

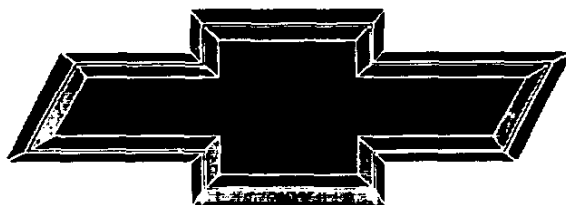
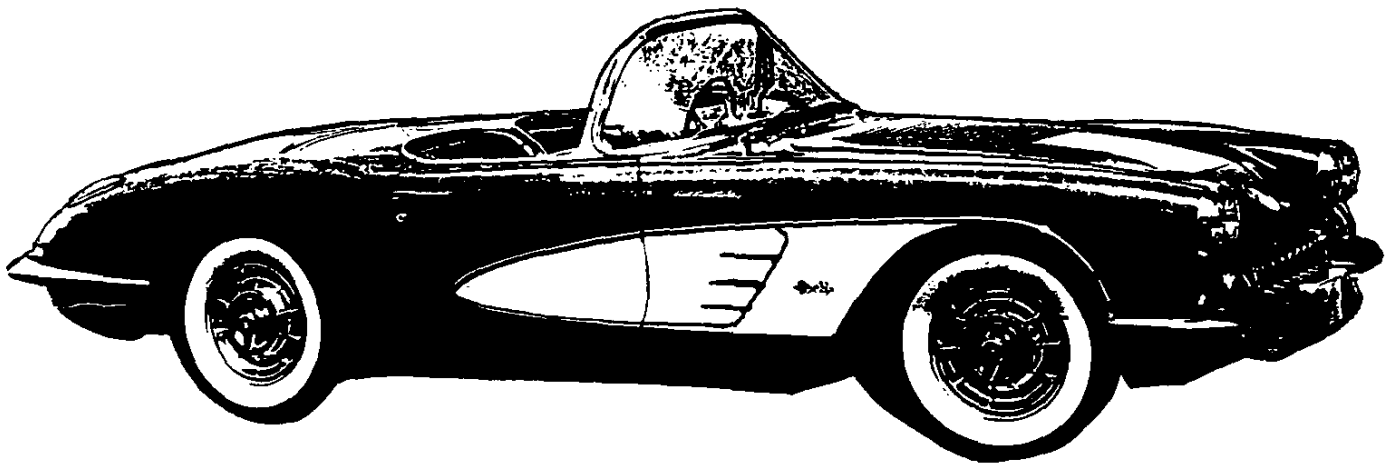




# 1959

# CORVETTE

## SPECIFICATIONS



GENUINE CHEVROLET™



# 1959 CORVETTE

Production: 9,670 convertibles

## 1959 NUMBERS

**Vehicle:** J59S100001 through J59S109670

**Suffix:** CQ: 283ci, 230hp, mt      CU: 283ci, 270hp, mt  
CR: 283ci, 250hp, mt      DG: 283ci, 230hp, at  
CS: 283ci, 290hp, mt      DH: 283ci, 250hp, at  
CT: 283ci, 245hp, mt      DJ: 283ci, 245hp, at

**Block:** 3737739: All (ep)      3756519: All

**Head:** 3748770: All (ep, sh)      3767465: All (lp)  
3755550: All (ep, sh)

**Carburetor:** Carter 2613S #3741089: 283ci, 270hp, fc  
Carter 2614S #3741090: 283ci, 270hp, rc  
Carter 2626S #3744002: 283ci, 245hp, fc  
Carter 2627S #3744004: 283ci, 245hp, rc  
Carter 2818S #3756676: 283ci, 230hp

**Fuel Injection:** Rochester 7014900: 283ci, 250hp  
Rochester 7014900R: 283ci, 290hp  
Rochester 7017200: 283ci, 250hp  
Rochester 7017250: 283ci, 290hp  
Rochester 7017300: 283ci, 290hp  
Rochester 7017300R: 283ci, 250hp

**Distributor:** 1110891: 283ci, 245hp, 270hp      1110915: 283ci, 250hp  
1110914: 283ci, 290hp      1110946: 283ci, 230hp

**Generator:** 1102043: 283ci, 230hp, 245hp, 250hp, 270hp  
1102059: 283ci, 290hp, fd  
1102173: 283ci, 290hp, sd

**Ending Vehicle:** Sep 58: 100409      Jan 59: 103962      May 59: 107934  
Oct 58: 100623      Feb 59: 104921      Jun 59: 108702  
Nov 58: 101587      Mar 59: 106033      Jul 59: 109437  
Dec 58: 102641      Apr 59: 107144      Aug 59: 109670

**Abbreviations:** at=automatic transmission, ci=cubic inch, fc=front carburetor, fd=first design, ep=early production, hp=horsepower, lp=late production, mt=manual transmission, rc=rear carburetor, sd=second design, sh=staggered valve cover holes.

## 1959 FACTS

- Exterior 1959 appearance was similar to 1958, except 1959 did not have the simulated hood louvers or the twin chrome trunk spears.
- Door panels were redesigned by relocating the armrests for additional elbow room, and by moving the door releases forward.
- Instruments were redesigned for better legibility in 1959. This included making the gauge lenses concave for less light reflection, and adding a new tachometer face.
- The "T" shift handle with positive reverse lockout was introduced in 1959 models with 4-speed manual transmissions.
- A storage bin was added under the passenger grab bar. The grab bar itself was more heavily padded than for the previous year.
- The optional 1959 windshield washer reservoir mounted on the left side for all carbureted engines, and on the right side for all fuel injected engines. Right side mountings were protected by heat shields.
- Seat upholstery was smoother than the previous year and the black interior available in 1959 models was the Corvette's first.

## 1959 OPTIONS

CODE	DESCRIPTION	QTY	RETAIL \$
867	Base Corvette Convertible .....	9,670	\$3,875.00
101	Heater .....	8,909	102.25
102	AM Radio, signal seeking .....	7,001	149.80
107	Parking Brake Alarm .....	3,601	5.40
108	Courtesy Light .....	3,601	6.50
109	Windshield Washers .....	7,929	16.15
121	Radiator Fan Clutch .....	67	21.55
261	Sunshades .....	3,722	10.80
276	Wheels, 15x5.5 (5) .....	214	0.00
290	Whitewall Tires, 6.70x15 .....	8,173	31.55
313	Powerglide Automatic Transmission .....	1,878	199.10
419	Auxiliary Hardtop .....	5,481	236.75
426	Power Windows .....	587	59.20
440	Two-Tone Exterior Paint .....	2,931	16.15
469	283ci, 245hp Engine (2x4 carburetors) .....	1,417	150.65
469C	283ci, 270hp Engine (2x4 carburetors) .....	1,846	182.95
473	Power Operated Folding Top .....	661	139.90
579	283ci, 250hp Engine (fuel injection) .....	175	484.20
579D	283ci, 290hp Engine (fuel injection) .....	745	484.20
675	Positraction Rear Axle .....	4,170	48.45
684	Heavy Duty Brakes and Suspension .....	142	425.05
685	4-Speed Manual Transmission .....	4,175	188.30
686	Metallic Brakes .....	333	26.90
1408	Blackwall Tires, 6.70x15 nylon .....	—	—
1625	24 Gallon Fuel Tank .....	—	—

- A 283ci, 230hp engine, 3-speed manual transmission, vinyl interior trim, and a soft top were included in the base price.
- RPO 684 included special front and rear springs and shock absorbers, heavier front stabilizer bar, quick steering adaptor, metallic brakes, finned brake drums, fresh air ducting to rear brakes (early only) and front brake air deflectors. RPO 469C or RPO 579D, RPO 675, and manual transmission were required.
- RPO 276 (15x5.5 wheels) included hubcaps (small) in lieu of standard wheel discs.
- LPO 1625 required the hardtop without soft top because the fuel tank occupied part of the folding top storage area.
- The 5,481 RPO-419 quantity included 1,695 in lieu of soft tops at no cost.
- RPO 675 (Positraction) required manual transmission.

## 1959 COLORS

EXTERIOR	QTY	SOFT TOP	WHEELS	INTERIOR
Tuxedo Black .....	1,594	Bk-W	Black	B-Bk-R
Classic Cream .....	223	Bk-W	Black	Bk
Frost Blue .....	1,024	B-Bk-W	Black	B-R
Crown Sapphire .....	888	Bk-Tq-W	Black	Tq
Roman Red .....	1,542	Bk-W	Black	Bk-R
Snowcrest White .....	3,354	B-Bk-Tq-W	Black	B-Bk-R-Tq
Inca Silver .....	957	Bk-W	Black	Bk-R

- Suggested interiors shown. Other combinations were possible.
  - Interiors and exteriors were not coded to individual cars. In 1959, five Corvettes were painted a non-standard color, combination, or primer. An additional 83 were exported and their colors combinations are unknown.
  - Numbers of interiors sold in 1959 are as follows: 1,303 blue, 1,181 turquoise, 5,124 red, 2,062 black.
  - The 2,931 quantity for code 440 two-tone paint (contrasting cove) was split 805 Roman Red/white; 535 Snowcrest White/silver; 496 Tuxedo Black/silver; 420 Crown Sapphire/white; 361 Frost Blue/white; 220 Inca Silver/white; 89 Classic Cream/white; 5 other.
  - Turquoise soft tops were available only in 1959.
- Abbreviations:** B=Blue, Bk=Black, R=Red, Tq=Turquoise, 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	
Glossary .....	4
Instructions .....	6
Statistics .....	12
Chronology .....	14
1953 Corvette .....	20
1954 Corvette .....	22
1955 Corvette .....	24
1956 Corvette .....	26
1957 Corvette .....	28
1958 Corvette .....	30
1959 Corvette .....	32
1960 Corvette .....	34
1961 Corvette .....	36
1962 Corvette .....	38
1963 Corvette .....	40
1964 Corvette .....	42
1981 Corvette .....	76
1982 Corvette .....	78
1984 Corvette .....	80
1985 Corvette .....	82
1986 Corvette .....	84
1987 Corvette .....	86
1988 Corvette .....	88
1989 Corvette .....	90
1990 Corvette .....	92
1991 Corvette .....	94
1992 Corvette .....	96
1993 Corvette .....	98
Notes .....	100
Photos/Specs .....	104
Literature .....	124
Coupons .....	127

© Michael Bruce Associates, Inc., 1978, 1980, 1983, 1985, 1988, 1991, 1992. All rights reserved under Pan American and Universal Copyright Conventions by Michael Bruce Associates, Inc. Reproduction without permission is prohibited. Because of the possibility of errors, exceptions, or other reasons for inaccuracy, the publisher and author disclaim responsibility for the accuracy of any or all information presented in this publication.

Michael Bruce Associates, Inc. acknowledges with appreciation the following enthusiasts who contributed their expertise to this and previous editions of the Corvette Black Book: Nolan Adams, Dan Aldridge, John Amgwer, Pat Baker, Jane Barthele, Michele Bojng, Kent Brooks, Barry Brown, David Burroughs, Steve Dangemond, Dr. M. F. Dobbs, Bob Eckles, the late Sam Foltz, John Hibbert, Mike Hunt, Alan Kaplan, Paul Kitchen, Gary Konner, Ralph Kramer and staff, Jim Knigloff, Gary Lisk, Bill Locke, Bob Ljowski, Bob McDorman, Chip Miller, Bill Mock, Brian Pearce, John Poloney, Bill Rhodes, Jeffrey Smith, Mark & Diane Smith, Lou Vitale, 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.

Notice: The Corvette Black Book and its publisher, Michael Bruce Associates, Inc. have no relationship or connection whatever with Hearst Business Media Corporation, its parent or affiliated corporations, or the Black Book published by National Auto Research Division of Hearst Business Media Corporation. Michael Bruce Associates, Inc. and the Corvette Black Book are not associated with or sponsored by General Motors or its Chevrolet Motor Division. Cover: Photo and design by Mike Antonick. 1953 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:  
**Chickadee Books International**  
 Publishers & Wholesalers, Inc.  
 Okcreek, Wisconsin 54070, 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

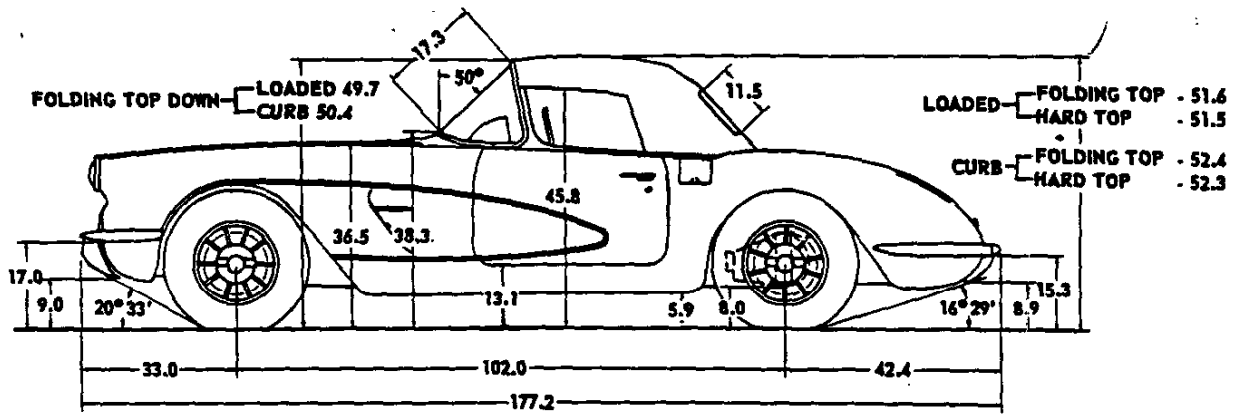
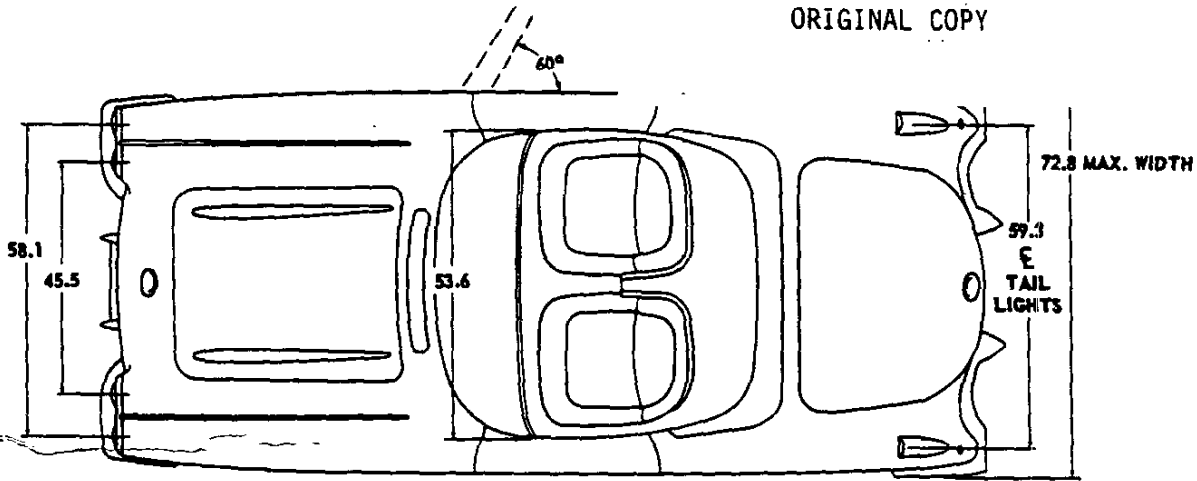
**Corvette Black Book 1953-1993**

@ \$11.95 each \$ \_\_\_\_\_  
 Ohio residents add .72 sales tax \_\_\_\_\_  
 Postage/hard shipping container 3.00 \_\_\_\_\_  
 Check or money order enclosed \$ \_\_\_\_\_

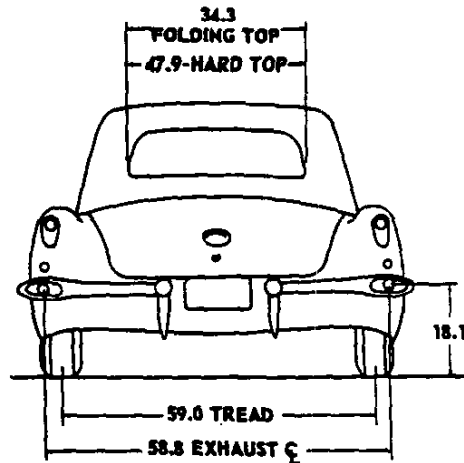
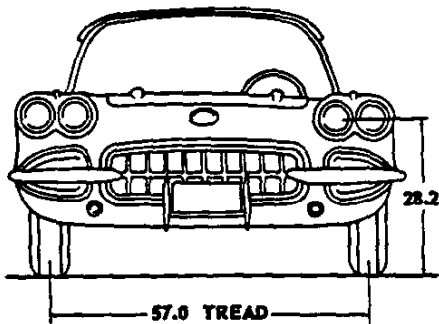
Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

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

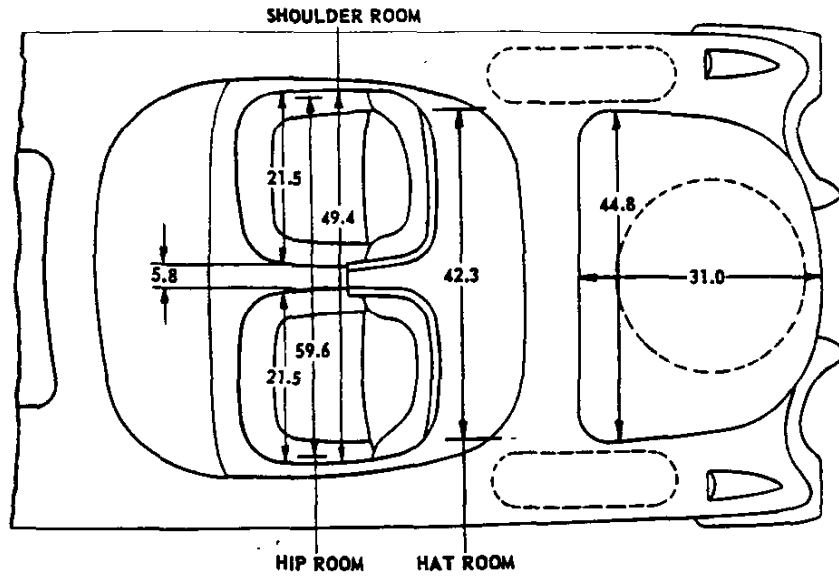
ORIGINAL COPY



RAMP ANGLE - 7° 29'

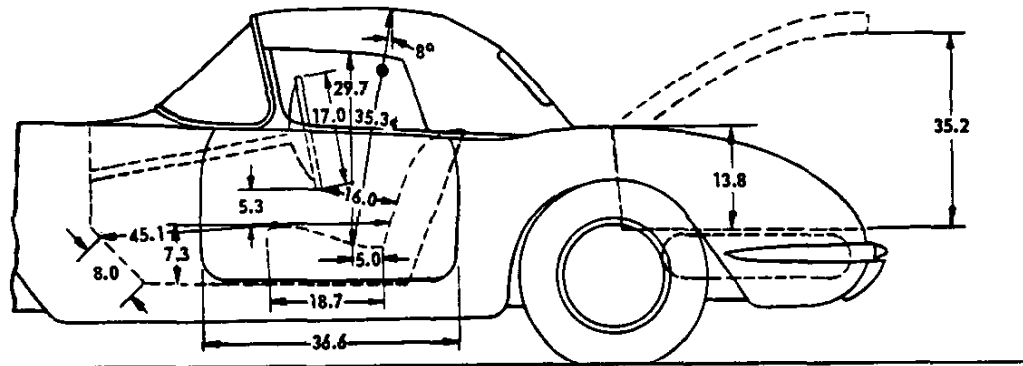


INTERIOR DIMENSIONS



DRIVER SEAT ADJUSTMENT 4.4  
SEAT DIMENSIONS SHOWN ARE  
MEASURED 15" FROM CENTER  
LINE OF CAR WITH SEAT IN  
REAR POSITION

LUGGAGE COMPARTMENT APPROX.  
CAPACITY - 4.474 CU. FT.



±35.1 WITH HARD TOP



## 1959 CORVETTE REGULAR EQUIPMENT

EXTERIOR		
Four Headlights		
Parking and Turn Signal Lights		
Tail, Stop, and Turn Signal Lights		
Twin License Lights		
Bright Metal	Headlight and Parking Light Bezels	
	Front Fender Crown Molding	
	Grille Frame and Body	
	Grille Guards and License Frame	
	Front and Rear Bumpers	
	Cove Area Reveal Molding	
	Windshield Reveal Molding	
	Belt Reveal Molding	
	Door Glass Frames	
	Door Push-Button Handles	
	Door Key Locks	
	Deck Lid Key Lock	
	Tail Light Bezels	
	Rear Body Guards	
	*Hardtop Additional Moldings	Roof Front
		Drip Cap
	Quarter Window Reveal	
	Rear Window Reveal	
Hood Emblem		
Deck Lid Emblem		
Outside Rear View Mirror		
Wheel Disks		
Wheel Disk Ornaments		
Convertible Top		
Crossed Flags in Cove Area		
Gas Filler Door		
Twin Rear Fender Reflectors		
Dual Rear Bumper Exhaust Ports		

INTERIOR	
Three-Spoke Competition-Type Steering Wheel	
Vinyl Covered Instrument Panel	
160 MPH Speedometer, Odometer	
7000 RPM Tachometer	
Bright Metal	Cove Insert
	Sill Plates
	Step Plates
	Top Header Release Latches
	Door Lock Lever
Fuel, Temperature, Ammeter, Oil Pressure Gauges	
Ignition - Starter Switch	
Cigarette Lighter	
Cowl Vent Lever	
Hood Release Lever	
Rear View Mirror	
Ash Tray	
Electric Clock	
Cockpit Center Console	
Stowage Compartment	
Roll-Up Door Windows	
Twin Reflectors in Side Wall	
Door Armrests	
Glove Box with Key Lock	
Padded Passenger - Assist Bar	
Direction Signal Control	
Individually Adjusted Bucket Seats	
Safety Belts	
Ball-Type Door Handles	
Transmission Shift Lever with Shift Diagram	
Headlight Dimmer Switch	
Windshield Wiper Control Knob	
Horn Button	

\* - If Hardtop is provided in place of Convertible Top.

**1959 CORVETTE REGULAR PRODUCTION  
OPTIONS AND FACTORY OPTIONAL ACCESSORIES**

ITEM	NUMBER	ITEM	NUMBER
Alarm, parking brake	107*	Radio, signal-seeking	102*
Axles, limited-slip	675	Sunshades	261
Brakes, heavy-duty	686	Tires, 6.70 X 15-4 ply (whitewall)	290
Brakes and suspension, heavy-duty	684	Top, hydraulic folding	473
Carburetors, two 4-barrel	469	Transmission, 4-speed	685
Fuel injection	579	Transmission, Powerglide	313
Hardtop, auxiliary	419	Washers, windshield	109*
Heater, air flow	101*	Wheels, 15 X 5.50K	276
Light, courtesy	108*	Windows, power	426

\* - Factory Optional Accessory

**1959 CORVETTE EXTERIOR-INTERIOR COLOR COMBINATIONS**

EXTERIOR*						INTERIOR			
Body †	Cove Area (optional)	Folding Top				Black	Blue	Turquoise	Red
		Black	White	Turquoise	Light Blue				
Tuxedo Black	Inca Silver	X	X			X	X		X
Classic Cream	Snowcrest White	X	X			X			
Frost Blue			X		X		X		X
Crown Sapphire			X	X	X			X	
Roman Red		X	X			X			X
Snowcrest White	Inca Silver	X	X	X	X	X	X	X	X
Inca Silver	Snowcrest White	X	X			X			X

\* - Wheels painted black.

† - Includes hardtop, when used.

## GENERAL DATA

### VEHICLE SERIAL NUMBER

Series designation  
 J ----- 8 cylinder engine  
 S ----- St Louis

### DIMENSIONS

Wheelbase ----- 102.00  
 Length (overall) ----- 177.20  
 Width (overall) ----- 72.8  
 Height (ground to top of windshield at centerline) ----- 49.20  
 Height (overall loaded)  
   Folding top ----- 51.6  
   Hard top ----- 51.5  
 Angle of approach ----- 20°33'  
 Angle of departure ----- 16°29'  
 Treads:  
   Front ----- 57.00  
   Rear ----- 59.00

### VEHICLE WEIGHTS\*

Powerglide transmission  
   Shipping ----- 3002 lb.  
   Curb ----- 3135 lb.  
   Loaded ----- 3405 lb.  
 3-speed transmission  
   Shipping ----- 2900 lb.  
   Curb ----- 3033 lb.  
   Loaded ----- 3333 lb.  
 Optional hard top ----- 55 lb.

\* - Curb weight is empty vehicle ready to drive.  
 Shipping weight is curb weight minus gasoline (100 lb.) and water (33 lb.).  
 Loaded weight is curb weight plus 300 lb. (weight of two 150 lb. passengers)

### BODY GLASS

Windshield ----- Laminated safety plate  
 Side doors ----- Laminated safety plate  
 Rubberized fabric top,  
 Rear window ----- Vinyl plastic

### Hard Top,

Rear window ----- Acrylic plastic (plexiglass)  
 Rear quarter window - Acrylic plastic (plexiglass)

### CHASSIS

#### FRONT WHEEL ALIGNMENT (Service data)

Camber ----- 0°+0°30'  
 Caster ----- 2°+0°30'  
 King pin inclination ----- 3°30'-4°-30'  
 Toe in ----- 0-.125

### FRAME

Make & type ----- Own, box girder with "X" member  
 Maximum overall length ----- 139.28  
 Maximum overall width (over side members) -- 43.24  
 Material ----- Hot rolled steel  
 Material yield point ----- 33,000 lb./sq.in.  
 Material elongation ----- 25% minimum in 2 in.  
 Side member section modulus (inches cubed) --- 1.677  
 Moment of inertia (in<sup>4</sup>) ----- 4.930  
 Construction:  
 Side members ----- Box section, each composed of two full length channel sections welded together.  
 Front suspension cross member ----- Flanged semi-tubular section with flat steel bottom plate welded on.  
 Rear shock absorber upper mounting cross member. ----- Inverted channel section.  
 Rear cross member ----- Box section composed of a flanged channel section and a welded on bottom plate.  
 Center "X" member ----- Composed of I-beam sections attached to side members at the end of each leg of the "X". Also attached to the forward section of side members by long angular braces from the front legs of the "X".  
 Body mounting points ----- 10

### KING PINS

Diameter ----- .8660-.8665  
 Bushings  
   Inside diameter ----- .867-.868  
   Length ----- 1.312

### STEERING KNUCKLE

Type ----- Reverse Elliot  
 Spindle diameter:  
   At inner bearing ----- 1.2810-1.2815  
   At outer bearing ----- .7498-.7503

### SPRING MOUNTING

Type ----- Parallel 47.24 between centers  
 Front eye bolt diameter ----- .498-.502  
 Shackle mounting ----- Outrigger type  
 Shackle type ----- Rubber bushed  
 Shackle pin O.D. ----- .620-.625

### FRONT SPRINGS

Make and type ----- Own, coil  
 Material and gauge ----- Chrome alloy steel .547-.553  
 Number of coils ----- Total 9.75; active 7.94  
 Diameter ----- Outside 4.30; pitch 3.752  
 Height ----- Free 13.45; working 9.62@ 1235 lb.  
 Height under curb weight ----- 9.72  
 Capacity at ground ----- 800 lb.

CHASSIS - Continued

Deflection rate  
At spring ----- 300 lb/in.  
At wheel ----- 110 lb/in.

FRONT SHOCK ABSORBERS †

Make and type ----- Delco, direct double acting  
Mounting ----- Vertically from lower control arm  
through coil spring to front suspension crossmember  
Model number ----- 538F  
Piston diameter and travel ----- 1.00 x 4.68

REAR SPRINGS

Make ----- Own  
Type ----- Semi-elliptic  
Material ----- Alloy steel  
Length and width ----- 51 x 2.0  
Spring clips ----- Clinch type-3  
Bolt type-1  
Total-4  
Number of leaves ----- 4  
Leaf thickness ----- Number 1 & 3 ----- .282  
Number 2 ----- .313  
Number 4 ----- .262  
Total ----- 1.159  
Capacity ----- At pad ----- 575 lb.  
At ground ----- 725 lb.

REAR SHOCK ABSORBERS †

Make & type ----- Delco, direct double acting  
Mounting ----- Stem attached to slotted  
holes in flanged "U" shaped rear crossmember, eye  
attached at bottom to an anchor bolt on rear spring  
"U" bolt and shock absorber anchor bolt plate  
Model ----- .560P  
Piston diameter and travel ----- 1.0 x 6.69

DRIVE LINE

Type ----- Hotchkiss drive,  
one propeller shaft.

REAR AXLE

Type ----- Hypoid  
Ratio  
Conventional trans. - regular & RPO 675 -- 3.70:1  
RPO 675 only ----- 4.11:1  
RPO 675 only ----- 4.56:1  
Powerglide trans. ----- 3.55:1  
Gear combination  
Conventional trans. - regular ----- 37 & 10  
optional ----- 37 & 9  
optional ----- 41 & 9  
Powerglide trans. ----- 39 & 11  
Total gear reduction

Axle	3.70:1		4.11:1		4.56:1	
Trans.	3-spd	4-spd	3-spd	4-spd	3-spd	4-spd
1st	8.18	8.14	9.08	9.04	10.08	10.03
2nd	4.88	6.14	5.43	6.82	6.02	7.57
3rd	3.70	4.85	4.11	5.38	4.56	5.97
Fourth		3.70		4.11		4.56
Rev.	9.29	8.36	10.32	9.29	11.45	10.31

† - Contains nitrogen-filled envelope in fluid reservoir

Powerglide  
3.55:1 axle: drive ----- 13.56:1-1:1  
low ----- 13.56:1-6.46:1  
reverse ----- 13.56:1-6.46:1

BRAKES-SERVICE

Type ----- Servo, 4 wheel hydraulic  
Brake size  
Front ----- 11 x 2  
Rear ----- 11 x 1-3/4  
Brake drums  
Diameter front & rear ----- 11  
Total effective area ----- 259 sq. in.  
Lining sizes (length x width x thickness)  
Front-primary ----- 9.29 x 2.0 x .175  
-secondary ----- 11.69 x 2.0 x .175  
Rear -primary ----- 9.29 x 1.75 x .175  
-Secondary ----- 11.69 x 1.75 x .175  
Total lining effective area ----- 157 sq. in.  
Wheel cylinder bore  
Front ----- 1.125  
Rear ----- 1.000  
Master cylinder bore ----- 1.000  
Pedal travel ----- 4.50  
Shoe clearance adjustment ----- Adjust  
to light drag and back off seven notches.

BRAKES-PARKING

Type of control ----- "T" handle pull rods  
Location of control ----- L.H. of steering column  
Operate on ----- Rear service brakes

STEERING

Steering gear ratio ----- 16:1  
Steering wheel diameter ----- 17.00  
Turning diameters  
Right-wall to wall ----- 38.5 ft.  
Left-wall to wall ----- 39.0 ft.  
Right-curb to curb ----- 36.5 ft.  
Left-curb to curb ----- 37.0 ft.  
Overall steering ratio ----- 21.0:1

TACHOMETER

Make ----- AC  
Model ----- W  
Type ----- Mechanical  
Driven Off  
Fuel Injection (special camshaft) ----- Distributor  
All others ----- Generator

WHEELS

Rim Size & Flange Type ----- 15 x 5K

TIRES

Size ----- 6.70 x 15-4 pr  
Type ----- Rayon  
Revolutions/mile @ 30 MPH ----- 760  
Sidewall Color  
Regular ----- Black  
Optional ----- White

• Data revised 6-22-59 10-15-58

**CORVETTE CHASSIS (HEAVY-DUTY RPO 684)**

**FRONT SPRINGS**

Gauge ----- .636  
 No. of Coils ----- 8.75 total; 6.94 active  
 Diameter ----- Outside 4.44; 3.811 P.D.  
 Height ----- Free 11.18; working 9.12@1145  
 Deflection Rate (lb./in.)  
     At spring ----- 550  
     At wheel ----- 200

**REAR SPRINGS**

No. of Leaves ----- Five  
 Total Leaf Thickness ----- 1.458  
 Spring Rate (lb.in.) ----- 145  
 Inserts ----- None

**SHOCK ABSORBERS**

Front & Rear  
 Diameter ----- 1.375"

**STABILIZER BAR**

Diameter ----- 0.81

**STEERING**

Overall Ratio ----- 16.3:1  
 No. Wheel Turns ----- 3.25

**TIRES (LPO 1408)**

Type ----- Nylon

**BRAKES-SERVICE**

Material ----- Cerametalix  
 Segment per Shoe  
     Primary ----- Six  
     Secondary ----- Ten  
 Size  
     Primary ----- 2.25x2.50x.220  
     Secondary ----- 2.25x2.00x.220  
 Drums  
     Front & rear ----- Cooling vanes cast on rim  
 Rear Wheel Cylinder Bore ----- 0.875  
 Shoe Clearance Adjustment ----- Adjust to  
     light drag and back off 27-32 notches  
 Gross Lining Area (sq.in.) ----- 121.5  
 Brake Effectiveness (front) ----- 62%  
 Brake Air Scoops  
 Attachment ----- On flange plates

**POSITRACTION REAR AXLES (RPO 675)**

<u>Ratios</u>	<u>Gear Combinations</u>
3.70:1	37 & 10
4.11:1	37 & 11
4.56:1	41 & 9

**WHEELS**

Rim Size & Flange Type ----- 15 x 5.5K

## CORVETTE 283 CUBIC INCH V-8 ENGINE

### GENERAL DATA

Engine		Conventional	Powerglide
Piston displacement (cu. in.)		283	
Type		Valve-in-head	
Number of cylinders		8	
Bore and stroke (nominal)		3.875 x 3.000	
Compression ratio		9.5:1\$	
Taxable (SAE) horsepower		48	
Idling speed (RPM)		475 in neutral	475 in drive
Compression press. (PSI)@ cranking speed, engine hot		160**	
Dry weight (pounds)	Engine and clutch	625	565
	With transmission	695	795
Lubrication		Full pressure	
Power plant mounting		Three point mounting; two front and one rear; compression type	
Measurements (inches)	Fan to rear of clutch housing	36.57	31.66
	Front of cylinder block to rear of clutch housing	29.57	24.66
	Length of cylinder block	23.28	
	Top air cleaner to bottom oil pan	29.54	
	Exhaust manifold to generator (width)	26.72	

### ADVERTISED MAXIMUM ENGINE PERFORMANCE

Carburetor		4-barrel (Production)	Dual 4-barrel (RPO 469)		Fuel Injection (RPO 579)	
			Standard	Special	Standard	Special
Camshaft						
Brake horsepower	Gross	230@ 4800 RPM	245@ 5000 RPM	270@ 6000 RPM	250@ 5000 RPM	290@ 6200 RPM
	Net	195@ 4600 RPM	215@ 4800 RPM	230@ 6000 RPM	225@ 4800 RPM	245@ 5600 RPM
Torque (lb. ft.)	Gross	300@ 3000 RPM	300@ 3800 RPM	285@ 4200 RPM	305@ 3800 RPM	290@ 4400 RPM
	Net	270@ 2800 RPM	270@ 3400 RPM	255@ 3800 RPM	280@ 3400 RPM	265@ 4200 RPM

### ENGINE SPEED AND PISTON TRAVEL

Transmission		3-Speed close ratio (Production)			Powerglide (RPO 313) *
		3.70:1 ▼	4.11:1 ▼	4.56:1 ▼	3.55:1
Rear axle ratio					
Tire size		6.70 x 15-4 pr			
Crankshaft revolutions per mile		2812.0	3123.6	3465.6	2698.0
Crankshaft RPM @ 1 MPH	Low	103.4	115.1	127.7	81.9
	Reverse	117.5	130.8	145.1	
	Second	61.8	68.8	76.3	
	Third ‡	46.8	52.1	57.8	45.0
Piston travel (ft./mile)		1406.0	1561.8	1732.8	1349.0
Transmission		4-Speed close ratio (RPO 685)			
		3.70:1 ▼	4.11:1 ▼	4.56:1 ▼	
Rear axle ratio					
Tire size		6.70 x 15-4 pr			
Crankshaft revolutions per mile		2812.0	3123.6	3465.6	
Crankshaft RPM @ 1 MPH	Low	103.0	114.6	127.2	
	Reverse	105.8	117.7	130.6	
	Second	77.7	86.5	96.0	
	Third	61.3	68.3	75.7	
	Fourth ‡	46.8	52.1	57.8	
Piston travel (ft./mile)		1406.0	1561.8	1732.8	

\* - Data computed assuming zero slippage in torque converter.

\$ - 10.5:1 with Fuel Injection and special camshaft.

‡ - Also known as N/V factor.

▼ - Rear axle ratios are optional with Positraction (limited slip) differential carrier.

\*\* - 140 psi for all engines equipped with special camshaft.

● Revised 3-23-59 10-15-58

**CORVETTE-9**

**1959 CHEVROLET PASSENGER CAR**

**CORVETTE 283 CUBIC INCH V-8 ENGINE - Continued**  
**ADVERTISED CAR PERFORMANCE**

3-Speed Transmission	ENGINE				
	4-barrel	Dual 4-barrel		Fuel Injection	
	Camshaft				
	Standard		Special	Standard	Special
Model	867				
Performance weight (pounds) +	3275	3290	3295	3280	3290
Pounds per gross horsepower	14.21	13.43	12.20	13.12	11.35
Pounds per cu. in. displacement	11.61	11.63	11.64	11.59	11.63
Gross horsepower per cu. in. displacement	.813	.866	.954	.883	1.025
Power displacement (cu. ft./mile) @	228.7	228.7	228.7	228.7	228.7
Displacement factor (cu. ft./ton mile) #	139.7	139.0	138.8	139.5	139.0

**4-Speed Transmission**

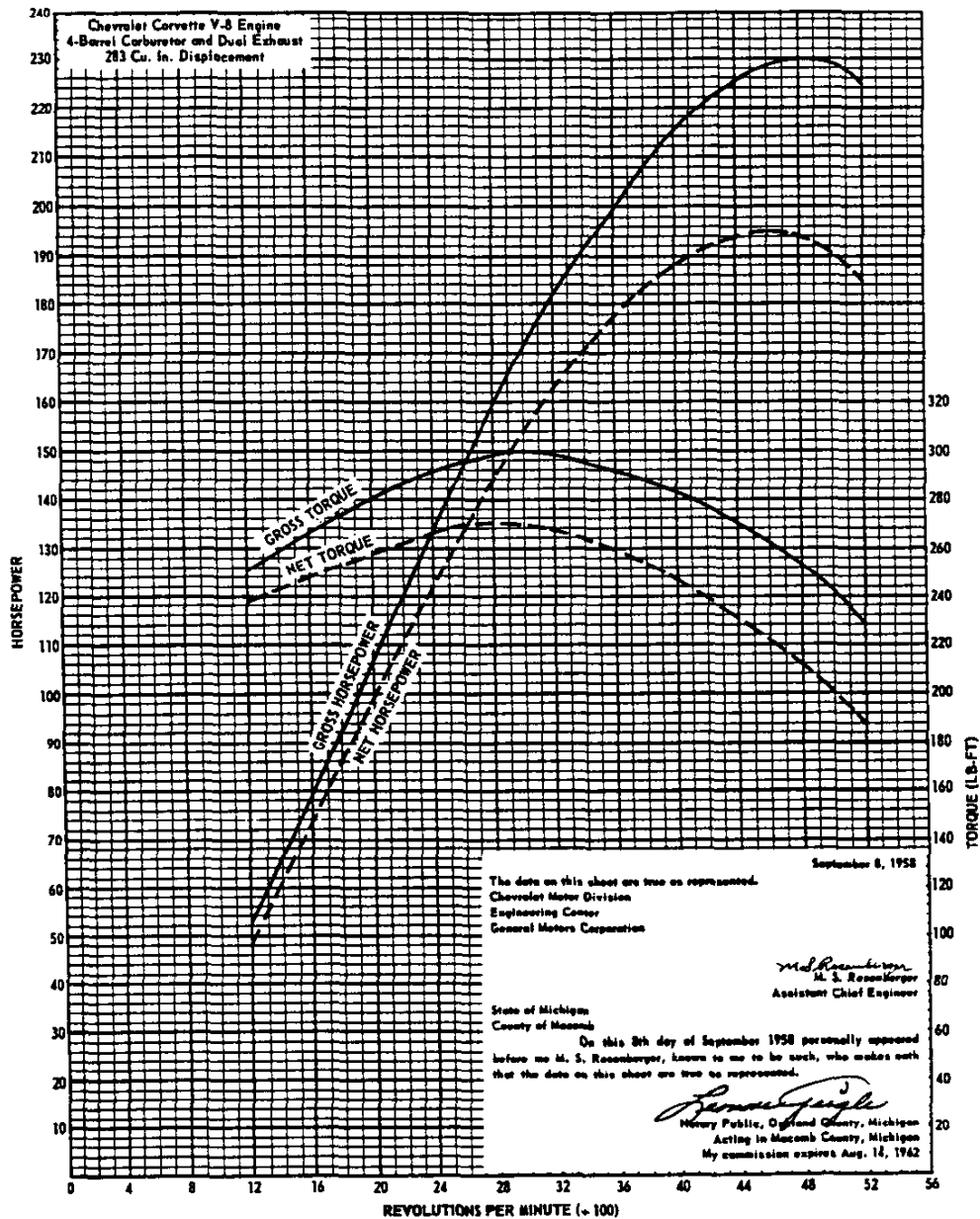
Performance weight (pounds) +	3290	3305	3310	3295	3305
Pounds per gross horsepower	14.30	13.49	12.26	13.18	11.40
Pounds per cu. in. displacement	11.63	11.68	11.70	11.64	11.68
Gross horsepower per cu. in. displacement	.813	.866	.954	.883	1.025
Power displacement (cu. ft./mile) @	228.7	228.7	228.7	228.7	228.7
Displacement factor (cu. ft./ton mile) #	139.0	138.4	138.2	138.8	138.4

**Powerglide Transmission \***

Performance weight (pounds) +	3375	3390		3380	
Pounds per gross horsepower	14.67	13.84		13.52	
Pounds per cu. in. displacement	11.93	11.98		11.94	
Gross horsepower per cu. in. displacement	.813	.866		.883	
Power displacement (cu. ft./mile) @	219.5	219.5		219.5	
Displacement factor (cu. ft./ton mile) #	130.1	129.5		129.9	

- + - Curb weight plus 300 lb. (weight of two 150 # passengers).
- \* - Data computed assuming zero slippage in torque converter.
- @ -  $\frac{\text{Crankshaft revolutions per mile} \times \text{piston displacement} \div 2}{1728}$
- # - Power displacement divided by performance weight in tons.

**CORVETTE 283 CUBIC INCH V-8 ENGINE**  
(4-Barrel Carburetor)



The engine performance curves shown on this sheet are taken from Chevrolet engine test report 17697-25. They represent the full throttle performance of a Chevrolet Corvette V-8 engine with 283 cubic inch displacement, as obtained from dynamometer test data corrected to standard barometric pressure of 29.92 inches of mercury and the standard temperature of 60°F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

GROSS POWER and TORQUE were obtained in a regular dynamometer test simulating actual operating conditions when the engine is in its vehicle. It includes the use of the regular mufflers and pipes, the fan in operation and automatic spark advance. The generator is not charging.

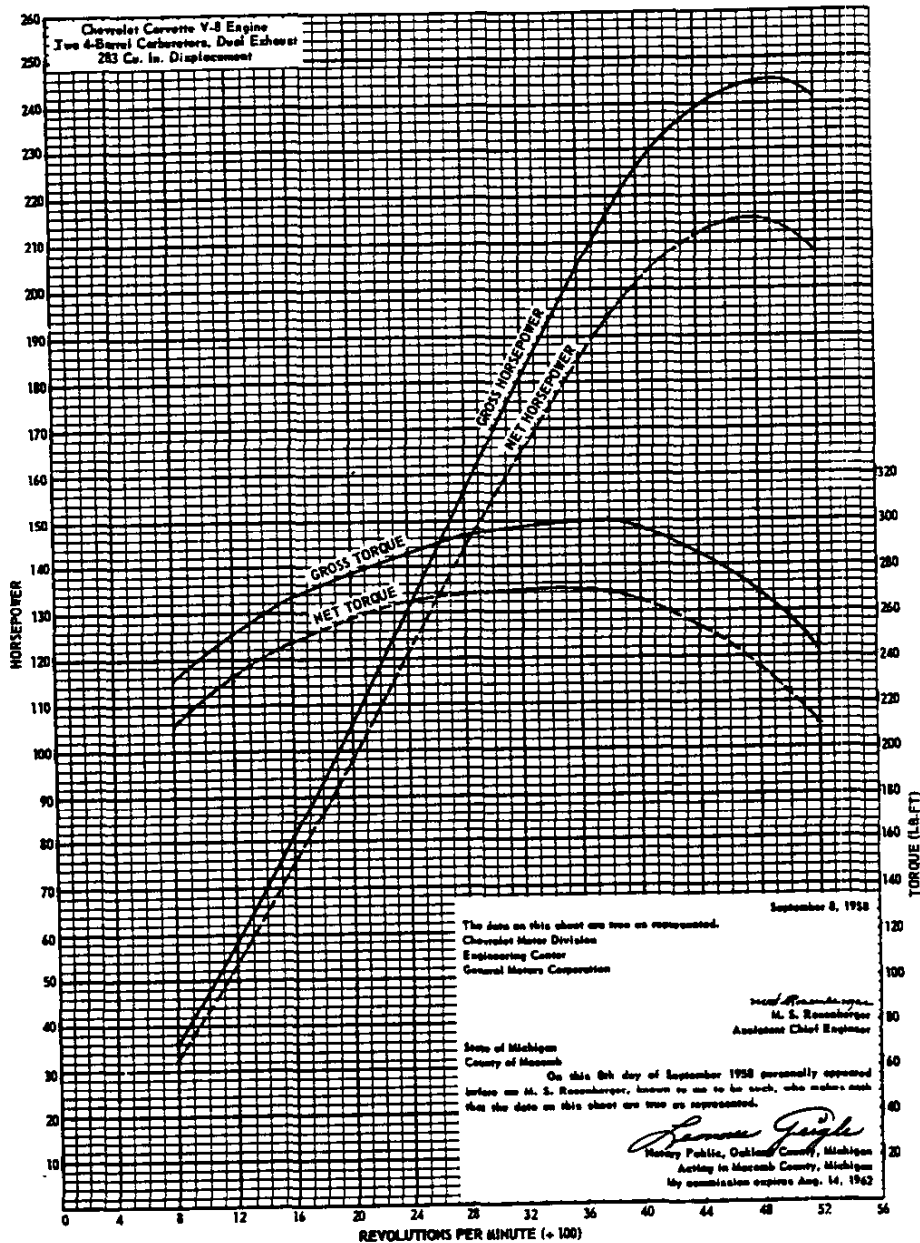
NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle. It includes the use of the regular mufflers and pipes, the fan in operation and automatic spark advance. The generator is not charging.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle. It includes the use of the regular mufflers and pipes, the fan in operation and automatic spark advance. The generator is not charging.



CORVETTE 283 CUBIC INCH V-8 ENGINE - Continued

CORVETTE 283 CUBIC INCH V-8 ENGINE  
(Dual 4-barrel Carburetors)



The engine performance curves shown on this sheet are taken from Chevrolet engine test report 17697-25. They represent the full throttle performance of a Chevrolet Corvette V-8 engine with 283 cubic inch displacement, as obtained from dynamometer test data corrected to standard barometric pressure of 29.92 inches of mercury and the standard temperature of 60°F.

ular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle. It includes the use of the regular mufflers and pipes, the fan in operation and automatic spark advance. The generator is not charging.

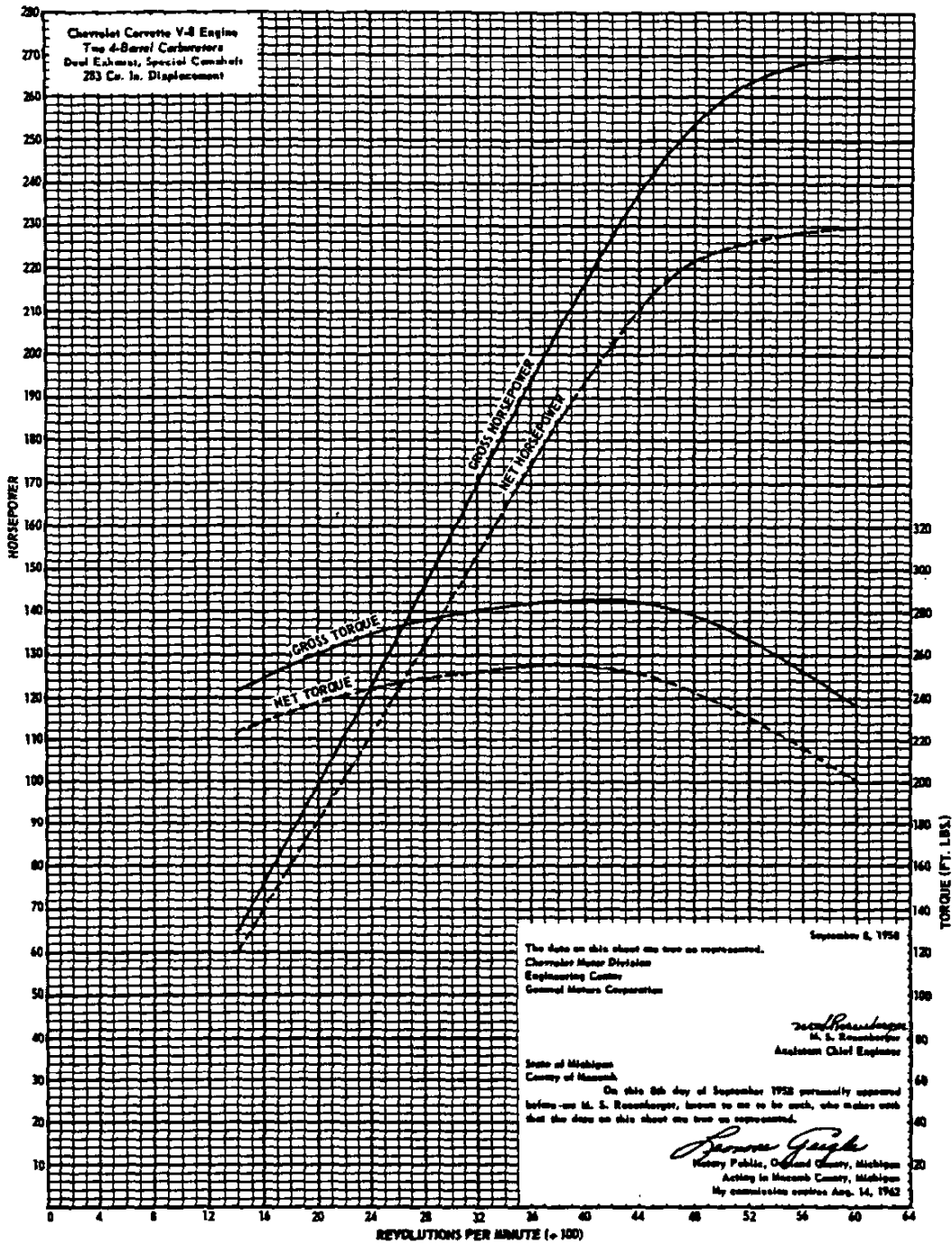
GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

10-15-58 • Revised 3-23-59  
12-CORVETTE

1959 CHEVROLET PASSENGER CAR

**CORVETTE 283 CUBIC INCH V-8 ENGINE**  
(Dual 4-Barrel Carburetors and Special Camshaft)



The engine performance curves shown on this sheet are taken from Chevrolet engine test report 17697-25. They represent the full throttle performance of a Chevrolet Corvette V-8 engine with 283 cubic inch displacement, as obtained from dynamometer test data corrected to standard barometric pressure of 29.92 inches of mercury and the standard temperature of 60°F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

GROSS POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle. It includes the use of the regular mufflers and pipes, the fan in operation and automatic spark advance. The generator is not charging.

GROSS POWER and TORQUE were obtained in a regular

1959 CHEVROLET PASSENGER CAR

ular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, and optimum spark advance.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle. It includes the use of the regular mufflers and pipes, the fan in operation and automatic spark advance. The generator is not charging.

**CORVETTE 283 CUBIC INCH V-8 ENGINE - Continued**

**CORVETTE 283 CUBIC INCH V-8 ENGINE**  
(With Standard 4-Barrel Carburetor)

Same as Super Turbo-Fire passenger car V-8 engine shown on Pages 16-25 except for following differences:

<b>FAN &amp; GENERATOR BELT</b>	
Pitch Line Length -----	55.40"
<b>GENERATOR</b>	
Model -----	1102043
<b>IGNITION COIL</b>	
Model -----	1115091
<b>OIL FILTER</b>	
Capacity -----	1.0 qt.
Type -----	Full flow
<b>AIR CLEANER</b>	
Type -----	Oil wetted
Filter Element -----	Aluminum wire
<b>GAS TANK</b>	
Capacity (gallons) -----	16.4
Filler Location -----	In body left side, to rear of driver's door
<b>EXHAUST SYSTEM</b>	
Type -----	Dual, diffusion & resonance, reverse flow.
<b>OIL PAN CAPACITY (quarts)</b>	
Less Filter -----	5.0
<b>CLUTCH</b>	
Type -----	Semi-centrifugal
Number of Coil Springs -----	9
Spring Pressure (lbs.) -----	1620 initial
Drive -----	Lug
Lining Area (sq. in.) -----	90.72
Rated Torque Capacity (lb. ft.) -----	326
<b>COOLING SYSTEM</b>	
<b>Radiator</b>	
Make -----	Harrison
Type -----	Cellular
Size -----	20 x .56 x 2.0
Frontal Area (sq. in.) -----	340
Capacity (quarts)	
Without heater -----	15.5
With heater -----	16.5
<b>SPARK PLUGS</b>	
Make -----	AC
Type -----	46
<b>RADIATOR CAP</b>	
Type -----	Pressure
Valve Opens @ -----	6.25-7.75 psi

**CORVETTE 283 CUBIC INCH V-8 ENGINE**  
(With Optional Dual 4-Barrel Carburetors)

Same as for Corvette 4-barrel carburetor version except for following differences:

<b>MAIN BEARINGS (special camshaft)</b>	
Type -----	Moraine M-400
Material -----	Steel backed aluminum alloy matrix with a thin lead alloy overplate except rear which is steel backed babbitt.
<b>CONNECTING ROD BEARINGS (special camshaft)</b>	
Type -----	Moraine M-400
Material -----	Steel backed aluminum alloy matrix with a thin lead alloy overplate
<b>CAMSHAFT, SPECIAL (optional)</b>	
<b>Ramp, Inlet</b>	
Opening & closing -----	.0067, 18° long
<b>Ramp, Exhaust</b>	
Opening & closing -----	.0107, 29° long
<b>Tappet Lift</b>	
Inlet -----	.2625
Exhaust -----	.2665
<b>Valve Lift</b>	
Inlet -----	.39375
Exhaust -----	.39975
<b>Valve Lash (engine hot)</b>	
Inlet -----	.012
Exhaust -----	.018
<b>Timing Diagram Data</b>	
<b>Inlet</b>	
Opens -----	35°BTC
Closes -----	72°ABC
<b>Exhaust</b>	
Opens -----	76°BBC
Closes -----	31°ATC
<b>DISTRIBUTOR</b>	
Make -----	Delco-Remy
Model -----	1110891
Type Breakers -----	Dual
Vacuum Advance -----	None (Centrifugal Advance curve is same as Super Turbo- Fire and Fuel Injection, page 25 of Engines and Clutches)
Vacuum Advance -----	None
<b>VALVES (special camshaft)</b>	
<b>Inlet</b>	
Overall length -----	4.8699-4.8899
<b>Exhaust</b>	
Overall length -----	4.8905-4.9105
<b>VALVE LIFTERS (special camshaft)</b>	
Type -----	Mechanical
<b>CARBURETOR</b>	
Make -----	Carter
Type -----	4-barrel, downdraft

Model  
 Regular camshaft  
 Front ----- 3744002  
 Rear ----- 3744004  
 Special camshaft  
 Front ----- 3741089  
 Rear ----- 3741090

MUFFLER (special camshaft)  
 Type ----- Dual, straight thru,

INLET MANIFOLD  
 Material ----- Aluminum

**CORVETTE 283 CUBIC INCH V-8 ENGINE**  
 (With Optional Fuel Injection) +

Same as Ramjet Fuel Injection Passenger car V-8 engine shown on Pages 16-25, Engine & Clutch, except for following differences:

FAN AND GENERATOR BELT  
 Pitch line length ----- 56.00

GENERATOR  
 Model ----- 1102059  
 Pulley size (P.D.) ----- 4.00  
 Ratio (generator to engine RPM) ----- 1.66:1

COIL  
 Make ----- Delco-Remy  
 Model ----- 1115107

MUFFLER (special camshaft)  
 \* Type ----- Dual, straight thru

RADIATOR CAP  
 Valve Opens @ ----- 6.25-7.75 psi

**TRANSMISSION**

3-speed is same passenger car shown on Page 3, Transmission, except for following differences:

GEAR RATIOS  
 First ----- 2.21:1  
 Second ----- 1.32:1  
 Third ----- 1.00:1  
 Reverse ----- 2.51:1

GEARSHIFT  
 Location ----- On floor

4-speed is same as passenger car shown on Page 3, Transmission, except for following differences:

REVERSE INHIBITOR  
 Type ----- Positive, manually controlled  
 Operation ----- Lift "T" handle allowing selector lever to enter reverse gate

SPEEDOMETER GEARS (3 and 4-speed)  
 Number of Teeth  
 Drive gear ----- 8  
 Driven gear ----- 22  
 Normal tooth pitch ----- 30

Powerglide is same as passenger car shown on Page 4, Transmission, except for following differences:

SELECTOR LEVER  
 Location ----- Floor mounted

SPEEDOMETER GEARS  
 Number of Teeth  
 Drive gear ----- 8  
 Driven gear ----- 21  
 Normal tooth pitch ----- 30

+ - See Pages 14-15, Engine & Clutch, for Engine Performance curves

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

# AMA Specifications – Passenger Car

Data prepared and distributed by American automobile manufacturers, using uniform questionnaire form developed by car manufacturers under auspices of the Automobile Manufacturers Association.

**MAKE OF CAR** CHEVROLET **MODEL YEAR** 1959 **DATE ISSUED** 7-15-58 **REVISED** 10-16-58

**COMPANY** Chevrolet Motor Division, General Motors Corporation

MODEL NAME	SYMBOL	MODEL NAME	SYMBOL
Corvette	867		

## TABLE OF CONTENTS

General Specifications . . . . .	1	Drive Units . . . . .	12	Rear Suspension . . . . .	18	Body & Car - General . . . . .	25
Engine - Mechanical . . . . .	2	Brakes . . . . .	15	Body Dimensions . . . . .	19	Weights . . . . .	26
Electrical . . . . .	8	Front Suspension & Steering . . . . .	16	Station Wagon . . . . .	24	Index . . . . .	27

### NOTES:

1. The specifications set forth herein are those in effect at the date of compilation and are subject to change without notice. UNLESS OTHERWISE INDICATED;
2. All specifications are standard for the models under which they are listed.
3. Specifications apply basically to 4-door sedan or equivalent. Body dimensions shown on pages 19-24 include other body models available.
4. All dimensions are nominal engineering dimensions.

## GENERAL SPECIFICATIONS

MODEL	Additional Information Page No.:	
		283 cu. in. V-8
Wheelbase (L-101)	22	102.0
Tread	Front (W-101)	57.0
	Rear (W-102)	59.0
Maximum Overall Dimensions	Length (L-103)	177.2
	Width (W-103)	72.8
	Height (H-101)	51.6
Transmission— (Specify trade name - opt., not available)	Manual	3-Speed close ratio (a)
	Overdrive	None
	Automatic	Powerglide (optional)
Axle ratio	Manual	3.70:1
	Overdrive	None
	Automatic	3.55:1
Tire size		6.70x15-1/2 ply
	Type, no. cyl., valve arr.	90°V-8, OHV
Engine	Fuel system (Carb. or inj.)	Carburetor (b)
	Bore and stroke	3.875 x 3.00
	Piston displ., cu. in.	283
	Std. compression ratio	9.5:1 (c)
	Max. bhp at engine rpm	230 @ 4800
	Max. torque at rpm	300 @ 3000

Rev. Form 1-58

- (a) 4-Speed close ratio optional  
 (b) Dual 4-barrel or Fuel Injection optional  
 (c) 10.5:1 with Fuel Injection and special cam

# AMA Specifications – Passenger Car

**MAKE OF CAR** CHEVROLET **MODEL YEAR** 1959 **DATE ISSUED** 7-15-58 **REVISED** 10-16-58

**MODEL** Corvette

## ENGINE—GENERAL

Type, no. cyls., valve arr.		90° V-8, OHV
Bore and stroke		3.875 x 3.0
Piston displacement, cu. in.		283
Bore spacing (C/L to C/L)		4.4
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
Compres. ratio (nominal)	Standard	9.5:1
	Optional	10.5:1 with Fuel Injection and special cam
Cylinder Head Material	Standard	Cast alloy iron
	Optional	None
Cylinder Sleeve - Wet, dry, none		None
Number of mounting points	Front	Two
	Rear	One
Taxable Dia. <sup>2</sup> x No. Cyl. horsepower		2.5 1.8
Published max. bhp at engine RPM*	Standard	230 @ 4800
	Optional	See below
Published max. torque (lb. ft. @ RPM)	Standard	300 @ 3000
	Optional	See below
Recommended fuel regular - premium	Standard	Premium
	Optional	Premium
Recommended idle speed (neutral)		3-Speed - 475 in Neutral; Powerglide - 425 in Drive

## ENGINE—PISTONS

Material	Cast aluminum alloy
Description and finish	Flat head, slipper skirt autothermic having machined reliefs for valve clearance (a)
Weight (piston only) oz.	N.A.

\* Max. bhp (brake horsepower) and max. torque corrected as defined by SAE Engine Test Code.

(Continued)

Rev. Form 6-57

(a) With Fuel Injection and special cam, domed piston with machined reliefs

<u>Engine</u>	<u>BHP @ RPM</u>	<u>Torque @ RPM</u>
2x4-bbl. carburetor	245 @ 5000	300 @ 3800
2x4-bbl. carb. and special cam	270 @ 6000	285 @ 4200
Fuel Injection	250 @ 5000	305 @ 3800
Fuel Injection and special cam	290 @ 6200	290 @ 4400

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## ENGINE PISTONS (Cont.)

Clearance (limits)	Top land		.035-.043
	Skirt	Top	.0016-.0020
		Bottom	N.A.
Ring groove depth	No. 1 ring		.2153-.2218
	No. 2 ring		.2153-.2218
	No. 3 ring		.2053-.2158
	No. 4 ring		None

## ENGINE-RINGS

Function (top to bottom)	No. 1, oil or comp.	Compression
	No. 2, oil or comp.	Compression
	No. 3, oil or comp.	Oil Control
	No. 4, oil or comp.	None
Compression	Description - material, type, coating, etc.	Inside bevel, cast alloy iron, chrome plated O.D.
	Width	.9775-.9780
	Gap	.010-.020
Oil	Description - material, type, coating, etc.	Multi-piece, two (2) steel rails with chrome plated O.D. and one (1) stainless steel spacer
	Width	.221-.231
	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.	Pressed in rod	
	Bushing	In rod or piston	None
		Material	None
Clearance	In piston	.00015-.00025	
	In rod	None	
Direction & amount offset in piston	Major thrust side - .060		

## ENGINE-CONNECTING RODS

Material	Drop forged steel	
Weight (oz.)	NA	
Length (center to center)	5.699-5.701	
Bearing	Material & Type	Steel backed babbitt, precision removable (a)
	Overall length	.817
	Clearance (limits)	.0007-.0027
	End play	.008-.011

(g) With special camshaft, steel backed aluminum alloy matrix with a thin lead alloy overplate



# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## ENGINE—CRANKSHAFT

Material		Forged steel	
Vibration damper type		Inertia, rubber mounted	
End thrust taken by bearing (No.)		5	
Crankshaft end play		.002-.006	
Main bearing	Material & type	Steel backed babbitt, removable (a)	
	Clearance	.0008-.0031	
	Journal dia. and bearing overall length	No. 1	2.2983 x .7620
		No. 2	2.2983 x .7620
		No. 3	2.2983 x .7620
		No. 4	2.2983 x .7620
		No. 5	2.2983 x 1.169
		No. 6	None
No. 7		None	
Dir. & amt. cyl. offset		None	
Crankpin journal diameter		1.999-2.000	

## ENGINE—CAMSHAFT

Location		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		Steel
	Camshaft gear or sprocket material		Cast alloy iron
	Timing chain	No. of links	46
		Width	.875
		Pitch	500

## ENGINE—VALVE SYSTEM

Hydraulic lifters (Std, opt, NA)		Standard (b)
Special provision for valve rotation (intake, exhaust)		None
Rocker ratio		1.5:1
Operating tappet clearance (indicate hot or cold)	Intake	Zero (b)
	Exhaust	Zero (b)
Timing marks on fly-wheel, damper, other		Damper

(Continued)

Rev. Form 6-57

- (a) With special camshaft, steel backed aluminum matrix with a thin lead alloy overplate
- (b) With special camshaft, mechanical lifters standard - valve lash (hot), intake .012", exhaust .018" for maximum power output; .008" intake, .018" exhaust for maximum economy.

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58  
 MODEL Corvette

## ENGINE—VALVE SYSTEM (cont.)

Timing	Intake	Opens (°BTC)	12°30'	Special camshaft	35°	
		Closes (°ABC)	57°30'		72°	
		Duration - deg.	250		287°	
	Exhaust	Opens (°BBC)	51°30'		76°	
		Closes (°ATC)	159°30'		31°	
		Duration - deg.	250		287°	
Valve opening overlap		280		66°		
Intake	Material		Alloy steel			
	Overall length		4.9024-4.9224 (a)			
	Actual overall head dia.		1.715-1.725			
	Angle of seat		46° in head			
	Seat insert material		None			
	Stem diameter		.3415-.3422			
	Stem to guide clearance		.0010-.0027			
	Lift		.3987	.382 (.394-.012 lash)		
	Outer spring press. and length	Valve closed (lb. @ in.)	69-79 @ 1.696			
		Valve open (lb. @ in.)	159-169 @ 1.306			
	Inner spring press. and length	Valve closed (lb. @ in.)	Valve spring damper 5-10 lb.			
		Valve open (lb. @ in.)	N.A.			
	Exhaust	Material		Alloy steel		
		Overall length		4.913-4.933 (a)		
Actual overall head dia.		1.495-1.505				
Angle of seat		46° in head				
Seat insert material		None				
Stem diameter		.3417-.3417				
Stem to guide clearance		.0015-.0032				
Lift		.3987	.382 (.400-.018 lash)			
Outer spring press. and length		Valve closed (lb. @ in.)	69-79 @ 1.696			
		Valve open (lb. @ in.)	159-169 @ 1.306			
Inner spring press. and length		Valve closed (lb. @ in.)	Valve spring damper 5-10 lb.			
		Valve open (lb. @ in.)	N.A.			

## 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	Pressure
	Cylinder walls	Pressurized jet cross sprayed

(a) With special camshaft, intake 4.8699-4.8899,  
 exhaust 4.8905-4.9105

(Continued)

Rev. Form 6-57

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Gear
Normal oil pressure (lb. @ engine rpm)	35 @ 2000
Oil pressure sending unit (elect. or mech.)	Electric
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, partial, other)	Full flow
Filter replacement (element, complete)	Element
Capacity of crankcase, less filter-refill (qt.)	5
Oil grade recommended (SAE viscosity and temperature range)	32°F and above - SAE 20W, SAE 20, SAE-10W-30 0°F and above - SAE 10W, SAE 10W-30 Below 0°F - SAE 5W, SAE 5W-20 Sustained high speed over 90°F - SAE 30 may be used
Engine Service Requirement (MM, MS, etc.)	MS or DG

## ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)	Dual	
Muffler No. & type (reverse flow, straight thru, separate resonator)	Two, reverse flow (a)	
Exhaust pipe dia. (O.D.) wall thickness	Branch	None
	Main	2.0 x .0625
Tail pipe diameter (O.D. & wall thickness)	1.81 x .0598	

## ENGINE—FUEL SYSTEM

(See Supplement to Page 6 for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.	Carburetor (Fuel Injection optional)		
Fuel Tank	Capacity (gals.)	16.4	
	Filler location	Left side of body to rear of driver's door	
Fuel Pump	Type (elec. or mech.)	Mechanical	
	Locations	Lower right front corner of engine	
	Pressure range	5.25-6.50 psi	
Vacuum booster (std., optional, none)	None		
Fuel Filter	Type	Sintered bronze	
	Locations	Carburetor inlet	
Carburetor	Make & Model No.	Carter - 3756676 2 x 4-barrel regular cam front 3744002, rear 3744004; special camshaft, front 3741089, rear 3741090	
	Number & Type	Single 4-barrel downdraft (dual 4-barrel downdraft optional)	
	Barrel size	1.4375	
	Choke type	Automatic	
	Intake manifold heat control (exhaust or water)	Exhaust	
	Air cline. type	Standard	Oil watted
		Optional	Paper element with Fuel Injection

(a) Straight through with special camshaft.

# AMA Specifications -- Passenger Car

Supplement to Page 6

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

## SUPPLEMENTARY INFORMATION

MODEL Corvette

### Engine Fuel System - Fuel Injection

Injection System	Make	Rochester Products
	Model	7017200 (b)
	Type	Constant flow
Fuel Recommended		Premium
Fuel Pump	Type	Mechanical
	Location	Lower right front corner of engine
	Pressure range	5.25-6.50 psi
Auxiliary Fuel Filter	Type	Paper filter
	Location	Bracket to engine adapter on right, rear of center
Inlet Manifold Adapter-Material		Cast aluminum
Inlet Manifold - Material		Cast aluminum
Air Induction (a)	Air Cleaner Type	Dry (paper element)
	Air Meter Location	Left side of engine
	Plenum Chamber	Integral with inlet manifold
	Ram Pipes	Eight, integral with inlet manifold
	Ram Pipe Length	12 inches
Fuel Induction		Metered as function of air flow
Air/Fuel Ratio Control	Type	Vacuum sensitive diaphragm
	Location	On fuel meter
Fuel Meter Pump	Type	Gear
	Location	In fuel meter assembly
	Drive	Gear driven by flexible shaft from distributor
	Pressure (max.)	300 psi
Injection Nozzles	No. Used	Eight
	Material	Brass
	Location	Mounted on inlet manifold above intake ports
	Orifice Size, Fuel	.0118
	Insulation	Bakelite blocks
Automatic Enrichment	Type	Electric, time-temperature
	Location	On air meter assembly
	Current Draw	1 amp, @ 70°
	Fast Idle Cam	Yes

- (a) Air intake ducts which channel outside air to the engine compartment are furnished with Fuel Injection.
- (b) 7017250 with special camshaft.

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## ENGINE—COOLING SYSTEM

Type (pressure system, atmospheric, other)		Pressure system	
Radiator cap relief valve pressure		6.25-7.75 psi	
Circulation thermostat	Type (choke, bypass)	Choke	
	Starts to open at (°F)	160	
Water pump	Type (centrifugal, other)	Centrifugal	
	Number of pumps	One	
	Drive (V-belt, other)	V-belt	
	Bearing type	Double row ball	
By-pass recirculation type (internal, external)		Internal	
Radiator core type (cellular, tube and fin, other)		Cellular	
Cooling system capacity	With heater (qt.)	16.5	
	Without heater (qt.)	15.5	
	Opt. equipment-specify (qt.)	None	
Water jackets full length of cylinder (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		1-staggered
	Diameter		17
	Ratio-fan to crankshaft rev.		9:19:1
	Fan cutout type		None
	Bearing type		Double row ball
*Drive belts (indicate belt used by letter)	Fan		A
	Generator		A
	Water Pump		A
	Power Steering		N.A.
	Air Conditioning		N.A.

Rev. Form 1-58

* Drive Belt Dimensions	
Angle of V	37-44°
Nominal length (SAE)	55.10 (a)
Width	.380 ± .005

(a) Pitch length

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model		Delco, 1980458
	Voltage Rtg. & Total Plates		12 Volts, 54 plates
	SAE Designation & Amp Hr. Rtg.		2SMR, 53 amp. hr. @ 120 hr.
	Location		Engine compartment right rear side
Terminal grounded		Negative	
Generator	Make		Delco-Remy
	Model		1102043 (a)
	Type		Two brush, shunt wound
	Ratio—Gen. to Cr/s rev.		2.00:1
	Gen. cut-in—engine rpm		620
Regulator	Make		Delco-Remy
	Model		1119001
	Type		Vibrator
	Cutout relay	Closing voltage @ generator rpm	11.8-13.5 @ 1300 RPM
		Reverse current to open	NA
	Regulated	Voltage	13.8-14.8
		Current	27-33 amps
	Voltage test conditions	Temperature	Operating
Load		10 amps max.	
Other		None	

## ELECTRICAL—STARTING SYSTEM

Starting motor	Make		Delco-Remy
	Model		1107664
	Rotation (drive end view)		Clockwise
	Engine cranking speed		NA
	Test conditions		Engine at operating temperature
	Lock test	Amps	NA
		Volts	NA
		Torque (lb. ft.)	NA
	No load test	Amps	75 (max.)
		Volts	10.3
RPM (min.)		6900	
Motor control	Switch (solenoid, manual)		Solenoid
	Starting procedure		3 & 4-Speed, shift into neutral and depress clutch. Powerglide place selector lever in "P" (Park) or "N" (Neutral). To start engine, depress accelerator pedal to floor, release, turn ignition key to extreme right.

(a) 1102059 with special cam.

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE: ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## ELECTRICAL—STARTING SYSTEM (cont.)

Motor drive	Engagement type		Positive shift solenoid
	Pinion meshes (front, rear)		Front
	Number of teeth	Pinion	9
		Flywheel	168
Flywheel tooth face width		.1135	

## ELECTRICAL—IGNITION SYSTEM

Coil	Make		Delco-Remy
	Model		1115091 (e)
	Amps	Engine stopped	4.0
Engine idling		1.8	
Distributor	Make		Delco-Remy
	Model		1110916 (a)
	Centrifugal adv. in crankshaft degrees @ engine rpm	Start (rpm)	0 @ 600 (c)
		Intermediate points deg. @ rpm	14 @ 1500 (c)
		Max deg. @ rpm	28 @ 3700 (c)
	Vacuum adv. in crankshaft degrees @ in. Hg.	Start (in. Hg.)	0 @ 8 (d)
		Intermediate points, deg. @ in. Hg.	NA
		Max. deg. in. Hg.	15 @ 15.5 (d)
	Breaker gap (in.)		.018
	Cam angle (deg.)		26-33
Breaker arm tension (oz.)		19-23	
Timing	Crankshaft deg. @ rpm.		14° BTC @ 600 RPM (b)
	Mark location		Damper
	Cylinder numbering system (see page 2)		Left bank - 1-3-5-7 Right bank - 2-4-6-8
	Firing order (see page 2)		1-8-4-3-6-5-7-2
Spark Plug	Make and model		AC-46
	Thread (mm)		14
	Tightening torque (lb. ft.)		25
	Gap		.033-.038
Cable	Conductor type		Linen core impregnated with electrical conducting material
	Insulation type		Rubber with neoprene jacket
	Spark plug protector		Hypalon jacket

## ELECTRICAL—SUPPRESSION

Description	Non-metallic high tension cable
-------------	---------------------------------

- (a) 1110891 with 2 x 4-bbl. carburetors; 1110915 with Fuel Injection and 1110914 with Fuel Injection and special cam.
- (b) 14° BTC @ 1000 RPM with Fuel Injection and special cam
- (c) 0 @ 1000 RPM, 5 @ 1500 RPM, 22 @ 6000 RPM with Fuel Injection and special cam
- (d) 0 @ 5, 24 @ 13.5 with Fuel Injection; no vacuum advance with 2 x 4-bbl. carburetors and Fuel Injection with special cam

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58  
 MODEL Corvette

## ELECTRICAL—INSTRUMENTS AND SWITCHES

Speed-ometer	Make	AC
	Trip odometer (yes, no)	No
Charge indicator-type		Ammeter
Temperature indicator-type		Gauge (electric)
Oil pressure indicator-type		Gauge (bourdon tube)
Fuel indicator-type		Gauge (electric)
Other		Tachometer (mechanical)
Ignition switch	Identify positions in order and circuits controlled	Counter clockwise from vert.----- Off, "Lock" Vertical ----- "Off," unlocked 1st pos. clockwise from vert.----- "On", ign. & accessories 2nd pos. clockwise from vert. ----- "Start", ign. & starter, spring return to "On"
	Provision for illumination	None
	Location	On instrument panel, right of steering column
Main lighting switch	Identify positions and lights controlled	Depressed - off. 1st notch - Instru. panel, parking, tail, license lights 2nd notch - Instru. panel, head, tail, license lights Rotate clockwise to dim or turn off instru. panel lights, counter clockwise to turn on or brighten panel lights.
Other light switches	Locations and lamps controlled	Toe panel ----- Headlight dimmer. Steering column ----- Turn signal lamps Hinge pillars, rh & lh ----- Courtesy lamp (b)(c) Brace below instru. panel ----- Stop lamps Parking brake handle shaft ----- Park brake alarm lamp (t)
Other switches	Locations and devices controlled	Instru. panel, center ----- Power folding top. (d) Instru. panel, left ----- Elect. w/s wipers Door panels, lh & rh ----- Elect. window lifts (d) Instru. panel, lower ----- Radio (b) Instru. panel, lower ----- Heater blower (b)
Windshield wiper	Make	Delco
	Type	Electric, 2-speed
	Vacuum booster provision	None
	Washer provision	Factory Optional Accessory (a)
Horn	Type	Vibrator
	Number used	2
	Amp draw (each)	8.0-11.0 @ 12.5 Volts

- (a) Includes co-ordinator and vacuum reserve tank
- (b) Available as a Factory Optional Accessory
- (c) Switch on lamp housing also
- (d) Available as a Regular Production Option



# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58  
 MODEL Corvette

## ELECTRICAL—LAMP BULBS

Give quantity used and trade number, e.g., Headlamp 2-5400 S, dual headlight 2-4001, 2-4002. Indicate accessories which are not standard equipment by an asterisk following the numbers.

Headlamps & arrangement	Dual horizontal 2-4001 (inner), 2-4002 (outer)
Headlamp beam indicator	1-53
Parking light	2-103 $\frac{1}{2}$ (4 cp. filaments)
Tail light	2-103 $\frac{1}{2}$ (4 cp. filaments)
Stop light	2-32 cp. filaments of tail light bulbs
Direction signal	Front
	Rear
	Indicator
License plate light	2-32 cp. filaments of tail light bulbs
Instrument light	2-57
Ignition lock light	2-67
Back up light	5-57
Dome light	None
Clock light	None
Radio light	None
Glove compartment light	1-67
Park brake alarm	1-GE-1891
Courtesy light	None
Cig. lighter light	1-53*
	1-90*
	1-53

## ELECTRICAL—FUSE & CIRCUIT BREAKER DATA

Use trade number of fuse, e.g., SFE-10. Indicate circuit breaker by ampere capacity suffixed by letters "C.B.," e.g., 30 C.B. Where fuse or circuit breaker protects multiple circuits indicate first use by a letter and repeat the same letter for all units protected by the same fuse or circuit breaker, e.g., Parking lights SFE-10 (a), Direction indicator same as (a).

Headlamp	15 CB (a)
Headlamp beam indicator	(a)
Parking light	(a)
Tail light	3 AG/AGC - 10 amp (b)
Stop light	(b)
Direction indicator	Flasher
License plate light	(b)
Instrument light	AGC - 3 amp (c)
Ignition light	None
Back up light	None
Dome light	None
Clock	3 AG/AGC - 10 amp (d)
Clock light	(c)
Radio	Lights (c), Receiver 3 AG/AGC 7.5 amp
Glove compartment light	None
Park brake alarm	(d)
Power windows	10 CB (e)
Heater blower	3 AG/AGC - 10 amp
Cig. lighter light	(c)
Power top	(e) & 2 SAE 1 $\frac{1}{2}$ amp

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE: ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## DRIVE UNITS—CLUTCH (Manual Transmission)

Make & type	Borg and Beck, dry plate	
Type pressure plate springs	Coil	
Total plate pressure (lb.)	1620 initial	
No. of clutch driven discs	One	
Clutch facing	Material	Premium woven asbestos composition
	Outside & inside dia.	10.0 x 6.5
	Total eff. area (sq.in.)	90.72
	Thickness	.132-.138
	Engagement cushioning method	Springs
Release bearing	Type & method of lubrication	Ball bearing, sealed
Torsional damping	Methods: springs, friction material	Spring at hub

## DRIVE UNITS—TRANSMISSIONS

Manual (std. or opt.)	Standard
Manual with overdrive (std. or opt.)	None
Automatic (std. or opt.)	Optional

## DRIVE UNITS—MANUAL TRANSMISSION

Number of forward speeds		3-Speed (standard)	4-Speed (optional)	
Transmission ratios	In first	2.21:1	2.20:1	
	In second	1.32:1	1.66:1	
	In third	1.00:1	1.31:1	
	In fourth	None	1.00:1	
	In reverse	2.51:1	2.26:1	
Synchronous meshing, specify gears		2nd, and 3rd	1st, 2nd, 3rd, 4th	
Lubricant	Capacity (pt.)	2	3.5	
	Type recommended	A-9 mineral lubricant		
	SAE viscosity number	Summer	SAE-90	
		Winter	SAE-90	
		Extreme cold	SAE-80	

# AMA Specifications – Passenger Car

**MAKE OF CAR** CHEVROLET **MODEL YEAR** 1959 **DATE: ISSUED** 7-15-58 **REVISED** 10-16-58

**MODEL** Corvette

## DRIVE UNITS—MANUAL TRANSMISSION WITH OVERDRIVE

For transmission data see manual transmission section

Overdrive	Type (planetary or other)		None	
	Manual lockout (yes, no)		-	
	Downshift accelerator control (yes, no)		-	
	Minimum cut-in speed		-	
	Gear ratio		-	
	Lu- bri- cant	Capacity (Overdrive only)		-
		Separate filler (yes, no)		-
		Type recommended		-
		SAE vis- cosity number	Summer	-
			Winter	-
Ext. cold	-			

## DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	Powerglide	
Type describe	Torque converter with planetary gears	
Method of Selection (Lever, Push Button or other)	Lever	
Selector Pattern	P-Park, R-Reverse, N-Neutral, D-Drive, L-Low	
List gear ratios Selector Pattern and indicate which are used in each selector position	Drive 1.82-1.00:1 Low 1.82:1 Reverse 1.82:1	
Max. upshift speeds—drive range	55	
Max. kickdown speeds—drive range	50	
Torque converter	Number of elements	3
	Max. ratio at stall at engine rpm	2.1:1
	Type of cooling (air, water)	Air
Lubricant	Capacity—refill (pt.)	9
	Type recommended	Type "A", Suffix "A"
Special transmission features	Three element hydraulic torque converter with automatic planetary gear system for reverse and low	

# AMA Specifications – Passenger Car

**MAKE OF CAR** CHEVROLET **MODEL YEAR** 1959 **DATE: ISSUED** 7-15-58 **REVISED** 10-16-58

**MODEL** Corvette

## DRIVE UNITS—PROPELLER SHAFT

Number used		1
Type (exposed, torque tube)		Exposed
Outer diameter x length* x wall thickness	Manual transmission	2.50 x 31.55 x .065
	Overdrive transmission	None
	Automatic transmission	Same as manual transmission
Inter-mediate bearing	Type (plain, anti-friction)	None
	Lubrication (fitting, prepack)	None
Universal joints	Make	Own
	Number used	2
	Type (ball and trunnion, cross, other)	Yoke & spider (trunnion)
	Bearing	Type (plain, anti-friction)
Lubric. (fitting, prepack)		Fitting
Drive taken through (torque tube or arms, springs)		Rear springs and radius rods
Torque taken through (torque tube or arms, springs)		Rear springs and radius rods

## DRIVE UNITS—REAR AXLE

Description - (incl. limited slip differential)		Standard axle - Semi-floating, overhung pinion gear. Optional "Positraction" - Semi-floating, overhung pinion gear. Spicer limited slip with dual 4 disc clutches applied by reaction torque through the differential side gears.	
Drive Pinion Offset		1.5	
No. of differential pinions		2 (b)	
Gear ratio and No. of teeth	Automatic transmission	3.55:1, 9-32 (a)	
	Overdrive trans.	None	
	Manual transmission	3.70:1, 10-37 (a)	
Ring gear pitch diameter & O.D.		8.375 p.d. & o.d.	
Pinion adjustment (shim, other)		Shim	
Pinion bearing adj. (shim, other)		None	
Wheel bearing type		Ball	
Lubricant	Capacity (pt.)	4	
	Type recommended	A-9 hypoid	
	SAE viscosity number	Summer	SAE-90
		Winter	SAE-90
Extreme cold		SAE-90	

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

- (a) Optional Positraction axles available with 3.70:1 (10-37), 4.11:1 (9-37), or 4.56:1 (9-41) ratios with manual transmission. Positraction not available with automatic transmission.
- (b) 4 pinions in Positraction axle.

# AMA Specifications - Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE: ISSUED 7-15-58 REVISED 10-16-58  
 MODEL Corvette

## DRIVE UNITS—WHEELS

Type & material		Short spoke disc, pressed steel
Rim (size and flange type)		15 x 5K (a)
Attachment	Type (bolt or stud)	Stud
	Circle diameter	4.75
	Number and size	5, 7/16-20

## DRIVE UNITS—TIRES

Standard	Size & ply	6.70 x 15-4 ply
	Type - Nylon, etc.	Rayon
	Sidewall color	Black
Optional	Size & ply	6.70 x 15-4 ply
	Type - Nylon, etc.	Rayon (b)
	Sidewall color	White (b)
Rev/mile at 30 mph		760
Inflation press.(cold)	Front	24 psi
	Rear	24 psi

## BRAKES—SERVICE

Type		Servo, 4 wheel hydraulic	
		Regular production	Optional (c)
Power brake type		None	
Effective area (sq. in.)		157	108
Gross lining area (sq. in.)		157	120
Percent brake effectiveness-front		56%	56%
Drum	Diameter	11	
		11	
Type and material		Composite; cast alloy iron rim, pressed steel web	
Bonded or riveted		Bonded	Riveted
Brake lining	Material		Full molded asbestos comp.
	Front Shoe	Size (length x width x thickness)	9.29 x 2.0 x .175
		Segments per shoe	1
	Rear Shoe	Size (length x width x thickness)	9.29 x 1.75 x .175
		Segments per shoe	6
Material		Full molded asbestos comp.	Sintered Iron
Front Shoe	Size (length x width x thickness)	11.69 x 2.0 x .175	2.00 x 1.00 x .175
	Segments per shoe	1	10
Rear Shoe	Size (length x width x thickness)	11.69 x 1.75 x .175	2.00 x .875 x .175
	Segments per shoe	1	10
Wheel cylinder bore	Front	1.125	
	Rear	1.0	
Master cylinder bore		1.0	
Available pedal travel		4.5	
Line pressure at 100 lb. pedal load		700 approx	
Shoe clearance adjustment		Adjust to a light drag, back off 7 notches (d)	

- (a) 15 x 5.5K wheels available as a Regular Production Option
- (b) 6.70 x 15-4 ply nylon tires (black) available as a Limited Production Option
- (c) Heavy duty cerametalix brakes and suspension also available as a Regular Production Option.
- (d) Back off 12 notches on sintered iron brakes.

# AMA Specifications -- Passenger Car

Supplement to Page 15

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

## SUPPLEMENTARY INFORMATION

MODEL Corvette

Optional Heavy Duty Brakes (a)  
(Not recommended for street use)

Type		Servo, 4 wheel hydraulic	
Effective area (sq. in.)		121.5	
Gross lining area (sq. in.)		121.5	
Brake effectiveness, front		62%	
Drum	Diameter	Front	11
		Rear	11
	Type & material	Composite; cast alloy iron rim, pressed steel web	
Brake cooling at each wheel		Vaness cast on drum rim, air scoop on backing plate	
Brake lining, front shoe	Attachment		Welded
	Material		Cerametalix
	Size	Front wheel	2.25 x 2.50 x .220
		Rear wheel	2.25 x 2.00 x .220
Segments per shoe		2	
Brake lining, rear shoe	Attachment		Welded
	Material		Cerametalix
	Size	Front wheel	2.25 x 2.50 x .220
		Rear wheel	2.25 x 2.00 x .220
Segments per shoe		4	
Wheel cyl. bore	Front	1.125	
	Rear	.875	
Master cylinder bore		1.0	
Available pedal travel		4.5	
Line pressure @ 100 lb. pedal load		700 approx.	
Shoe clearance adjustment		Adjust to alight drag, back off 27-32 notches	

(a) Available with heavy duty suspension as a Regular Production Option.

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## BRAKES—PARKING

Type of control		T-handle pull rod
Location of control		Below inst. panel, left of steering column
Operates on		Rear service brakes
If separate from service brakes	Type (Internal or external)	None
	Drum diameter	None
	Lining size (length x width x thickness)	None

## FRAME or UNITIZED CONSTRUCTION

Type and description	Full length welded box section side members, "I" beam "I" member. Bracing from "I" member to front side members. "U" type rear shock absorber cross member. Box section front and rear cross members.
----------------------	---

## SUSPENSION—GENERAL (See Supplemental page 16 for details on Air Suspension)\* (a)

Provision for car leveling		None
Provision for brake dip control		None
Provision for acc. squat control		None
Special provisions for car jacking		Scissors - type jack provided
Shock absorber front & rear	Type	Direct, double acting (c)
	Make	Delco
	Piston dia.	1.0 (b)
Other special features		Auxiliary radius rods in rear to control spring wind-up.

## SUSPENSION—FRONT

Type and description	Unitized, independent, short & long arm
----------------------	---

(Continued) Rev. Form 1-58

- (a) Air suspension not available on Corvette
- (b) 1-3/8 on optional heavy-duty brakes and suspension.
- (c) Each contains nitrogen-filled envelope in fluid reservoir to prevent fluid aeration.

\* Air Suspension:  
 Air spring type  
 Compressor data  
   type  
   make  
   drive ratio  
 Normal operating pressures  
 spring rates  
 leveling data

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

MODEL Corvette

## SUSPENSION FRONT (cont.)

Spring	Type	Coil	
	Material	Chrome alloy steel	
	Size (coil design height & I.D.; bar length x dia.)	9.62x3.002x116.0x.550 (a)	9.12x3.175x105.0x.636 (b)
	Spring rate (lb. per in.)	300 (a)	550 (b)
	Rate at wheel (lb. per in.)	170 (a)	200 (b)
	Design load (lb. @ design height)	1235 @ 9.62 (a)	1115 @ 9.12 (b)
Stabilizer	Type (link, linkless, frameless)	Link	
	Material & bar diameter	H.R. steel, .67, .70 (a)	H.R. steel, .81 (b)

## STEERING

Mechanical (std., opt., NA)		Standard	
Power (std., opt., NA)		None	
Wheel diameter		17"	
Turning diameter	Outside front	Wall to wall (l. & r.)	Left: 39 feet, right: 38.5 feet
		Curb to curb (l. & r.)	Left: 37 feet, right: 36.5 feet
	Inside rear	Wall to wall (l. & r.)	NA
		Curb to curb (l. & r.)	NA
Outside wheel angle with inside wheel at 20°		17°	

Mechanical	Gear	Type		Semi-reversible, worm and ball bearing sector	
		Make		Saginaw	
		Ratios	Gear	16.0:1	
			Overall	21.0:1 (a)	16.3:1 (b)
	No. wheel turns		3.70 (a)	3.25 (b)	
Power	Type		None		
	Make		-		
	Trade name		-		
	Gear	Type		-	
		Ratios	Gear	-	
				Overall	-
	Pump driven by		-		
Number wheel turns		-			
Linkage	Type		Center point		
	Location (front or rear of wheels, other)		Rear of wheels		
	Drag link (trans. or longit.)		Longitudinal		
	Tie rods (one or two)		Two		

(Continued)

Rev. Form 1-58

- (a) Regular production equipment
- (b) Used with optional heavy duty brakes and suspension.



# AMA Specifications – Passenger Car

**MAKE OF CAR** CHEVROLET **MODEL YEAR** 1959 **DATE: ISSUED** 7-15-58 **REVISED** 10-16-58

**MODEL** Corvette

## STEERING (cont.)

Steering Axis	Inclination or camber (deg.)		3°30'–4°30'
	Bearings (type)	Upper	Bushing
		Lower	Bushing
	Thrust	Single row ball	
Wheel alignment (range and preferred)	Caster (deg.)		
	@ design load		2°±30'
	Camber (deg.)		
@ design load		0°±30'	
Toe-in (outside tread-inches) @ design load		.00 to .12 per wheel	
Steering spindle & joint type			Reverse alliot
Wheel spindle	Diameter	Inner bearing	1.2810–1.2815
		Outer bearing	.7498–.7503
	Thread size		3/4–20
	Bearing type		Ball

## SUSPENSION—REAR

Type and description			Outrigger mounted leaf springs			
Drive and torque taken through (see page 14)			Rear springs and radius rods			
Spring	Type		Leaf, semi-elliptic			
	Material		Chrome carbon steel			
	Size (length x width, coil design height and I.D.; bar length & dia.)		51.0x2.0			
	Spring rate (lb. per in.)		115 (a)	115 (b)		
	Rate at wheel (lb. per in.)		N.A.			
	Design load (lb. at design height)		725 @ .08 negative camber height			
	Mounting insulation type		Rubber bushed			
	If leaf	No. of leaves		4 (a)	5 (b)	
		Inserts	Type and size	3 liners x 19.8, 31.8, 46.3 lengths x 1.9 widths x .11 thick		
			Material	Wax impregnated fibre board (c)		
Shackle (comp. or type.)		Tension				
Stabilizer	Type (link, linkless, frameless)		None			
	Material		None			
Track bar type			Longitudinal radius rods			

- (a) Regular production equipment.
- (b) Used with optional heavy-duty brakes and suspension.
- (c) Liners used on reg. prod., not used with opt. heavy-duty equip.

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE: ISSUED 7-15-58 REVISED 10-16-58

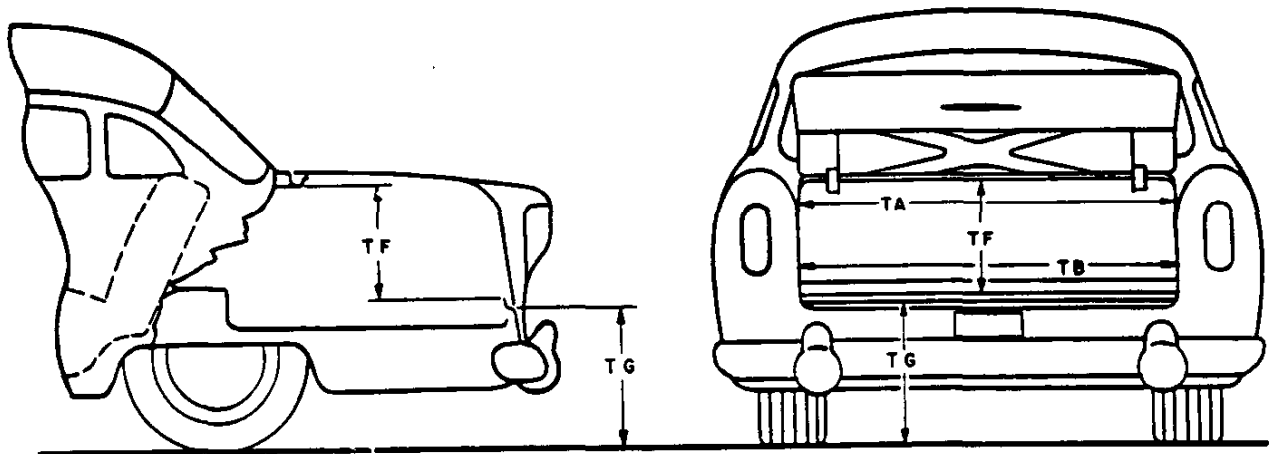
## BODY—GENERAL DEFINITIONS

NOTE: Included in the dimension definitions listed on this and the following pages are those which have been adopted by the S.A.E. These are indicated by a number following the type of dimension, e.g. L 3. Additional dimensions have been added by the AMA Specifications Body Subcommittee for inclusion in the Questionnaire. These are shown by an additional letter, e.g., MA. Symbol "a" added as suffix to SAE dimensions indicates an AMA modification. The dimensions are developed from the following basic points:

1. Front and rear seat free "A" points are taken 5" forward of vertical tangent to seat back 15" from center of body.
2. Front and rear seat "B" points are located on seat back 15" from center of body at height of horizontal tangent to top of seat cushion.
3. Front seat is in the full down and normal rearmost position.
4. Loaded position—5 passenger, front 300 lb., rear 450 lb.; includes spare wheel, tire and tools, and full complement of gas, oil, water, and tires to recommended pressure, etc.
5. C/L (centerline).
6. D. L. O. (daylight opening, exposed glass dimension - pages 21, 23 & 25).
7. Ramp breakover angle (page 21) is the supplement of the included ramp angle ( $180^\circ$  minus the included ramp angle) over which a car can pass without hanging up.

<b>MODEL</b>	Corvette
--------------	----------

## BODY—TRUNK DIMENSIONS

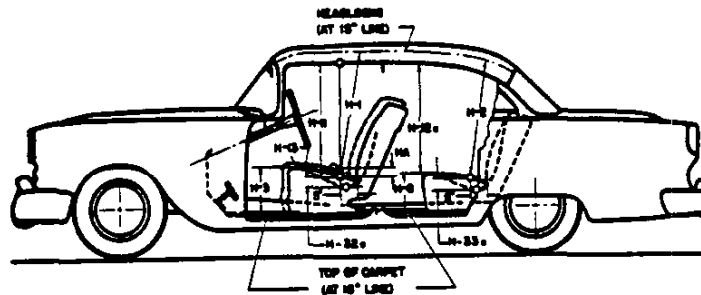


Usable trunk luggage capacity (see Section H1 of SAE Automotive Drafting Standards)	4.474 cu. ft.
TA—Width across the top	44.8 (at widest point)
TB—Width across the bottom	Opening is oval
TF—Vertical dimension at C/L from bottom to top of opening.	13.8
TG—Vertical height from ground to trunk lower opening (normal surface of outside sheet metal - loaded)	18.1
Position of spare tire storage	Horizontal in trunk under floor
Method of holding lid open	Counterbalance springs

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE: ISSUED 7-15-58 REVISED 10-16-58

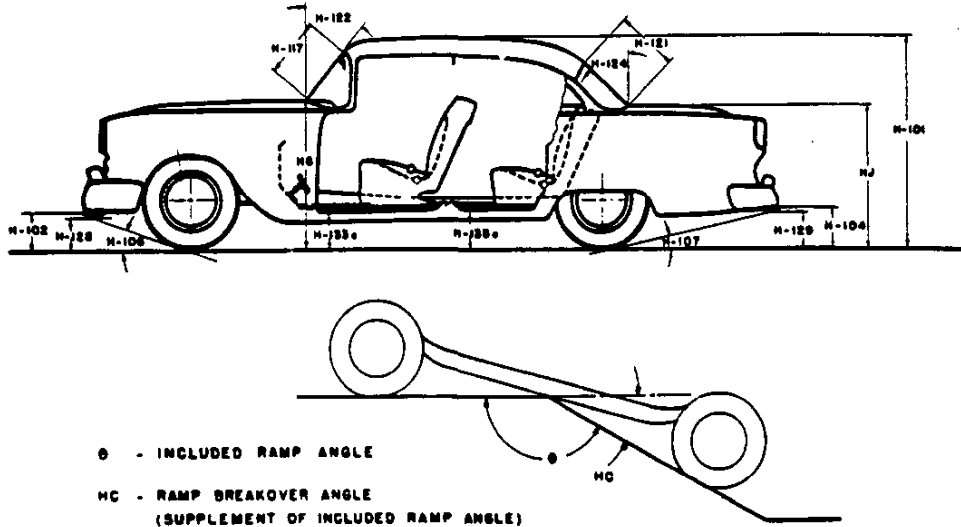
## BODY—HEIGHT DIMENSIONS--INTERIOR



MODEL	Corvette
H1. Front headroom—from free "A" pt. to headlining at 8° back of vertical on 15" line. (For "A" pt. see note 1, page 19)	Convertible: 35.3 Hard Top: 35.1
H2. Rear headroom—from free "A" pt. to headlining at 8° back of vertical on 15" line.	—
H3. Front cushion height above low point on floor carpet on 15" line (front edge of cushion).	7.3
H8. Rear cushion height above low point on floor carpet on 15" line (front edge of cushion).	—
H11. Entrance—front—cushion free "A" point to bottom windcard vertical.	29.7
H12a. Entrance—rear—top of cushion at vertical tangent to front of rear seat, to bottom of windcard in rear.	—
H13. Steering wheel clearance to seat cushion taken on arc (wheel turned for min. clearance).	5.3
HA. Front seat maximum vertical rise at free "A" point.	N.A.
HF. Front seat maximum vertical rise of free "A" point with multiple-position seat.	Not used
H32a. Front seat depressed depth – vertical dimension from free "A" point to depressed "A" point.	N.A.
H33a. Rear seat depressed depth – vertical dimension from free "A" point to depressed "A" point.	—

# AMA Specifications – Passenger Car

**MAKE OF CAR** CHEVROLET **MODEL YEAR** 1959 **DATE: ISSUED** 7-15-58 **REVISED** 10-16-58  
**BODY—HEIGHT DIMENSIONS—EXTERIOR**



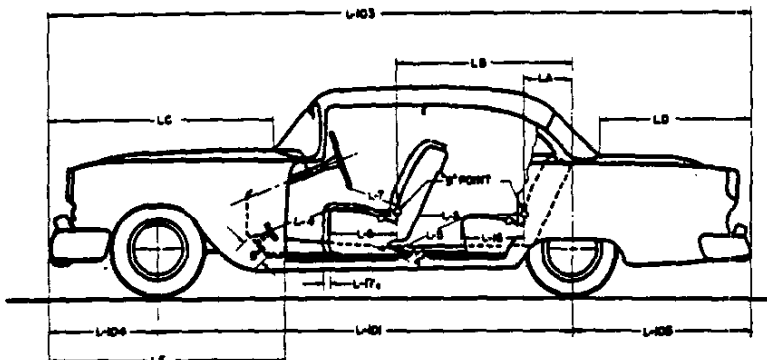
MODEL	Corvette
H101. Overall height - loaded.	Convertible: 51.6 (a), Hardtop: 51.5
H8. Overall height - curb weight.	Convertible: 52.4 (b), Hardtop: 52.3
H102. Front bumper bottom to ground at normal section.	17.0
H104. Rear bumper bottom to ground at normal section.	15.3
H106. Angle of appr.-fr. tire static loaded rad. to interfering pt. on fr. bumper, gd., other.	20°33'
H107. Angle of dep.-fr. tire static loaded rad. to interfering pt. on rr. bumper, gd., other.	16°29'
HC. Ramp breakover angle.*	7°29'
H117. Windshield DLO-slant height.	17.3
H121. Backlight DLO*-max., slant height.	11.5
H122. Windshield slope angle to vertical line on car axis.	50°
H124. Backlight slope angle to vertical line on car axis.	N.A.
H128. Ground to bottom of front bumper guard.	9.0
H129. Ground to bottom of rear bumper guard.	8.9
H133a. Bottom of front door to ground, min. dimension - car loaded.	13.1
H135a. Bottom of rear door to ground, min. dimension - car loaded.	—
HD. Min. road clear. (5 pass. load) & loc.	5.9 Rear spring front hanger
HE. Min. road clearance at rear axle.	8.0
HG. Hood at rr. to grd.-vert. dim. excl. molding, fr. hood opening line at cowl (curb wt.)	36.5
HH. Max. ht., fr. grd. frt. of windshield (curb wt.)	38.3
HJ. Max. ht. fr. grd. back of r. window (curb wt.)	N.A.

\* See Notes, page 19. (a) Top down: 49.7 (b) Top down: 50.4

# AMA Specifications - Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

## BODY-LENGTH DIMENSIONS



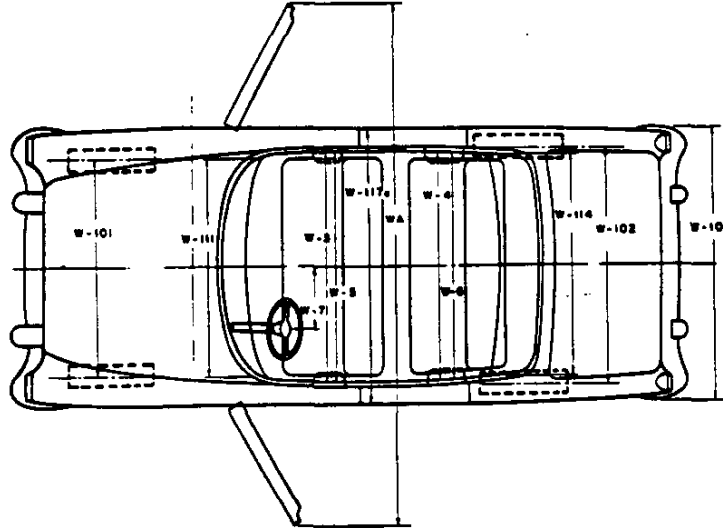
MODEL		Corvette
Interior	L3. Rear compartment of front seat back to rear seat back.	—
	L4. Leg room—front—ball of foot to top of seat to seat back—15" line.	45.1
	L5. Leg room—rear—from ball of foot to top of seat cushion and to seat back*	—
	L7. Steering wheel clearance to seat back taken on arc.	16.0
	L9. Front seat depth (front edge to vert. tan. to seat back on 15" line).	18.7
	L16. Depth of rear seat (front edge to seat back).	—
	L17a. Total adjustment of front seat at front lower seat frame.	4.4
	LA. Rear seat "B" point to center line of rear axle.	—
	LB. Front seat "B" point to center line of rear axle.	23.7
	LC. Front of car to base of windshield.	70.1
	LD. Rear of car to base of rear window or upper structure.	N.A.
	LE. Front of car to front edge of front door.	76.7
Exterior	L101. Wheelbase.	102.0
	L103. Overall length (bumper to bumper inc. guards).	177.2
	L104. Overhang—front including bumper guards.	33.0
	L105. Overhang—rear including bumper guards.	42.4

\* Dimension taken on 15" line—see notes 1 & 2, page 19.

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

## BODY—WIDTH DIMENSIONS

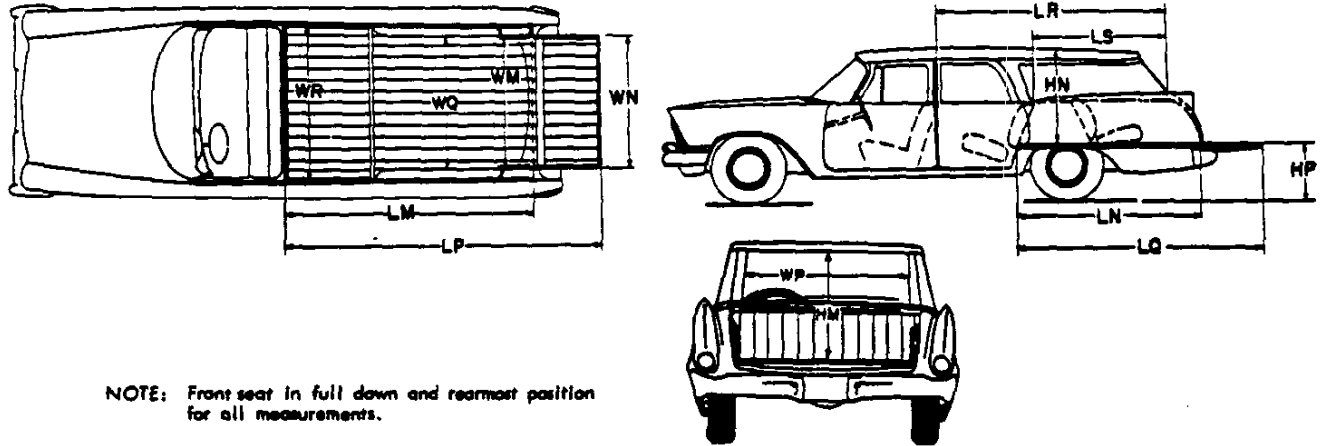


MODEL		Corvette
Inter- rior	W3. Front shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	49.4
	W4. Rear shoulder room, at garnish moulding height or nearest interference 5" forward of seat back.	--
	W5. Front hip room, at top of seat 5" forward of vert. tan. to seat back.	59.6
	W6. Rear hip room, at top of seat 5" forward of vert. tan. to seat back.	--
	W7. Steering wheel center to center of body.	13.9
Exte- rior	W101. Front tread at ground.	57.0
	W102. Rear tread at ground.	59.0
	W103. Max. overall width of car including bumpers or mouldings.	72.8
	WA. Max. overall width of car with doors open.	N.A.
	W111. Windshield DLO, max. width.	53.6
	W114. Back window DLO, max. width.	Convertible: 34.3, Hardtop: 47.9
	W117a. Max. body width at center pillar, less hardware and applied moldings.	--

# AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-15-58 REVISED 10-16-58

## STATION WAGON—CARGO SPACE DIMENSIONS



NOTE: Front seat in full down and rearmost position for all measurements.

MODEL	Corvette
LM Floor length from bottom of front seat to inside of tail gate in raised position.	Not Applicable
LN Floor lgth. from bottom of second seat to inside of tail gate in raised position.	"
LP Floor lgth. from bottom of front seat to end of tail gate in lowered position.	"
LQ Floor lgth. from bottom of second seat to end of tail gate - tail gate lowered.	"
HM Maximum hgth. of rear opening - tail gate lowered.	"
WM Rear end opening width at floor.	"
WN Rear end opening width at top of tail gate.	"
WQ Minimum distance between wheelhouses.	"
WP Maximum width of rear opening above raised tail gate.	"
WR Maximum width of cargo space at floor.	"
LR Cargo horizontal distance from top rear of front seat back to top of tail gate.	"
LS Cargo horizontal distance from top rear of second seat back to top of tail gate.	"
HN Maximum height of roof above floor at center line of car.	"
HP Platform height of end of lowered tail gate - curb weight.	"
Third Seat - facing direction.	"

# AMA Specifications - Passenger Car

Page 25

MAKE OF CAR CHEVROLET MODEL YEAR 1959 DATE ISSUED 7-25-58 REVISED 10-16-58

MODEL Corvette

## BODY - MISCELLANEOUS INFORMATION

Drs. hinged (front, rear)	Front doors	Front
	Rear doors	---
Type of finish (lacquer, enamel).		Acrylic lacquer
Hood hinge location (front, rear).		Front
Hood counterbalanced (yes, no).		No (linkage)
Hood release control (internal, external).		Internal
Vehicle (Serial) No. Location		Left front body hinge pillar
Engine No. location		Front right side of cylinder block
Theft protection - type		Ignition, key not removable in "Off" (unlocked) position
Vent window control method (crank, friction pivot).		None
Windshield type (single curved, compound curved, other)		Single curved
Rear window type (flat, curved, one piece, three piece)		Folding top: one piece flexible plastic Hard top: one piece curved rigid plastic
Side glass type (curved, flat)		Flat
Windshield glass area D.L.O.		908 sq. in.
Backlight glass area D.L.O.		408 sq. in.
Total glass area D.L.O.		1816 sq. in.

## BODY - TYPES AND STYLE NAMES —

Body type, number of passengers & style names; use manufacturer's code for series & body style.

**BODY STYLES:**

Corvette

867

CODES

2-door convertible, 2-passenger



