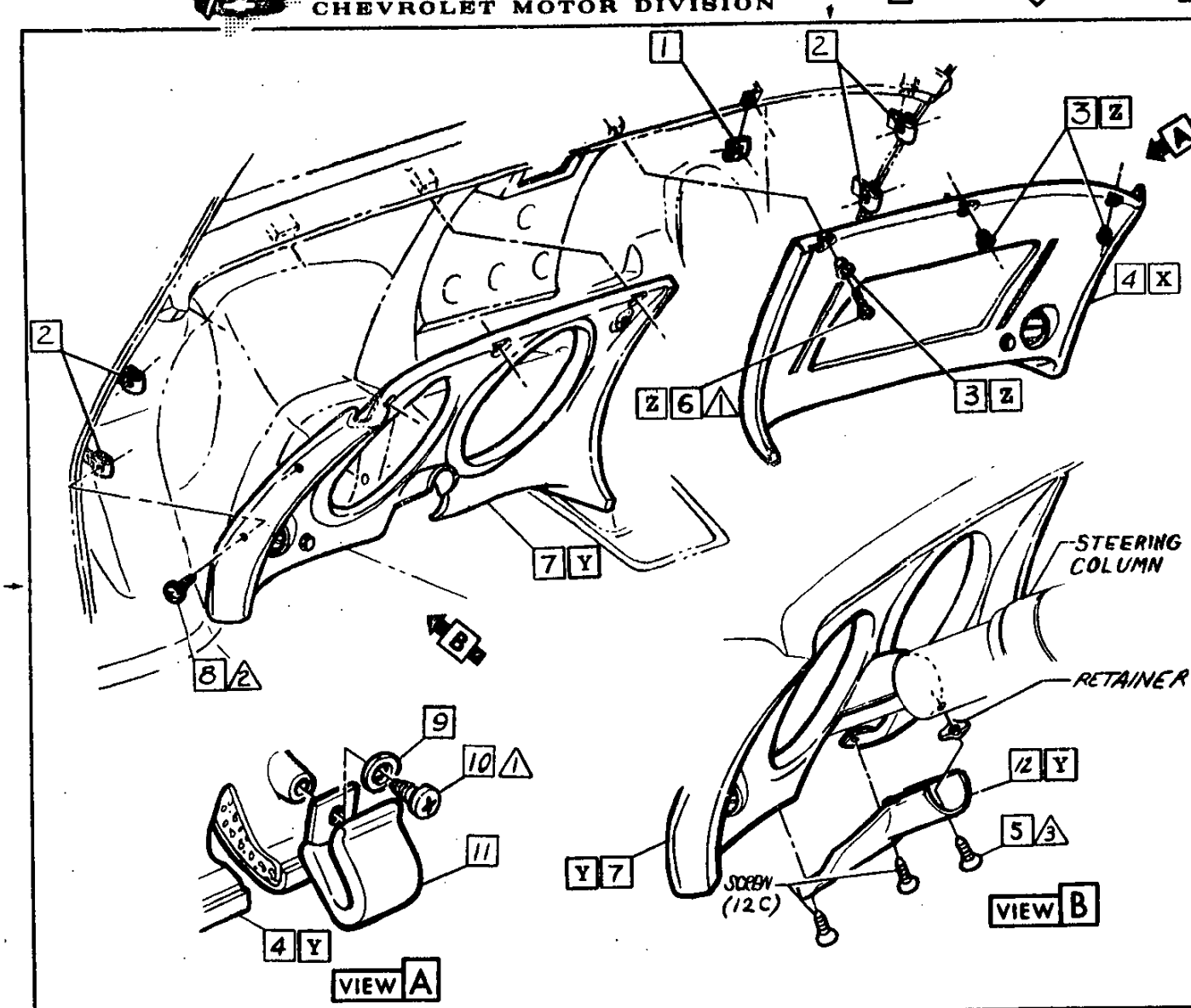
Unless the crankcase oil is selected on the basis of viscosity or fluidity of the anticipated temperature, difficulty in starting will be experienced at each sudden drop in temperature.

Engine Oil and Filter Recommendations

- Use only SE engine oil.
- Change oil each 12 months or 7,500 miles. If more than 7,500 miles are driven in a 12 month period, change oil each 7,500 miles.
- Change oil each 3 months or 3,000 miles, whichever occurs first, under the following conditions:
  - driving in dusty conditions.
  - trailer pulling.
  - extensive idling.
  - short-trip operation at freezing temperatures (engine not thoroughly warmed-up).
- Replace the oil filter at the first oil change, and every second oil change thereafter, if mileage (7,500 miles) is the determining factor. If time (12 months) is the determining factor, then change oil filter with every oil change. AC oil filters (or equivalent) provide excellent engine protection.

General Motors Corporation
CHEVROLET MOTOR DIVISION

ITEM REFERENCE ◇ PROCESS MATERIAL △ TORQUE ◪ PART OF OR EXISTING



325822	1	"U" NUT
9422242	2	"U" NUT
3934287	3	EYELET
333624	4	CHART-PAD R. H.
(2) 11501121	5	SCREW ASM
(3) 11501150	6	SCREW
339117	7	CHART-I/P PAD ASM LWR L.H.
339115	7	& C60
(1) 11503503	8	SCREW ASM
3857912	9	SPL. WASHER
9422245	10	SCREW
3799990	11	CLIP-SPL
333630	12	CHART-I/P LWR STRG COL COV ASM

Y See UPC "0"-P/L.
Z Paint body intr. trim color.

DYNAMIC (Installation)—LBS.	HAND (Inspection)—LBS.
△1	10 - 15 IN.
△2	15 - 20 IN.
△3	5 - 10 IN.
△4	
△5	

DATE	SYM	REVISION	AUTH	DR	CK
10-4-76	1	WAS 9427868 SCREW	71168	ACA	HB
11-22-76	2	WAS 3909073 SCREW	71224		
	3	WAS 9420554 SCREW	70777	ACA	RPM

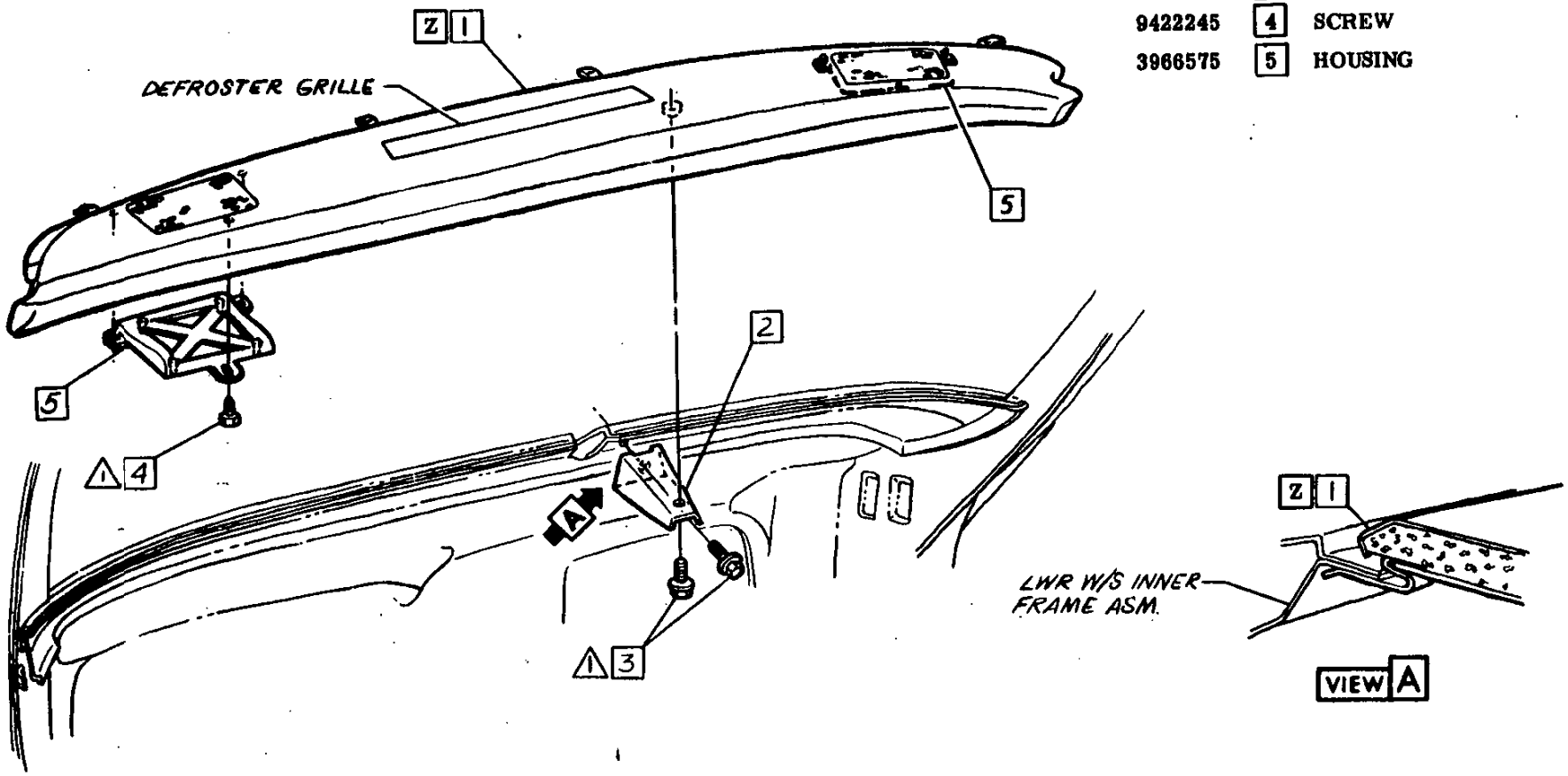
DATE 3-12-76
DR BRAGUNIER / ACA
CK [illegible] HB
APPR S
APPR
APPR
REF ECR 65371
3-10-76
C/O B01/B12 - 23

'77 CORVETTE "Y" 376249
TITLE INST PNL PAD & STEERING COLUMN COVER
1YA00 ALL

L- 82111 S
L- 86051 S
L- 87607 S
L- 91172 S

BPC B01 to B12
SHEET 24

458362	1	CHART-I/P UPR PAD
3974011	2	REINFORCEMENT
9419663	3	SCREW
9422245	4	SCREW
3966575	5	HOUSING



Z See UPC "0"-P/L.

DYNAMIC (Installation)—LBS.	HAND (Inspection)—LBS.
1 10 - 15 IN.	
2	
3	
4	
5	

DATE	SYM	REVISION	AUTH	DR	CK

DATE 3-12-76
DR BRAGUNIER/ACA
CK [illegible] N13
APPR D S
APPR
APPR
REF ECR 65371
3-10-76
C10 B01/B12-22

'77 CORVETTE "Y" 376249

TITLE INSTR PANEL PAD, REINF & SPEAKER HOUSING
1YA00 ALL

L- 911925
L-
L-
L-

UPC B01 to B12

SHEET 23

ORIGINAL

1977 MVMA Specifications Form

Passenger Car

Manufacturer	Car Line	
Chevrolet Motor Division General Motors Corporation	CORVETTE	
Mailing Address	Model Year	Issued:
Chevrolet Engineering Center 30003 Van Dyke Warren, Michigan 48090	1977	SEPT., 1976 Revised (•) Feb. 1977

Sheets revised - 5, 11, 12

MVMA Specifications Form
Passenger Car

Table Of Contents

NOTES:
1. The General Specifications herein are those in effect at date of compilation and are subject to change without notice by the manufacturer.
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 dimensions are in inches.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Car Models

Model Description	Make, Car line, Series, Body Type (Mfgr's Model Code)	Max. Number of Passengers (Front/Rear)
CORVETTE 2-Door Sport Coupe	Model Numbers 1YZ37	Front 2

NOTE: Any specifications on the following pages that are specific to California requirements are indicated accordingly.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Car and Body Dimensions See Key Sheets, Pgs. 30-33

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for: 4-Dr. Sedan, 2-Dr. H.T., 4-Dr. H.T.,Convertible and Station Wagon

	SAE Ref. No.	Body Type: SPORTS COUPE
Width		
Tread - Front	W101	58.7
Tread - Rear	W102	59.5
Maximum overall car width	W103	69.0
Body width at No. 2 pillar	W117	66.2
Max. front doors open	W120	136.5
Max. rear doors open	W121	-
Length		
Body "O" to front of dash	L 30	-1.7
Wheelbase	L101	98.0
Overall car length	L103	185.2
Overhang - front	L104	42.4
Overhang - rear	L105	44.8
Body upper structure length	L123	57.2
Body "O" line to C/L of rear wheel	L127	72.0
Body "O" line to w/s cowl point	L125	16.1
Height		
Passenger Distribution (front & rear)	*	2.0
Trunk/Cargo load (lbs.)	*	0
Overall height	H101	48.0
Cowl height	H114	36.6
Deck height	H138	
Rocker panel - front: To ground	H112	7.9
Rocker panel - front: From front wheel C/L	H112	-
Bottom of front door to ground	H133	10.3
Rocker panel - rear: To ground	H111	7.9
Rocker panel - rear: From rear wheel C/L	H111	-
Bottom of rear door to ground	H135	-
Windshield slope angle	H122	57.0°
Ground Clearance		
Bumper to ground - front	*H102*	11.1
Bumper to ground - rear	H104	12.1
Angle of approach	H106	17.03
Angle of departure	H107	18.12
Ramp breakover angle	H147	14.04
Rear axle differential to ground	H153	5.7
Min running clearance (Specify)	H156	4.3(a)

(a) Catalytic Converter

*All measurements are made at the stated passenger and trunk/cargo loadings

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Car And Body Dimensions See Key Sheets, Pgs. 30-33

SAE Ref. No.	Body Type: Sport Coupe

Front Compartment

H Point to body "O" line	L31	44.7
Effective head room	H61	32.2
Effective T Point head room	H75	7.2
Max. eff. leg room - accelerator	L34	42.1
H Point to Heel point	H30	6.4
H Point travel	L17	4.5
Shoulder room	W3	47.9
Hip room	W5	48.8
Upper body opening to ground	H50	44.5
Steering Wheel Angle Vertical	H-18	14°38'
Back Angle Front	L-40	33°

Rear Compartment

H Point couple distance	L50	
Effective head room	H63	
Effective T Point head room	H76	NOT
Min. effective leg room	L51	APPLICABLE
H Point to Heel point	H31	
Min. knee room	L48	
Rear Compartment room	L3	
Shoulder room	W4	
Hip room	W6	
Upper body opening to ground	H51	

Luggage Compartment

Usable luggage capacity (cu. ft.)	V1	7.8
Liftover height	H195	-
Position of spare tire storage		In well under body at rear
Method of holding lid open		-

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issuec 9/76 Revised (●)

Car And Body Dimensions See Key Sheets, Pgs. 30-33

		Body Type
	SAE Ref. No.	Sport Coupe

Station Wagon — Third Seat

Shoulder Room	W85	
Hip room	W86	
Effective leg room	L86	NOT
Effective head room	H86	APPLICABLE
Effective T Point head room	H89	
Seat facing direction		

Station Wagon — Cargo Space

Cargo length at floor - front seat	L202	
Cargo length at belt - front seat	L204	
Cargo width - Wheelhouse	W201	
Opening width at belt	W204	NOT
Maximum cargo height	H201	APPLICABLE
Rear opening height	H202	
Cargo volume index (cu. ft.) $\frac{W4 \times L204 \times H201}{1728}$	V2	

Hatchback — Cargo Space

Front Seat Back to Load Floor Height	H197	
Cargo Length at Front Seat Back Height	L208	NOT
Cargo Length at Floor - Front Seat	L209	APPLICABLE
Cargo volume index (cu. ft.) $\frac{\frac{L208 + L209}{2} \times W4 \times H197}{1728}$	V3	

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●) 2/77

Power Teams (Indicate whether standard or optional)

SAE Net bhp (brake horsepower) and net torque corrected to 85° F and 29.38 in. Hg atmospheric pressure.

SERIES AVAILABILITY	ENGINE						TRANSMISSION	AXLE RATIO (Std. first) (Indicate A/C ratio) A(std) B(opt) C(std)
	Displ. cu. in.	Carb.	Compr. Ratio	SAE Net @ RPM BHP	SAE Net @ RPM Torque	Exhaust System*		
1YZ37- Base-all states	350 V8 5.7ℓ L48	4-bbl	8.5:1	180 @ 4000	270 @ 2400	D	4-spd. Manual (2.64: 1 ratio) (not available in California)	3.36 3.08 -
							3-Spd Automatic (optional)	3.08 - 3.08
1YZ37- Optional-all states exc. California	350 V8 5.7ℓ L82	4-bbl	9.0:1	210 @ 5200	255 @ 3600	D	4-Spd. Manual (2.64 Ratio)	3.70 3.55 -
							4-Spd. Manual (2.43 ratio) (optional)	3.70 3.55 -
							3-Spd Automatic (optional)	3.55 - 3.55

#- "Base' and 'Optional' refer to engine availability.
*- Positraction standard equipment with all axle ratios.
**-Same ratios available with Air Conditioning.
"A' & 'B'-Below 4000 feet altitude in 49 states and all altitudes in California.
'C'-Above 4000 feet altitude in all states except California.

*S — Single D — Dual

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Engine Displacement	
V8-350 C.I.	
L 48	L 82

Engine — General

Type, no cyls., valve arr.		90° OHV	
Bore and stroke (nominal)		4.00 x 3.48	
Piston displacement, cu in		350	
Bore spacing (C/L to C/L)		4.40	
No system (front to rear)	L Bank	1-3-5-7	
	R Bank	2-4-6-8	
Firing Order		1-8-4-3-6-5-7-2	
Cylinder Head Material		Cast alloy iron	
Cylinder Block Material		Cast alloy iron	
Cyl Sleeve-Wet, dry, none		None	
Number of mtg. points	Front	Two	
	Rear	One	
Engine installation angle		3°	
Recommended fuel regular — premium		Unleaded	
Cylinder Head Volume (cc)		75.47	76.18
Head Gasket Thickness (Compressed)		.021	
Head Gasket Volume (cc)		4.58	
Deck Clearance (minimum) (above or below block)		.025 (below)	
Minimum Combustion Chamber Volume (cc)		74.47	75.18

Engine — Pistons

Material			Cast aluminum alloy	Alum. impact extruded
Description and finish			Sump head, slipper skirt	Flat head, notched slipper skirt
Weight (piston only) oz.			21.33	20.38
Clearance (limits)	Top land		.0235-.0325	.0305-.0395
	Skirt	Top	.0007-.0017 (a)	.0046-.0056 (a)
		Bottom		
Ring groove diameter	No. 1 ring		3.541-3.556	3.546-3.556
	No 2 ring		3.541-3.556	3.546-3.556
	No 3 ring		3.577-3.592	3.582-3.592

(a) Measured 2.44 from top of piston.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (•)

	Engine Displacement	
	V8-350 C.I.	
	L 48	L 82

Engine - Piston Rings

Function (top to bottom)	No. 1, oil or comp.		Compression
	No. 2, oil or comp.		Compression
	No. 3, oil or comp		Oil
Compression	Description - material, coating, etc. Upper		Cast alloy iron; inside bevel ; tapered face (a)
	Lower		Cast alloy iron; reverse twist; tapered face (b)
	Width	Upr. .0775 - .0780/ Lwr. .0770 - .0775	Upr.&Lwr. .0770 - .0775
	Gap	Upper .010 - .020; lower .013 - .025	
Oil	Description - material, coating, etc.	Multi-piece (2 rails and 1 spacer expander) Rails-steel, chrome plated OD; Expander-stainless steel	
	Width	.1850-.1870	
	Gap	.015 -.055	
Expanders		In oil ring assembly	

Engine - Piston Pins

Material		Chromium Steel	
Length		2.990-3.010	
Diameter		.9270-.9273	
Type	Locked in rod, in piston, floating, etc.	Locked in rod	
	Bushing - In rod or piston	None	
	Bushing - Material	--	
Clearance	In piston	.00025-.00035	.00045-.00055
	In rod	--	
Direction & amount offset in piston		Major thrust side .060	None

Engine - Connecting Rods

Material		Drop forged steel	
Weight (oz.)		13.70	20.80
Length (center to center)		5.695-5.705	
Bearing	Material & Type	Premium aluminum	
	Overall length	.797	
	Clearance (limits)	.0013-.0035	
	End Play	.006 -.016	

(a) Chrome flash on L48; wear resistant coating and monybdenum inlay on L82
(b) Wear resistant coating.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Engine Displacement	
V8-350 C.I.	
L48	L82

Engine—Crankshaft

Material			Cast nodular iron	Forged steel
Vibration damper type			Rubber mounted inertia	
End thrust taken by bearing (No.)			5	
Crankshaft end play			.002-.007	
Main bearing	Material & type		Premium aluminum	
	Clearance		No.1 .0008-.0020; No.2,3&4- .0011 - .0023; No.5 - .0017 -.0033	
	Journal dia. and bearing overall length	No. 1	2.4502 x .752	
		No. 2	2.4502 x .752	
		No. 3	2.4502 x .752	
		No. 4	2.4502 x .752	
		No. 5	2.4508 x1.180	
		No. 6	--	
		No. 7	--	
	Dir & amt cyl offset		None	
	No. bolts/main brg. cap		10 bolts/5 caps	16 bolts/5 caps
Crankpin journal diameter			2.099 - 2.100	

Engine—Camshaft

Location			In block above crankshaft	
Material			Cast alloy iron	
Bearings	Material		Steel backed babbitt	
	Number		5	
Type of Drive	Gear or chain		Chain	
	Crankshaft gear or sprocket material		SINTERED IRON	
	Camshaft gear or sprocket material		Nylon teeth with aluminum hub	
	Timing chain	No. of links	46	
		Width	.625	
		Pitch	.500	

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Engine Displacement	
V8-350 C.I.	
L48	L82

Engine—Valve System

Hydraulic lifters (Std., opt., NA)			Standard	
Valve rotator, type (intake, exhaust)			Exhaust	
Push rods (dia., length, material)			.3125 x 7.72 stl.welding tubing	(a) .3120 x 7.72 stl.welding tu
Rocker ratio			1.50:1	
Operating tappet clearance (indicate hot or cold)	Intake		Zero	
	Exhaust		Zero	
Timing (based on top of ramp points)	Intake	Opens (°BTC)	28°	52°
		Closes (°ABC)	72°	114°
		Duration (deg.)	280°	346°
	Exhaust	Opens (°BBC)	78°	98°
		Closes (°ATC)	30°	62°
		Duration (deg.)	288°	340°
	Valve open overlap (deg.)		58°	114°
Intake	Material		Alloy steel	
	Overall length		4.870-4.889	
	Actual overall head dia		1.935-1.945	2.017-2.023
	Angle of seat & face (deg.)		45° seat/45° face	
	Seat insert material		None	
	Stem diameter		.3410-.3417	
	Stem to guide clearance		.0010-.0027	
	Lift (@ zero lash)		.3900	.4500
	Outer spring press & length	Valve closed (lb @ in.)	76-84 @ 1.70	
		Valve open (lb @ in.)	194-206 @ 1.25	
	Inner spring press & length	Valve closed (lb @ in.)	Spring Damper	
		Valve open (lb @ in.)	Spring Damper	
Exhaust	Material		High alloy steel, aluminized face	
	Overall length		4.910-4.930	4.891-4.910
	Actual overall head dia		1.495-1.505	1.595-1.605
	Angle of seat & face (deg.)		46° seat 45° face	
	Seat insert material		None	
	Stem diameter		.3410-.3417	
	Stem to guide clearance		.0010-.0027	
	Lift (@ zero lash)		.4100	.4600
	Outer spring press. & length	Valve closed (lb @ in.)	76-84 @ 1.61	76-84 @ 1.70
		Valve open (lb @ in.)	194-206 @ 1.16	194-206 @ 1.25
	Inner spring press & length	Valve closed (lb @ in.)	Spring damper	
		Valve open (lb @ in.)	Spring damper	

(a) Steel insert on L82

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Engine Displacement
V8-350 C.I.

Engine — Lubrication System

Type of lubrication (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Splash
	Camshaft bearings	Pressure
	Tappets	Pressure
	Timing gear or chain	Centrifugally oiled from camshaft bearing
	Cylinder walls	Pressure jet cross sprayed
Oil pump type		Gear
Normal oil pressure (lb. @ engine rpm)		32-40 @2000 RPM
Oil press. sending unit (elect. or mech.)		Electric
Type oil intake (floating, stationary)		Stationary
Oil filter system (full flow, part., other)		Full flow
Filter replacement (element, complete)		Complete
Capacity of c/case, less filter-refill (qt.)		4
Oil grade recommended (SAE viscosity and temperature range)		20°F and above-20W-20, 10W-30, 10W-40, 20W-40, 20W-50 0° to 20°F-10W, 5W-30, 10W-30, 10W-40 Below 20°F - 5W-20, 5W-30
Engine service reqmt. (SD, SE, etc.)		SE

Engine — Exhaust system

Type (single, single with cross-over, dual, other)		Dual exhaust, single converter with crossover
Muffler No. & type (reverse flow, straight thru, separate resonator)		Two, reverse flow
Resonator No. & type		None
Exhaust Pipe	Branch O. D., wall thickness	Crossover 2.00 x .071; exhaust to converter 2.50 x .071
	Main O. D., wall thickness	Rear exhaust to crossover 2.50 x .072; crossover to muffler-(2.25 x .072)
	Material	Welded or seamless steel tubing
Tail Pipe	O. D. & wall thickness	2.25 x .062
	Material	Welded or seamless steel tubing

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●) 2/77

Engine Displacement	
V8-350 C.I.	
L48	L82

Engine — Fuel System

(See supplemental page for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger			Carburetor	
Fuel Tank	Refill capacity (U. S. gals.)		17 approximately	
	Filler location		Center of rear deck	
Fuel Pump	Type (elec. or mech.)		Mechanical	
	Locations		Lower right front of engine	
	Pressure range		7.50-9.00 PSI	
Vacuum booster (std., optional, none)			None	
Fuel Filter	Type		Fine mesh plastic strainer in gas tank	
	Locations		and paper filter element in carburetor inlet	
Carburetor	Choke type		Automatic	
	Intake manifold heat control (exhaust or water)		Exhaust	
	Air cleaner type	Standard	Oil wetted paper element	
		Optional		
●	Idle speed (spec. neutral or drive)	Manual	700	800
		Automatic	500	700
	Idle A/F mix.		Not specified	

Carburetor Supplementary Information

Model Usage	Piston Displ.	Transmission	Carburetors Make	Carburetors Model	No. Used and Type	Barrel Size
All Models	350 L48	Manual	Rochester	17057203	One; 4-bbl.	1.38 Prim. 2.25 Sec.
		Automatic		17057202 (17057502)		
	350 L82	Manual	Rochester	17057211	One; 4-bbl.	1.38 Prim. 2.25 Sec.
		Automatic		17057210 (17057510)		

*1800 RPM at pump outlet.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●) 2/77

Engine Displacement	
V8-350 C.I.	
L48	L82

Engine — Cooling System

Type system (pressure, pressure vented, atmospheric, other)			Pressure-vented thru coolant recovery system
Radiator cap relief valve pressure			15± 1 PSI
Circulation thermostat	Type (choke, bypass)		Choke
	Starts to open at (°F)		192°-198°
Water pump	Type (centrifugal, other)		Centrifugal
	GPM ~~1000 pump rpm~~		2000 pump rpm 22.7
	Number of pumps		One
	Drive (V-belt, other)		V-belt
	Bearing type		Permanently lubricated double row ball
By-pass recirculation type (inter., ext.)			Internal
Radiator core type (cross-flow, vertical, cellular, tube and fin, other)			Tube and center Copper-brass crossflow
Cooling system capacity	With heater (qt.)		20.7
	Without heater (qt.)		-
	Opt. equipment-specify (qt.)		21.2
Water jackets full length of cyl (yes, no)			Yes
Water all around cylinder (yes, no)			Yes
Radiator hose	Lower	Number and type (molded, straight)	One, molded
		Inside diameter	1.75
	Upper	Number and type (molded, straight)	One, molded
		Inside diameter	1.50
	By-pass	Number and type (molded, straight)	None
		Inside diameter	None
Fan	Number of blades & spacing		5-staggered
	Diameter		17.50
	Ratio-fan to crankshaft rev.		0.949:1
	Fan cutout type		Thermo-modulated viscous-clutch
	Bearing type		Double row ball
*Drive belts (indicate belt used by letter)	Fan		AB
	Generator or alternator		A
	Water Pump		AB
	Power Steering		C
	Air Conditioning		D
	Air injection		(E)

Note: Items bracketed () are specific to California engines

*Drive Belt Dimensions	A	B	C	D	E	F	G	H	I	J	K
Angle	← 38°-42° →										
Nominal length (SAE)	52.50	32.46	36.00	58.50	32.50						
Width	← .380 →										

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 8/76 Revised (●)

	Engine Displacement	
	V8-350 C.I. Except California	V8-350 C.I. California only

Vehicle Emission Control

Exhaust Emission Control	Type (Air injection, engine modifications, other)		Engine modification		Air injection
	Air Injection Pump	Type	Controlled Combustion system		Semi-articulated vane type
		Displacement	"	"	19.3 cubic inch
		Drive ratio	"	"	1.15:1
		Drive type	"	"	Crankshaft pulley
		Relief valve (type)	"	"	Diverter valve
		Filter (describe)	"	"	Centritugal air cleaner
	Air Injection System	Air distribution (head, manifold, etc.)	"	"	Manifold
		Point of entry	"	"	Exhaust ports
		Injection tube i.d.			.2700
		Check valve type	"	"	Pressure plate type
		Backfire protection (type)	"	"	Diverter valve
	Exhaust Gas Recirculation System	Type (controlled flow, open orifice, other)	Controlled flow		
		Valve type	Vacuum modulated shut-off and metering valve		
		Valve location	Right rear at manifold		
		Control energy source	Carburetor vacuum		
		Exhaust source	Manifold exhaust crossover		
		Exhaust cooler type	None		
		Orifice no. and size	One; .030		
		Point of exhaust injection (spacer, carburetor, manifold, other)	Inlet manifold		
	Catalytic Converter System	Catalyst Type	Platinum - palladium		
		Catalyst Volume	260 cu. in.		
		Substrate type	Alumina		
		Container location	Beneath right front underbody		
	Other	Carburetor Hot air	Thermostatically controlled air cleaner regulates and mixed heated air with incoming cold air to reduce carbon emission		

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Engine Displacement
V-8-350 C.I.

Vehicle Emission Control (Continued)

Crankcase Emission Control	Type (ventilates to atmos., induction system, other)	Standard	Induction system
		Optional	--
	Control Unit	Make and model	AC Spark Plug 6487778
		Location	Left front rocker cover
		Energy source (manifold vacuum, carburetor, other)	Manifold vacuum
		Control method (variable orifice, fixed orifice, other)	Variable orifice
	Complete System	Discharges (to intake manifold, other)	Intake manifold
		Air inlet (breather cap, other)	Carburetor air cleaner
		Flame arrestor (screen, other)	Screen
Evaporative Emission Control	Fuel Tank	Thermal expansion volume (cu. ft.)	Approximately 10% of refill capacity
		Relief pressure (psi) and location	1.1 PSI
		Vacuum relief (psi) and location	.7 PSI
		Vapor-liquid separator type	Integral with fuel tank
		Vapor vented to (crankcase, canister, other)	Canister
			--
	Carburetor	Vapor vented to (crankcase, canister, other)	Internally vented
			--
	Vapor Storage	Storage provision (crankcase, canister, other)	Canister
			--
		Volume (cu. ft.) or capacity (grams)	Approximately 50 grams storage capacity
		Control valve type	Controlled by orifices and carburetor throttle body and throttle blade position.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Engine Displacement
V8-350 C.I.

Electrical — Supply System

Battery	Make and Model		Delco Remy 1980401
	Voltage Rtg & Total Plates		12 volts (3500 watts) 78 plates
	SAE Designation No. and/or capacity		Cold cranking rating 0° -430 amps: -20° -330 amps 100 minutes reserve capacity
	Location		Right side of engine compartment
	Terminal grounded		Negative
Generator or Alternator	Make		Delco-Remy
	Model		1102484
	Type and rating		Diode rectified with integral regulator -42 amps
	Output at engine idle (neutral)		14-22 amps
	Ratio—Gen. to Crls rev.		2.46:1
Regulator	Make		Delco-Remy
	Model		--
	Type		Micro circuit unit; integral with generator
	Cutout relay	Closing voltage @ generator rpm	None
		Reverse current to open	None
	Regulated	Voltage	13.8-14.8 @85°F.
		Current	--
	Voltage test conditions	Temperature	Operating
		Load	3-8 amperes
		Other	None

Electrical — Starting System

Starting Motor	Make			Delco-Remy
	Model			1108775
	Rotation (drive end view)			Clockwise
Motor Drive	Engagement type			Positive shift solenoid
	Pinion engages from (front, rear)			Rear
	Number of teeth	Pinion		9
		Flywheel	Manual	153
			Auto	168
	Flywheel tooth face width		Manual	.4010-.4130
			Auto	.4010-.4130

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Engine Displacement	
V8-350 C.I.	
L48	L82

Electrical — Ignition System — Distributor

Breaker gap (in.)		Not applicable	
Cam angle (deg.)		Not applicable	
Brkr. arm tension (oz.)		Not applicable	
Distributor	Manual	1103246	1103256
	Automatic	1103246 (1103248)	1103256
Timing	Manual	8°@700	12°@800
	Automatic	8°@500 (8°@500)	12°@700

Distributor Model	CENTRIFUGAL ADVANCE Crankshaft Degrees at Engine RPM			VACUUM ADVANCE Crankshaft Deg. at In. of Mercury	
	Start	Intermediate	Maximum	Start	Maximum
1103246	0@1200	12@2000	22@4200	0@4	18@12
1103248	0@1200	12@2000	22@4200	0@4	10@8
1103256	0@1200	13@1600	16@2000	0@4	10@8

Note: Item bracketed () is specific to California

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●) _____

Engine Displacement
V8-350 C.I.

Electrical—Ignition System

Type	Conventional - Std . Opt . N.A		----------
	Transistorized - Std . Opt . N A		Not available
	Other (specify)		High energy ignition system H.E.I.
Coil	Make		Delco-Remy
	Model		Integral with distributor
	Current	Engine stopped	--
		Engine idling	--
Spark Plug	Make		AC spark plug
	Model		R45TS
	Thread (mm)		14
	Tightening torque (lb ft)		25
	Gap		.045
Cable	Conductor type		Fiberglass core impregnated with electrical conducting mater
	Insulation type		Rubber with silicone jacket
	Spark plug protector		Silicone

Electrical—Suppression

Locations & type	Non-metallic high tension ignition cables

Electrical—Instruments and Equipment

Speed-ometer	Type	Circular dial with pointer
	Trip odometer (std opt . N. A.)	Standard
EGR maintenance indicator		NA
Charge Indicator	Type	Voltmeter
	Warning divice	NA
Temperature Indicator	Type	Electric gage
	Warning device	NA
Oil pressure Indicator	Type	Bourdon tube gage
	Warning device	NA
Fuel Indicator	Type	Electric gage
	Warning device	NA
Wind-shield Wiper	Type - standard	Electric, two-speed
	Type - optional	None
	Blade length	16.0
	Swept area	667.0
Wind-shield Washer	Type - standard	Push-button - manual
	Type - optional	None
	Fluid level indicator	NA
Horn	Type	Vibrator
	Number used	Two
	Current draw (A) per horn	4.5-6.5 @12.5V
Other		Tachometer/anti-theft alarm; parking brake warning light and brake failure warni light; restraint system warning light and buzzer.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●) _____

	Engine Displacement	
	V8-350 C.I.	
	L48	L82

Drive Units—Clutch (Manual Transmission)

Make & type		Chevrolet, single, dry-disc Semi-centrifugal		
Type pressure plate springs		Circular plate diaphragm, bent finger design		
Total spring load (lb.)		2100-2300		2450-2750
No. of clutch driven discs		One		
Clutch facing	Material	Woven type asbestos		
	Manufacturer	Chevrolet		
	Part Number	6262868		3682736
	Rivets/Plate	36		40
	Rivet size	.184X.208		.183X.207
	Outside & inside dia	10.40X6.50		11.0X6.50
	Total eff. area (sq. in.)	101.5		123.70
	Thickness	.135		.140
	Engagement cushioning method	Flat spring steel between friction rings		
Release bearing	Type & method of lubrication	Single row ball, packed and sealed		
Torsional damping	Methods: springs, friction material	Coil springs		

Drive Units—Transmissions

Manual 3-speed (std., opt., N.A.)	Not available
Manual 4-speed (std., opt., N.A.)	Standard
Automatic (std., opt., N.A.)	Optional

Drive Units — Manual Trans.

Number of forward speeds			4	4	4
Transmission ratios	In first		2.64	2.64	2.43
	In second		1.75	1.75	1.61
	In third		1.34	1.34	1.23
	In fourth		1.00	1.00	1.00
	In reverse		2.55	2.55	2.35
Synchronous meshing, specify gears			All forward gears		
Shift lever location			Floor mounted with console		
Lubricant	Capacity (pt.)		3		
	Type recommended		Meeting Military Specs. MIL-L-2105B		
	SAE viscosity number	Summer	SAE 80		
		Winter	SAE 80		
		Extreme cold	SAE 80		

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

	Engine Displacement	
	V8-350 C.I.	
	RPO L48	RPO L82

Drive Units—Automatic Transmission

Trade name		Turbo Hydra-matic	
Type (describe)		3-Speed torque converter	
Selector location		Lever (floor mounted)	
Gear Ratios	P	Park	Park
	R	1.94	2.08
	N	Neutral	Neutral
	D	2.52-1.52-1.00	2.48-1.48-1.00
	L2	2.52-1.52	2.48-1.48
	L1	2.52	2.48
Max. upshift speed - drive range		78	84
Max. kickdown speed - drive range		75	87
Torque Converter	Number of elements	3	3
	Max. ratio at stall	2.00	2.10
	Type of cooling (air, liquid)	Water	Water
	Nominal diameter	11.75	12.20
Lubricant	Capacity - refill (pt.)	8	9
	Type recommended	Dexron II	
Special transmission features			

Drive Units—Axle

Type (front, rear)		Rear	
Description		Overhung pinion gear	
Limited Slip differential, type		Disc clutches	
Drive Pinion Offset		1.50	
No. of differential pinions		Two	
Pinion adjustment (shim, other)		None	
Pinion bearing adj (shim, other)		Shim	
Wheel bearing type		Taper roller	
Lubricant	Capacity (pt.)	3.75	
	Type recommended	Meeting Military Specs MIL-L-2105B	
	SAE viscosity number — Summer	80W-90	
	SAE viscosity number — Winter	80W-90	
	SAE viscosity number — Extreme cold	80W-90	

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

Axle ratio		3.08	3.36	3.55	3.70
No. of teeth	Pinion	13	11	9	10
	Ring gear	40	37	32	37
Ring Gear O.D.		8.375			

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

			Engine Displacement	
			V8-350 Cu. In.	
			L48	L82
Drive Units—Propeller Shaft				
Number used			One	
Type (straight tube, tube-in-tube, internal-external damper, etc.)			Straight tube	
Outer diam x length* x wall thickness	Manual 3-speed trans.		Not available	
	Manual 4-speed trans.		2.50 x 29.50 x 0.083	
	Automatic transmission		2.50 x 29.81 x 0.083	2.50 x 29.50 x 0.083
Intermediate bearing	Type (plain, anti-friction)		None	
	Lubrication (fitting, prepack)		--	
Slip Yoke	Type		Yoke	
	Number of teeth		32	
	Spline O D		1.1750	
Universal joints	Make and Mfg. No		Chevrolet 133	
	Number used		Two	
	Type (ball and trunnion, cross)		Cross	
	Rear attach (u-bolt, clamp, etc.)		Strap & Bolt	
	Bearing	Type (plain, anti-friction)	Anti-friction	
		Lubric (fitting, prepack)	Pre-pack	
Drive taken through (torque tube or arms, springs)			Torque control arms	
Torque taken through (torque tube or arms, springs)			Torque control arms	

*Center to center of universal joints, or to centerline of rear attachment.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●) _____

Body Type And/Or Engine Displacement, Etc.

Drive Units — Tires And Wheels (Standard)

TIRES	Size, load range, ply		GR70 x 15B (2 + 2)
	Type (bias, radial, etc.)		Steel belted radial blackwall
	Inflation pressure (cold) for recommended max. vehicle load	Front *	20
		Rear *	20
	Rev./mile @ 45 mph		760
WHEELS	Type & material		Short spoke spider; steel
	Rim (size & flange type)		15 x 8
	Wheel offset		N-0.50
	Attachment	Type (bolt or stud)	Stud
		Circle diameter	4.75
		Number & size	5 hex nuts 7/16-20 UNF 2-B
	Spare wheel (same or other)		Same

Drive Units — Tires And Wheels (Optional)

Size, load range, ply	Same as above but with white lettering
Type (bias, radial, etc.)	
Wheel type & material	Cast aluminum
Rim (size, flange type, and offset)	15 x 8
Size, load range, ply	
Type (bias, radial, etc.)	
Wheel type & material	
Rim (size, flange type, and offset)	
Size, load range, ply	
Type (bias, radial, etc.)	
Wheel type & material	
Rim (size, flange type, and offset)	
Size, load range, ply	
Type (bias, radial, etc.)	
Wheel type & material	
Rim (size, flange type, and offset)	
Size, load range, ply	
Type (bias, radial, etc.)	
Wheel type & material	
Rim (size, flange type, and offset)	

Brakes — Parking

Type of control		Grip handle control
Location of control		Between seats
Operates on		Rear brake drums inboard of disc rotors on axle shafts.
If separate from service brakes	Type (internal or external)	Internal
	Drum diameter	6.50
	Lining size (length x width x thickness)	6.78 x 1.25 x 0.175

*Full rated pressure shown; selective tire pressures are contingent on weight of vehicle.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●) _____

Body Type And/Or Engine Displacement

Brakes — Service

Brake Type (std., opt., N.A.)	Drum	Front		--
		Rear		--
	Disc	Front		Standard
		Rear		Standard
Self adjusting (std., opt., N.A.)				Standard
Special Valving	Type (proportion, delay, metering, other)			Metering
Power Brake (std., opt., N.A.)				Standard
Booster Type (remote, integral, etc.)				Internal
Effective area (sq. in.)*				74.92
Gross lining area (sq. in.)**				86.30
Swept area (sq. in.)***				498.3
Drum	Diameter (nominal)	Front		--
		Rear		--
	Type and material			--
Rotor	Outer working diameter			11.75
	Inner working diameter			8.0
	Thickness			1.25
	Material & type (vented/solid)			Cast iron, vented
Wheel cylinder bore	Front			1.875
	Rear			1.375
Master Cylinder	Bore			1.125 power
	Stroke			1.139 power
Pedal arc ratio				3.51:1 power
Line pressure at 100 lb. pedal load				
Shoe Clearance	Front			Self adjusting
	Rear			Self adjusting
Anti-skid device type (std., opt., N.A.)				Not available
Brake lining	Bonded or riveted, rivets/seg.			Riveted
	Rivet size			.143 x .250
	Manufacturer			Delco Moraine
	Part number			5470945
	Front Wheel	Material		Molded asbestos
		Size (length x width x thickness)	Prim. or outboard	5.40 x 1.93 x 0.41
			Second. or inboard	5.40 x 1.93 x 0.41
		Segments per shoe		One
		Shoe thickness		.500
	Rear Wheel	Material		Molded asbestos
		Size (length x width x thickness)	Prim. or outboard	5.40 x 1.93 x 0.41
			Second. or inboard	5.40 x 1.93 x 0.41
		Segments per shoe		One
		Shoe thickness		.500

* Excludes rivet holes, grooves, chamfers, etc.

** Includes rivet holes, grooves, chamfers, etc.

*** Total swept area for four brakes (Drum brake: Widest lining contact width for each brake x its contact circumference.) (Disc brake: Square of Outer Working Dia. minus square of Inner Working Dia. multiplied by π/2 for each brake.)

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Steering

Manual (std., opt., NA)				
Power (std., opt., NA)				Standard-energy absorbing steering column
Adjustable steering wheel (tilt, swing, other)		Type and description		Tilt and telescopic steering sheel; 2 " adjustment
		(std., opt., NA)		Optional
Wheel diameter		Manual		
		Power		14.75 x 14.25
Turning diameter (feet)	Outside front	Wall to wall (l. & r.)		38.6
		Curb to curb (l. & r.)		37.0
	Inside rear	Wall to wall (l. & r.)		11.43
		Curb to curb (l. & r.)		10.51
Manual	Gear	Type		
		Make		
		Ratios	Gear	
			Overall	
	No. wheel turns (stop to stop)			
Power	Type (coaxial, linkage, etc.)			Linkage, power pump assisted
	Make			Saginaw Steering
	Gear	Type		Semi-reversible, recirculating ball nut
		Ratios	Gear	16.1:1
			Overall	17.6:1
	Pump driven by			Crankshaft pulley
	No. wheel turns (stop to stop)			2.92
Linkage	Type			Parallelogram
	Location (front or rear of wheels, other)			Rear
	Drag link (trans. or longit.)			None
	Tie rods (one or two)			Two
Steering Axis	Inclination at camber (deg.)			7.68 @ 5° camber
	Bearings (type)	Upper		Ball stud with non-metallic bearing surface
		Lower		Ball stud with non-metallic bearing surface
		Thrust		None
Whl. Align. (range at curb wt. & preferred)	Caster (deg.)			P2.405± 1/2
	Camber (deg.)			P0.709± 1/2
	Toe-in (outside track inches)			0± 1/32
Steering spindle & joint type				Steering knuckle with spherical joint
Wheel Spindle	Diameter	Inner bearing		1.3743-1.3748
		Outer bearing		0.8428-0.8433
	Thread size			27/32-20 UNEF (modified)
	Bearing type			Taper roller

(a) Rear wheel alignment; Camber 0.874 ± 1/4
Toe-in 0± 1/32

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Body Type And/Or Engine Displacement

Suspension — General

(See Supplement page for details on Air Suspension)

Provision for car leveling		Front stabilizer shaft
Provision for brake dip control		Mounting angle at front upper control arm
Provision for acc. squat control		None
Special provisions for car jacking		Front: 5" forward of front door opening, under frame Rear: 3" forward of wheel opening, under frame
Shock absorber front & rear	Type	Direct double acting hydraulic
	Make	Delco
	Piston dia.	1.00
Other special features		

Suspension — Front

Type and description		Independent SLA with coil springs
Travel	Full Jounce	4.76
	Full Rebound	2.94
Spring	Type (coil, leaf, other)	Coil
	Material	Steel alloy
	Size (coil design height & I.D., bar length x dia.)	10.49 x 3.80; 133.83 x .609
	Spring rate (lb. per in.)	320 (b)
	Rate at wheel (lb. per in.)	117.6 (b)
Stabilizer	Type (link, linkless, frameless)	Link
	Material & bar diameter	HR steel 0.875

Suspension — Rear

Type and description			(a)
Drive and torque taken through			Torque control arms
Travel	Full Jounce		3.70
	Full Rebound		2.80
Spring	Type (coil, leaf, other)		Multi-leaf
	Material		Chrome carbon steel
	Size (length x width, coil design height & I.D., bar length & dia.)		48.60 x 2.25
	Spring rate (lb. per in.)		196 (b)
	Rate at wheel (lb. per in.)		151.4 (b)
	Mounting insulation type		Rubber mounted at differential, vertical loading only at shac
	If leaf	No. of leaves	Ten
		Shackle (comp. or tens.)	Tension
Stabilizer	Type (link, linkless, frameless)		Link (Optional)
	Material & bar diameter		HR steel 0.440
Track bar type			

(a) Full independent with fixed differential; transverse multi-leaf spring, lateral struts and universally jointed axle shafts.

(b) For base equipped model, springs are computer selected by size and rate according to vehicle weight including optional equipment.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (•)

Body Type

Frame

Type and description (Separate frame, unitized frame, partially - unitized frame)	All welded, full length, ladder constructed frame with (5) crossmembers.

Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)		Lacquer
Hood counterbalanced (yes, no)		No
Hood release control (internal, external)		Internal
Vehicle indent. No. location		Left-hand windshield pillar
Theft protection - type		Lock mounted on steering column; locks steering wheel, @ and ignition anti-theft.
Vent window control method (crank, friction pivot, power)	Front	None
	Rear	--
Seat cushion type	Front	Bucket, polyurethane padding
	Rear	--
	3rd seat	--
Seat back type	Front	Bucket, polyurethane padding
	Rear	--
	3rd seat	--
Windshield glass type		Curved-laminated plate-tinted
Side glass type		Curved-laminated plate-tinted
Backlight glass type		Flat, tempered plate, tinted
Windshield glass exposed surface area		977.4
Side glass exposed surface area		800.8
Backlight glass exposed surface area		392.5
Total glass exposed surface area		2170.7

@Anti-theft alarm in left front fender, key operated lock arms, to lock doors and hood.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year 1977 Issued 9/76 Revised (●)

Body Type
SPORT COUPE

Convenience Equipment

Power windows	Side windows	Optional
	Vent windows	NA
	Backlight or tailgate	NA
Power seats (specify type as well as availability)		NA
Reclining front seat back (R-L or both)		NA
Radios (specify type as well as availability)		Optional - AM-FM Push-button, AM-FM stereophonic AM-FM with Stereophonic tape player
Rear seat speaker		NA
Power antenna		NA
Clock		Standard
Air conditioner (specify type and availability)		Optional-Four-Season (Manual control)
Speed warning device		NA
Speed control device		Optional
Ignition lock lamp		NA
Dome lamp		Standard
Glove compartment lamp		NA
Luggage compartment lamp		NA
Underhood lamp		Optional
Courtesy lamp		Standard
Map lamp		NA
Cornering light lamp		NA
Rear window defroster electrically heated		Optional
Rear window defogger		NA

Lamp Height And Spacing*

Height above ground to center of bulb or marker	Headlamp (H125)	Highest**	26.2
		Lowest	26.1
	Tail (H126)	Highest	25.7
		Lowest	25.7
	Sidemarker	Front	17.9
		Rear	19.2
Distance from C/L of car to center of bulb	Headlamp	Inside	11.3
		Outside**	18.0
	Tail	Inside	14.3
		Outside	21.7
	Directional	Front	22.5
		Rear	21.7

*Measured with passenger load and trunk/cargo load specified in Car and Body Dimension section.

**If single headlamps are used enter here.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE

Model Year 1977 Issued 9/76 Revised (●) _____

Vehicle Weights

Model	CURB WEIGHT * (Pounds)			PASS. WEIGHT DISTRIBUTION				SHIPPING WEIGHT ** (Pounds)
				Pass. In Front		Pass In Rear		
	Front	Rear	Total	Front	Rear	Front	Rear	
2-Dr. Sport Coupe 1YZ37	1690	1844	3534	28.0	72.0	-	-	3448

* Reference - SAE J1100, Passenger Car Dimension Definitions, Pg. 1, Base Curb Weight.

** Shipping weight definition - Weight of basic vehicle with regular equipment, including grease, oil, (3) gallons of gasoline and engine coolant to capacity.

MVMA Specifications Form
Passenger Car

Car Line CORVETTE

Model Year 1977 Issued 9/76 Revised (●)

Optional Equipment Weights

Equipment Differential Weights	WEIGHT (Pounds) Front	Rear	Total	Remarks
Air Conditioning	+65	+16	+81	
Power Windows	+ 4	+ 3	+ 7	
Gymkhana Susp. Frt.&Rear	+ 3	+ 3	+ 6	
Radio AM/FM Stereo	+11	+ 7	+18	
Radio AM/FM	+ 7	+ 7	+14	
Tilt & Telescopic Strg. Wheel	+ 3	+ 0	+ 3	
Heavy Duty Battery	+ 0	+ 1	+ 1	
350 Cu.In. V8-L82	+ 4	+ 0	+ 4	
Turbo Hydra-matic Trans.	+21	+13	+34	Used with L48
Turbo Hydra-matic Trans.	+37	+17	+54	Used with L82

MVMA Specifications Form
Passenger Car

Car Line CORVETTE
Model Year ~~1977~~ Issued 9/76 Revised (●)

Body Type

Vehicle Fiducial Marks

Fiducial Mark Number *

Define Coordinate Location

Front

X - Fiducial Mark to Centerline of Car - Front,
Width measurement made from centerline of car to fiducial mark located on top of the front seat adjuster mounting bolt.

Y - Fiducial Mark to Vertical Body Zero Line - Front,
Measured horizontally from the body zero line to the front fiducial mark located on top of the front seat adjuster mounting bolt.

Z - Fiducial Mark to Horizontal Body Zero Line - Front,
Measured vertically from body zero line to the front fiducial mark located on top of the front seat adjuster mounting bolt.

Rear

There is no rear fiducial point used on the Corvette. A fiducial area replaces, all functions provided by, the rear fiducial point.

Fiducial area - A surface parallel to the horizontal body zero, in this case it is the top surface of the rocker sill as shown on the seating arrangement drawing.

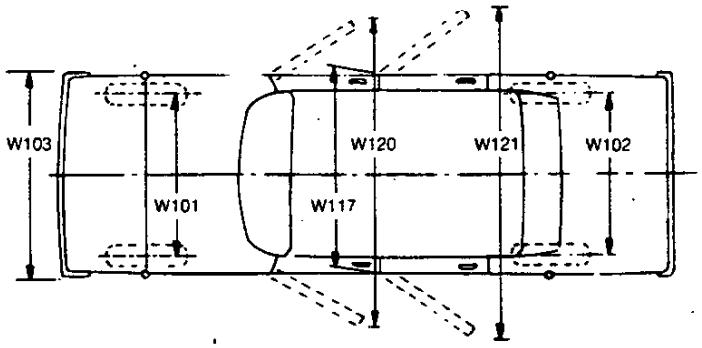
Fiducial Mark Number	Coordinate Location of Fiducial Mark				Fiducial Mark to Ground at Curb
	X	Y	Z		
Front	27.02	30.96	2.13	Coupe	9.86
			Z		
			12.62	Coupe	19.96
Rear					

* Reference — SAE Recommended Practice, J182

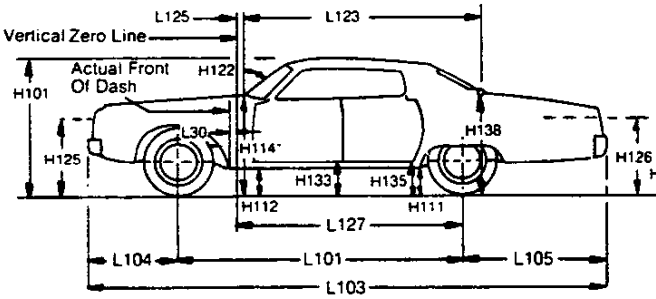
MVMA Specifications Form
Passenger Car

Exterior Car And Body Dimensions — Key Sheet

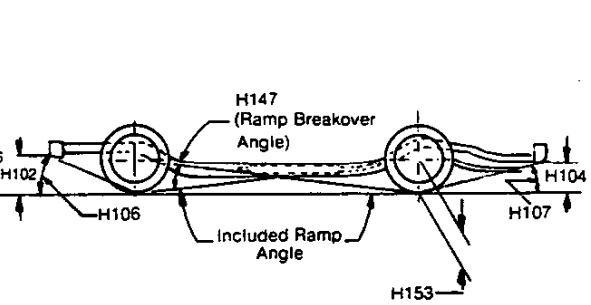
Width



Length & Height

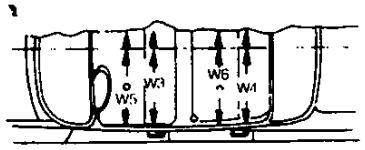


Ground Clearance

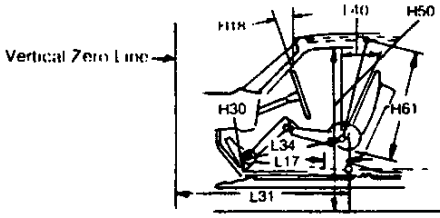


Interior Car And Body Dimensions — Key Sheet

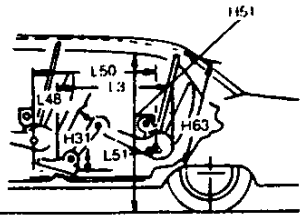
Width



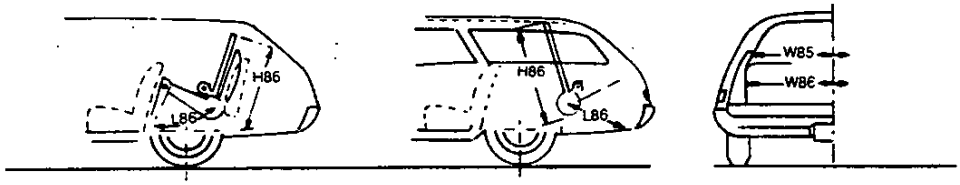
Front Compt.



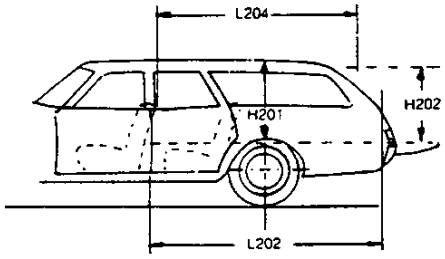
Rear Compt.



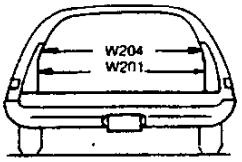
Third Seat

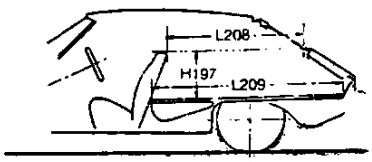


Cargo Space



Station Wagon





Hatchback

MVMA Specifications Form
Passenger Car

Exterior Car And Body Dimensions — Key Sheet
Dimension Definitions

Width Dimensions

W101 WHEEL TREAD — FRONT. Measured at centerline of tires, with nominal camber, at ground.

W102 WHEEL TREAD — REAR. Measured at centerline of tires at ground.

W103 MAXIMUM OVERALL CAR WIDTH. Include bumpers, moldings, or sheet metal protrusions. Measured to outside of metal.

W117 MAXIMUM BODY WIDTH AT NO. 2 PILLAR. Measured across body at No. 2 pillar, excluding hardware and applied moldings.

W120 MAXIMUM OVERALL CAR WIDTH, FRONT DOORS OPEN *is measured to outside of sheet metal with front doors in* maximum hold-open position.

W121 MAXIMUM OVERALL CAR WIDTH, REAR DOORS OPEN is measured in same manner as W120.

Length Dimensions

L30 VERTICAL ZERO LINE TO ACTUAL FRONT OF DASH. If actual Front of Dash is to the rear of Body Zero Line, it *is identified by a minus (—) sign.*

L101 WHEELBASE.

L103 *OVERALL LENGTH. Include bumper guards if standard* equipment.

L104 OVERHANG — FRONT. Measured from C/L of front wheels to front of car, including bumper guards if standard equipment

L105 OVERHANG — REAR. Measured from C/L of rear wheels to rear of car, including bumper guards if standard equipment

L123 BODY UPPER STRUCTURE LENGTH AT CAR CENTERLINE The horizontal dimension from the Cowl Point to the Deck Point.

L127 VERTICAL ZERO LINE TO CENTERLINE OF REAR WHEELS. A horizontal dimension.

L125 *VERTICAL ZERO LINE TO WINDSHIELD COWL POINT. The* horizontal dimension from the vertical zero line to the theoretical intersection of extended windshield glass plane and normal cowl surface.

Height Dimensions

H101 OVERALL HEIGHT — DESIGN. Measured with the vehicle *in Manufacturer's Design Weight attitude.*

H114 *COWL POINT TO GROUND. Measured at vehicle center*line.

H138 DECK POINT TO GROUND. Measured at vehicle centerline.

H112 ROCKER PANEL TO GROUND — FRONT. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured to the outside of sheet metal at foremost *point of rocker panel.*

H133 BOTTOM OF DOOR TO GROUND, CLOSED — FRONT is the same point on the door as H132 dimension, with door closed.

H111 ROCKER PANEL TO GROUND — REAR. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured to the outside of sheet metal at front of rear wheel opening.

H135 BOTTOM OF DOOR TO GROUND, CLOSED — REAR is measured in same manner as H133.

H122 WINDSHIELD SLOPE ANGLE. The angle between a ver*tical line and the windshield surface at car centerline.* On compound-curved windshields the chord of the arc is used and limited to that section of the windshield comprehended by an 18-inch chord.

H125 HEADLAMP CENTERLINE TO GROUND is measured verti*cally to the center of the upper lamp.*

H126 *TAILLAMP CENTERLINE is measured vertically from* ground to the centerline of the upper bulb.

Ground Clearance Dimensions

H102 BUMPER TO GROUND — FRONT. Minimum dimension, includes bumper guards.

H104 BUMPER TO GROUND — REAR. Minimum dimension, includes bumper guards.

H106 ANGLE OF APPROACH. The angle between ground and a line tangent to the front tire static loaded radius arc and the first point of interference, i.e., bumper, guard, gravel deflector, fender or other component, excluding license plate. This dimension may be determined graphically for *reporting purposes.*

H107 ANGLE OF DEPARTURE. *The angle between ground and* a line tangent to the rear tire static loaded radius arc and the first point of interference, i.e., bumper, guard, gravel deflector, tail pipe, fender or other component, excluding license plate. This dimension may be determined graphically for reporting purposes.

H147 RAMP BREAKOVER ANGLE. The supplement of included ramp angle (180° minus included ramp angle) over which *car can pass without interference; measured with car sitting* on a level surface, using lines tangent to arcs of front and rear static loaded radii and intersecting at point on underside of car which defines the smallest angle.

H153 REAR AXLE DIFFERENTIAL SYSTEM TO GROUND is a *minimum clearance.*

H156 MINIMUM RUNNING GROUND CLEARANCE. *Location of* measurement on the car is to be clearly recorded.

MVMA Specifications Form
Passenger Car

Interior Car And Body Dimensions — Key Sheet
Dimension Definitions

Front Compartment Dimensions

L31 H POINT TO VERTICAL ZERO LINE — FRONT is a horizontal dimension.

H61 EFFECTIVE HEAD ROOM — FRONT. The dimension from H Point to the headlining, plus a constant of 4.0 inches, measured along a line 8° to rear of vertical.

H75 EFFECTIVE T POINT HEADROOM — FRONT. The arc dimension from the T Point to the headlining plus 30 inches.

L34 MAXIMUM EFFECTIVE LEG ROOM — ACCELERATOR. Measured along a diagonal line from the Manikin ankle pivot center to the H Point plus a constant of 10.0 inches. For treadle type accelerator pedals, the leg room is measured with the Manikin's right foot on the accelerator pedal and the Manikin Heel Point at Accelerator Heel Point. All other types of accelerator pedals will be measured with the Manikin foot angle set at 87° and the shoe touching the pedal.

H30 H POINT TO HEEL POINT — FRONT. The vertical dimension from the H Point to the Accelerator Heel Point.

L17 H POINT TRAVEL. The horizontal dimension between the H Point in the most forward and rearward seat positions.

W3 SHOULDER ROOM—FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the H-point—front within the belt line to 10 inches above the H-point—front.

W5 HIP ROOM—FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the H-point—front within 1.0 inches below and 3.0 inches above the H-point height and 3.0 inches fore and aft of the H-point.

H50 UPPER BODY OPENING TO GROUND — FRONT. The vertical dimension from a point on the trimmed body opening to the ground, measured at the H Point station.

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

L40 BACK ANGLE — FRONT. The angle measured between a vertical line through the H-Point-Front and the torso line.

Rear Compartment Dimensions

L50 H POINT COUPLE DISTANCE. The horizontal dimension from the front seat H Point to the rear seat H Point.

H63 EFFECTIVE HEAD ROOM — REAR. The dimension from the H Point to the headlining, plus a constant of 4.0 inches, measured along a line 8° to rear of vertical.

H76 EFFECTIVE T POINT HEADROOM — REAR. Measured in the same manner as H75.

L51 MINIMUM EFFECTIVE LEG ROOM — REAR. Measured along a diagonal line from the ankle pivot center to the H Point plus a constant of 10.0 inches, with the foot positioned to the nearest interference between the seat structure and toe, instep or lower leg.

H31 H POINT TO HEEL POINT — REAR. The vertical dimension from the H Point to the Manikin Heel Point on the depressed floor covering.

L48 KNEE CLEARANCE. The minimum dimension measured from the knee pivot center to the back of front seatback minus 2.0 inches.

L3 REAR COMPARTMENT ROOM. The horizontal dimension from the back of front seat to front of rear seat back at height tangent to the top of rear seat cushion.

W4 SHOULDER ROOM—SECOND. The minimum dimension measured laterally between trimmed surfaces on the "X" plane through the H-point—second within 10.0-16.0 inches above the H-point—second.

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

H51 UPPER BODY OPENING TO GROUND — REAR. The vertical dimension from a point on the trimmed body opening to the ground, measured 13.0 inches forward of the H Point.

Luggage Compartment Dimensions

V1 LUGGAGE CAPACITY — USABLE. The total luggage compartment luggage capacity in cubic feet with the tire and tools in place.

H195 LIFTOVER HEIGHT. Vertical dimension from the highest point on the luggage compartment lower opening to ground, excluding corner radii.

Station Wagon — Third Seat Dimensions

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

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

L86 EFFECTIVE LEG ROOM — THIRD SEAT. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. With rear-facing third seat, foot is positioned in foot well or to nearest interference with rear end or rear closure.

H86 EFFECTIVE HEAD ROOM — THIRD SEAT. The dimension from H Point to the headlining, plus a constant of 4.0 inches. Measured along a line 8° to rear of vertical.

H89 EFFECTIVE T POINT HEADROOM — THIRD SEAT. Measured in the same manner as H75.

MVMA Specifications Form
Passenger Car

Interior Car And Body Dimensions — Key Sheet
Dimension Definitions

Station Wagon — Cargo Space Dimensions

L202 CARGO LENGTH AT FLOOR — FRONT SEAT. The horizontal dimension, measured at the floor level from the rear of the front seat back to the normal inside limiting interference on the tailgate, on the car centerline.

L204 CARGO LENGTH AT BELT — FRONT SEAT. The horizontal dimension measured from the top rear of front seat back to a vertical extension line from the normal inside limiting interference at the top of the tailgate, on the car centerline.

W201 CARGO WIDTH — WHEELHOUSE. The minimum horizontal dimension, measured between wheelhousings at floor level.

W204 OPENING WIDTH AT BELT. The minimum horizontal dimension, measured between the nearest normal inside limiting interferences of the rear opening at the top of the tailgate.

H201 MAXIMUM CARGO HEIGHT. The maximum vertical dimension, measured from the top of the floor covering to the headlining, on the car centerline.

H202 REAR OPENING HEIGHT. The vertical dimension measured from the top of the floor covering to the normal inside limiting interference at the top of the rear opening, on the car centerline, with both tail and liftgates fully open.

V2 CARGO VOLUME INDEX BEHIND FRONT SEAT. The total volume in cubic feet above the normal load floor and behind the front seat with the liftgate and tailgate closed.

$$\frac{W4 \times L204 \times H201}{1728}$$

Hatch Back — Cargo Space Dimensions

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

H197 FRONT SEAT BACK TO LOAD FLOOR HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seat back to the undepressed floor covering.

L208 CARGO LENGTH AT FRONT SEAT BACK HEIGHT. The horizontal dimension measured from the top rear of front seat back to the inside limiting interference of the hatch back door on the car centerline.

L209 CARGO LENGTH AT FLOOR — FRONT SEAT. The horizontal dimension measured at floor level from the rear of the front seat back to the normal limiting interference of the hatch back door on the car centerline.

V3 HATCH BACK — CARGO INDEX VOLUME. Hatch back cargo index volume is to be determined by the following formula, and expressed in terms of cubic feet.

$$\frac{\frac{L208 + L209}{2} \times W4 \times H197}{1728}$$

MVMA Specifications Form
Passenger Car

Index

MVMA Specifications Form
Passenger Car

Car Line _____

Model Year _____ Issued _____ Revised (●) _____

1977 CORVETTE

Production: 49,213 coupes

1977 NUMBERS

Vehicle: 1Z37L7S400001 through 1Z37L7S449213
- Fifth digit varies as follows: L=350ci, 180hp
  X=350ci, 210hp

Suffix:

CHD: 350ci, 180hp, at, ce	CLB: 350ci, 180hp, at, ha
CKD: 350ci, 180hp, at, ha	CLC: 350ci, 180hp, at, ce
CKZ: 350ci, 180hp, mt	CLD: 350ci, 210hp, mt
CLA: 350ci, 180hp, at	CLF: 350ci, 210hp, at

Block: 3970010: 350ci, 180hp, 210hp

Head: 333882: 350ci, 180hp, 210hp

Carburetor: Rochester Q-jet #17057202: 350ci, 180hp, at
Rochester Q-jet #17057203: 350ci, 180hp, mt
Rochester Q-jet #17057204: 350ci, 180hp, at, ac
Rochester Q-jet #17057210: 350ci, 210hp, at
Rochester Q-jet #17057211: 350ci, 210hp, mt
Rochester Q-jet #17057228: 350ci, 210hp, at, ac
Rochester Q-jet #17057502: 350ci, 180hp, at, ce
Rochester Q-jet #17057504: 350ci, 180hp, at, ac, ce
Rochester Q-jet #17057510: 350ci, 210hp, at, uu
Rochester Q-jet #17057582: 350ci, 180hp, at, ha
Rochester Q-jet #17057584: 350ci, 180hp, at, ac, ha

Distributor: 1103246: 350ci, 180hp
1103248: 350ci, 180hp, at, ce
1103256: 350ci, 210hp

Alternator: 1102474: ac, ep
1102484: All without ac
1102908: ac or rd
1102909: ac or rd

Ending Vehicle:

Aug 76: 02287	Jan 77: 21118	May 77: 37029
Sep 76: 06337	Feb 77: 24662	Jun 77: 41233
Nov 76: 14216	Mar 77: 29041	Jul 77: 45179
Dec 76: 17551	Apr 77: 33057	Aug 77: 49213

Abbreviations: ac=air conditioning, at=automatic transmission, ce=california emissions, ci=cubic inch, ep=early production, ha=high altitude, hp=horsepower, mt=manual transmission, rd=rear defogger.

1977 FACTS

- A new console for 1977 held heater and air conditioning controls and accepted standard Delco radios due to the console's increased depth. A new steering column positioned the steering wheel two inches closer to the instrument panel to provide more of an "arms out" driving position and easier entry and exit.
- The V54 rack was designed to hold the T-top panels, permitting use of the full luggage compartment when panels were removed.
- Early 1977 option listings contained CC1 glass roof panels, but these were never available during 1977 due to a marketing exclusivity dispute between Chevrolet and the panel vendor. Chevrolet released its own glass panels in 1978; the vendor sold their panels in the aftermarket under the trade name "Moon Roofs."
- Effective with #1Z37X7S427373, the alarm activator was moved from the driver-side fender to the driver-side door lock.
- New option K30 speed control required automatic transmission.
- Leather seats were standard for the first time in 1977, but a cloth-leather combination could be substituted at no cost.
- The headlight dimmer and windshield wiper/washer controls were located on steering column stalks in 1977 models.

1977 OPTIONS

RPO #	DESCRIPTION	QTY	RETAIL $
1YZ37	Base Corvette Sport Coupe	49,213	$8,647.65
A31	Power Windows	44,341	116.00
B32	Color Keyed Floor Mats	36,763	22.00
C49	Rear Window Defogger	30,411	84.00
C60	Air Conditioning	45,249	553.00
D35	Sport Mirrors	20,206	36.00
FE7	Gymkhana Suspension	7,269	38.00
G95	Optional Rear Axle Ratios	972	14.00
K30	Speed Control	29,161	88.00
L82	350ci, 210hp Engine	6,148	495.00
M21	4-Speed Manual Trans, close ratio	2,060	0.00
M40	Turbo Hydra-Matic Automatic Transmission	41,231	0.00
NA6	High Altitude Emission Equipment	—	22.00
N37	Tilt-Telescopic Steering Column	46,487	165.00
QRZ	White Letter Steel Belted Tires, GR70x15	46,227	57.00
UA1	Heavy Duty Battery	32,882	17.00
U58	AM-FM Radio, stereo	18,483	281.00
U69	AM-FM Radio	4,700	187.00
UM2	AM-FM Radio, stereo with 8-track tape	24,603	414.00
V54	Luggage and Roof Panel Rack	14,160	73.00
YF5	California Emission Certification	—	70.00
YJ8	Aluminum Wheels (4)	12,646	321.00
ZN1	Trailer Package	289	83.00
ZX2	Convenience Group	40,872	22.00

• A 350ci, 180hp engine, 4-speed wide-ratio manual transmission, T-tops, and leather interior trim were included in the base price.
• RPO ZX2 convenience group included dome light delay, headlight warning buzzer, underhood light, low fuel warning light, interior courtesy lights and right side visor mirror.
• RPO FE7 suspension included stiffer front sway bar and stiffer springs. There were no engine or transmission order restrictions with FE7.
• RPO M40 was no cost with the base 350ci, 180hp engine, but cost $146 with optional L82 engine. M21 was no cost but required optional L82.
• The only engine-transmission combination available in California was the base 350ci, 180hp engine with M40 automatic transmission.
• RPO NA6 high attitude emission equipment was required for +4000ft; available only with the base 350ci, 180hp engine and M40 transmision.

1977 COLORS

CODE	EXTERIOR	QTY	WHEELS	INTERIORS
10	Classic White	9,408	Silver	B-Bk-Br-Bu-R-Sg-W
13	Silver	5,518	Silver	B-Bk-R-Sg-W
19	Black	6,070	Silver	B-Bu-R-Sg-W
26	Corvette Light Blue	5,967	Silver	Bk-Sg-W
28	Corvette Dark Blue	4,065	Silver	B-Bk-Bu-Sg-W
41	Corvette Chartreuse	1	Silver	Bk
52	Corvette Yellow	71	Silver	Bk-Br
56	Corvette Bright Yellow	1,942	Silver	Bk-Br
66	Corvette Orange	4,012	Silver	Bk-Br-Bu
80	Corvette Tan	4,588	Silver	Bk-Br-Bu-R-W
72	Medium Red	4,057	Silver	Bk-Bu-R-Sg-W
83	Corvette Dark Red	3,434	Silver	Bk-Bu-Sg

• Suggested interiors shown. Additional combinations were possible.
• Paint quantities do not add to total production because additional units had non-standard paint, or primer only.

Interior Codes: 112=W/L, 15C=Sg/C, 152=Sg/L, 19C-Bk/C, 192=Bk/L, 27C=B/C, 272=B/L, 64C=Bu/C, 642=Bu/L, 69C=Br/C, 692=Br/L, 72C=R/C, 722=R/L.

• Cloth codes actually designate cloth-leather combinations.

Abbreviations: B=Blue, Bk=Black, Bu=Buckskin, Br=Brown, C=Cloth, L=Leather, R=Red, Sg=Smoked Grey, W=White.

The Corvette Black Book

1953-1993

October 1992

Published by
Michael Bruce Associates, Inc.
Michael Antonick, President
Post Office Box 396
Powell, Ohio 43065

CONTENTS

Michael Bruce Associates, Inc. acknowledges with appreciation the following enthusiasts who contributed their expertise to this and previous editions of the *Corvette Black Book*: Noland Adams, Dan Aldridge, John Amgwert, Pat Baker, Jane Barthelme, Michele Boling, Kent Brooks, Barry Brown, David Burroughs, Steve Dangremond, Dr. M. F. Dobbins, Bob Eckles, the late Sam Folz, John Hibbert, Mike Hunt, Alan Kaplan, Paul Kitchen, Gary Konner, Ralph Kramer and staff, Jim Krughoff, Gary Lisk, Bill Locke, Bob Lojewski, Bob McDorman, Chip Miller, Bill Mock, Brian Pearce, John Poloney, Bill Rhodes, Jeffrey Smith, Mark & Dixie Smith, Lou Vitalle, Jerry Wadsworth, Jerry Weichers and Don Williams. Thanks also to Callaway Engineering, to Mercury-Marine, and to the Chevrolet Motor Division of General Motors Corporation.

Cover: Photo and design by Mike Antonick. 1963 Corvette owned by Bill Munzer; restored by Bill Munzer and Don Williams.

Printed and bound in the United States of America.

ISBN: 0-933534-35-3

BOOK TRADE DISTRIBUTION BY:
Motorbooks International
Publishers & Wholesalers Inc.
Osceola, Wisconsin 54020, USA ®

BLACK BOOK ORDER FORM

Send _____ copies of the

Corvette Black Book 1953-1993

@ $11.95 each $ _____

Ohio residents add .72 sales tax _____

Postage/hard shipping container 3.00

Check or money order enclosed $ _____

Name _____

Street _____

City _____ State _____ Zip _____

Mail Order To: **Michael Bruce Associates, Inc.**
Post Office Box 396
Powell, Ohio 43065

BLACK BOOK ORDER FORM

Send _____ copies of the

Corvette Black Book 1953-1993

@ $11.95 each $ _____

Ohio residents add .72 sales tax _____

Postage/hard shipping container 3.00

Check or money order enclosed $ _____

Name _____

Street _____

City _____ State _____ Zip _____

Mail Order To: **Michael Bruce Associates, Inc.**
Post Office Box 396
Powell, Ohio 43065