



GENERAL



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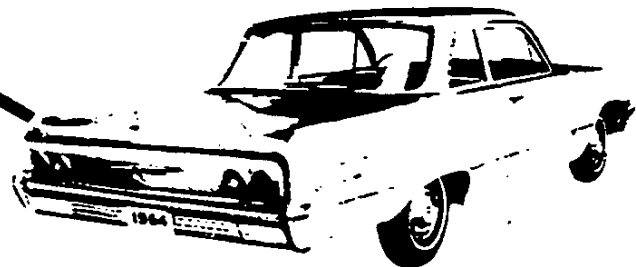
HEAVY DUTY CHASSIS-BODY (RPO B01-Z04) 11

MODEL IDENTIFICATION

1100-1200 BISCAYNE SERIES

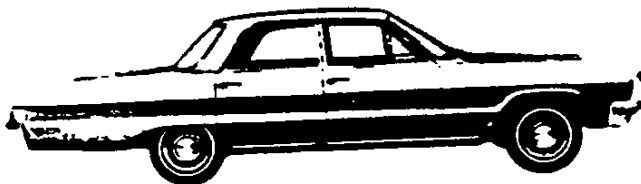


MODEL 11-1211 2-DOOR SEDAN, 6-PASSENGER
MODEL 11-1235 4-DOOR STATION WAGON, 6-PASSENGER
MODEL 11-1269 4-DOOR SEDAN, 6-PASSENGER

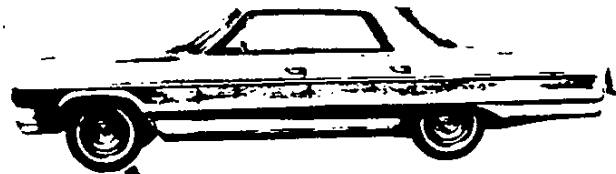


MODEL 15-1611 2-DOOR SEDAN, 6-PASSENGER
MODEL 15-1635 4-DOOR STATION WAGON, 6-PASSENGER
MODEL 15-1645 4-DOOR STATION WAGON, 9-PASSENGER
MODEL 15-1669 4-DOOR SEDAN, 6-PASSENGER

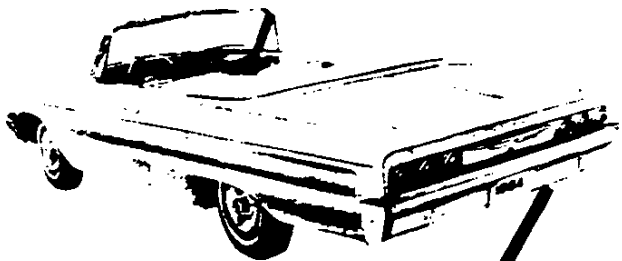
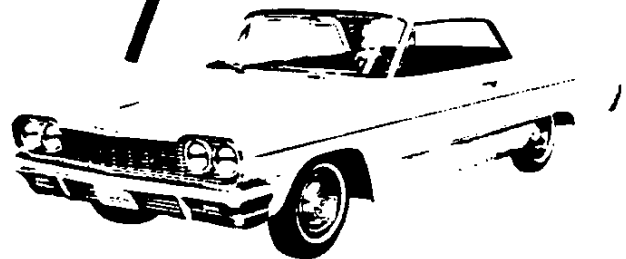
1500-1600 BEL AIR SERIES



MODEL 17-1835 4-DOOR STATION WAGON, 6-PASSENGER
MODEL 17-1839 4-DOOR SPORT SEDAN, 6-PASSENGER
MODEL 17-1845 4-DOOR STATION WAGON, 9-PASSENGER
MODEL 17-1847 2-DOOR SPORT COUPE, 5-PASSENGER
MODEL 17-1867 2-DOOR CONVERTIBLE, 5-PASSENGER
MODEL 17-1869 4-DOOR SEDAN, 6-PASSENGER



1700-1800 IMPALA SERIES



1300-1400 IMPALA
SUPER SPORT SERIES

MODEL 13-1447 2-DOOR SPORT COUPE, 4-PASSENGER
MODEL 13-1467 2-DOOR CONVERTIBLE, 4-PASSENGER

SERIAL NUMBERS AND IDENTIFICATION

ONLY BASIC DESIGNATIONS SHOWN

VEHICLE SERIAL NUMBER

6-Cylinder Example:

Model Year	Model	Assembly Plant (Tarrytown)	Unit Number (25th unit)
1964	1169	T	100025

Thus: The 25th model built at Tarrytown would be serial number 41169T100025

8-Cylinder Example:

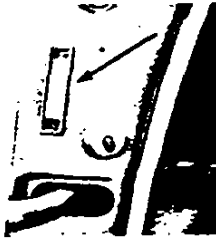
Model Year	Model	Assembly Plant (Flint)	Unit Number (26th unit)
1964	1269	F	100026

Thus: The 26th model built at Flint would be serial number 41269F100026

ASSEMBLY PLANTS

A - Atlanta	L - Los Angeles
C - Atlanta BOP	R - Arlington
F - Flint	S - St. Louis
G - Framingham	T - Tarrytown
J - Janesville	U - Southgate
Y - Wilmington	

Starting unit number 10001 and up at each assembly plant regardless of series
Location Stamped on plate attached to left front body hinge pillar

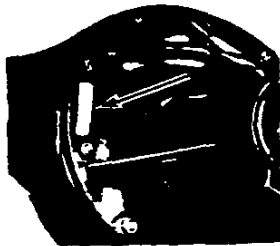


REAR AXLE IDENTIFICATION

Example: BB 0212

Plant and Type Designation	Production* Month & Date
BB	0212
<u>Gear & Axle</u>	<u>Buffalo</u>
AA ----- BA -----	3-speed transmission
AB ----- BB -----	Automatic transmission
AC ----- BC -----	Overdrive transmission
Location -----	Stamped from right side differential carrier

* - Month: February, 02; 12th day of February, 12



ENGINE IDENTIFICATION

Example: F 1210 A

Source Designation	Production* Month & Date	Type Designation
F	1210	A

230 Cubic Inch 6-Cylinder

- A - Regular production engine, 3-speed
- B - Regular engine, Powerglide

283 Cubic Inch 8-Cylinder

- C - Regular production engine, 3-speed
- D - Regular, Powerglide

327 Cubic Inch 8-Cylinder (RPO L30)

- R - Optional, 3 or 4-speed trans., 4-bbl. carb.
- S - Optional, Powerglide, 4-bbl. carb.

409 Cubic Inch 8-Cylinder (RPO L31)

- QA - Optional, 3 or 4-speed, large 4-bbl. carb. spec. cam.



6-cyli



8-cylinder

Location:

- 6-cylinder engine ----- Stamped on pad on right side of cylinder block to rear of distributor
- 8-cylinder engine ----- Stamped on pad at front right side of cylinder block

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

REGULAR EQUIPMENT-EXTERIOR

		ITEM	MODELS
Bright Metal Trim & Moldings	Stainless Steel	Windshield reveal	All
		Roof drip gutter	All exc 11-1200; 13-14-17-1867
		Rear belt reveal	13-14-17-1847, 67
		Roof rail reveal	13-14-17-1847; 17-1839
		Belt reveal, side	13-14-17-1800
		Rear window reveal	All exc conv. & station wagon
		Roof rear drip gutter	15-16-17-1835, 45
		Door and rear quarter upper reveal	17-1835, 39, 45
		Belt reveal, tailgate	17-1835, 45
		Tailgate window reveal	
		Tailgate window finishing, side	11-1235; 15-16-17-1835, 45
		Wheel disks	13-1400
		Windshield pillar	13-14-17-1847, 67
		Windshield header	13-14-17-1867
	Deck lid windsplit	13-14-17-1800 exc station wagon	
	Body side (pattern insert on 13-1400)	11-12-13-14-15-1600	
	Body side dual (painted insert)	17-1800	
	Radiator grille, nameplate and grille surround moldings (includes plastic emblem)	All	
	Headlight and tail light bezels		
	Back-up light bezels	13-14-17-1800	
	Rear cove reveal, outer	11-1200	
	Rear cove dual reveal (satin insert on 17-1800)	15-16-17-1800	
	Rear cove dual reveal (pattern insert)	13-1400	
	Body sill	15-1600	
	Hood windsplit	13-14-17-1800	
	Front door vent channel and post	All	
	Ventipane frame	13-14-17-1800 exc 17-1869; 17-1835, 45	
	Door or quarter window channel	13-1400; 17-1839, 47, 67	
	Hub caps	11-12-15-16-17-1800	
	Rear quarter series nameplate & emblem	All	
	Rear cove lettering ("Chevrolet")	All	
	Deck lid nameplate	13-1400	
	Deck lid or tailgate emblem (plastic insert)	All	
Rear license lamp	All		
Dual windshield wipers, electric, single speed			
Gasoline filler (left rear quarter panel)			
Electric rear window control	15-16-17-1845		
Manual rear window control	11-12-15-16-17-1835		
Front	Crest and "V" (283 V-8)	12-16-1800	
Fender	Crest, "V" and flags (327 V-8)		
Emblems	Crest, "V" and flags with "409" plate (409 V-8)		

REGULAR EQUIPMENT-INTERIOR

ITEM		MODELS	
Instrument Panel	Anodized aluminum trim molding (Short on 11-1200)	11-12-15-1600	
	Anodized aluminum trim molding and plate (Eng. turn pattern 13-1400)	13-14-17-1800	
	Anodized aluminum instrument cluster trim plates	All	
	Bright metal control knobs		
	Glove compartment	Light	13-14-15-16-17-1800
		Lock	All
	Glove box door nameplate	13-14-17-1800	
	Black plastic vent control knobs		
	Cigarette lighter	All	
	Ash tray		
	5-position ignition lock and starter switch		
	Electric clock	13-14-17-1800	
	Parking brake alarm	13-14-17-1800	
	Rear window control switch	15-1645, 17-1845	
	Convertible top switch	13-14-17-1867	
Steering Wheel	Deep hub, dual solid spokes, horn ring	11-12-15-1600	
	Deep hub, dual solid spokes, horn ring (2-tone type)	13-14-17-1800	
Coat hooks	All except 13-14-17-1867		
Crank-type front ventpanes			
Door locking knobs - front and rear			
Dual sunshades	All		
Inside rear view mirror (chrome back & support on 13-14-17-1800)			
Manual interior light switch integral with headlight switch (main switch)			
Automatic interior light switch, front doors only	13-14-15-16-17-1800		
Interior Lights	Single dome, center (with switch on all wagons)	All exc. 13-14-17-1847, 67; 17-1839	
	Dual side rail	17-1839	
	Dual courtesy (instrument panel)	13-14-17-1867, 47	
	Dual rear quarter dome	13-14-17-1847	
	Third seat, courtesy	15-1645, 17-1845	
Rear seat speaker grille	13-14-17-1847, 67		
Aluminum front seat end panels (backrest frame moldings 13-1400)	13-14-17-1800		
Door remote control handle, paddle-type	13-14-17-1800		
Door remote control handle, conventional-type (dual arm type 15-1600)	11-12-15-1600		
Armrests, front door			
Armrests, rear doors or quarter panels	All		
Ash tray, rear door or quarter panels			
Bright Metal Moldings	Windshield, upper and side		
	Rear window, upper and side	13-14-17-1847, 17-1839	
	Side roof rails		
	Front door, rear door or rear quarter trim	13-14-15-16-17-1800	
Luggage compartment lamp	13-1400; 17-1800 exc. 35, 45		
Deluxe beater	All		
Super Sport console	13-1400		
Seat belts	All		

REGULAR PRODUCTION OPTIONS

GROUP	ITEM	NUMBER	MODELS	
Engine	Air cleaner, oil bath	K45	11-13-15-1700	
	Generator, Delcotron 12-42 amp.	K79	All	
	Generator, Delcotron 6-55 amp.	K77		
	Generator, Delcotron 23-62 amp.	K81		
	Carburetor, economy	Z05		
	Clutch, heavy-duty	M01	11-13-15-1700	
	327 cubic inch V-8 - 250 HP	L30	12-14-16-1800	
	327 cubic inch V-8 high performance - 300 HP	L74		
	409 cubic inch V-8 - 340 HP	L33		
	409 cubic inch V-8 - 400 HP	L31		
	409 cubic inch V-8 - 425 HP	L80		
	Fan, thermomodulated	K02	All	
	Radiator, heavy-duty	V01		
	Regulator and ignition, transistor	K66	12-14-16-1800	
	Ventilation, engine positive closed (Type B)	K24	All	
Transmission	Four speed	M20	12-14-16-1800	
	Four speed close ratio	M21		
	Overdrive	M10	All	
	Powerglide	M35		
	Powerglide, oil cooled	M55		
Chassis	Axle, limited slip (3.08, 3.36, 3.55, 3.70, 4.11, 4.56:1)	G80	All	
	Axle, rear (3.55:1)	G96	All exc. 6-cyl. wagons	
	Axle, rear (3.36:1)	G76	11-12-15-16-1700 exc. wagons & conv.	
	Battery, heavy-duty	T60	All	
	Brakes, power	J50		
	Brakes, metallic	J65	11-1211, 69, 35	
	Chassis, heavy-duty	Z04		
	Cover, wheel trim	P01	All exc. 13-1400	
	Driven gear and fitting, speedometer	Z12	All	
	Shock absorber, rear air lift	G66		
	Special front and rear suspension	F40	Station Wagons	
	Springs, heavy-duty front	F60		
	Steering, power	N40	All	
	Steering wheel, rtk type	N33	13-14-15-16-17-1800	
	Steering wheel, wood grained plastic	N34	All	
	Wheels, 14 x 6.00JK	P12	All exc. wagons	
	Wire wheel cover (simulated)	P02	All	
	Tires	6.70 x 15-4 pr blackwall nylon	P91	All exc. wagons, 13-1400
		6.70 x 15-4 pr blackwall nylon-tube	P95	
		6.70 x 15-4 pr blackwall rayon	P90	
		7.50 x 14-4 pr blackwall nylon	P60	
		6.70 x 15-4 pr blackwall rayon-tube	P93	
		6.70 x 15-4 pr blackwall rayon-tube	P97	
		6.70 x 15-6 pr blackwall rayon	Q01	
		6.70 x 15-6 pr blackwall rayon-tube	Q03	
		7.00 x 14-4 pr whitewall rayon	P58	
		7.10 x 15-4 pr blackwall rayon	Q04	
7.10 x 15-4 pr blackwall nylon		Q05		
7.50 x 14-4 pr blackwall rayon	P65	All exc. wagon & conv.		

REGULAR PRODUCTION OPTIONS -Cont'd.

GROUP	ITEM	NUMBER	MODELS	
Chassis Continued	7.50 x 14-4 pr whitewall rayon	P62	All exc. wagons	
	7.50 x 14-4 pr whitewall nylon	P61		
	7.50 x 14-6 pr blackwall rayon	P63	All	
	8.00 x 14-4 pr blackwall rayon	P75	All exc. wagons	
	8.00 x 14-4 pr whitewall rayon	P77		
	8.00 x 14-4 pr blackwall nylon	P76		
Body	Air conditioning, Deluxe all weather	C60	All	
	Air conditioning, Custom Deluxe	C65		
	Belt unit, Custom Deluxe seat (retractor type)	A49		
	Belt unit, seat (delete)	A62		
	Body, police car	B01	11-1211, 69, 35	
	Cushion, foam rubber front seat	B50	11-1200	
	Comfort and Convenience	Inside and outside r/v mirror (a)	Z01- Z13	All
		2-speed wiper and washer		11-1200
		Glove box lamp		11-12-15-1600 (exc. wagons)
		Luggage lamp		11-12-15-1600
		Back-up lamp		
	Defogging equipment, rear window	C50	All exc. conv. & wgn.	
	Glass, tinted	A01	All	
	Front bumper guard	V31		
	Rear bumper guard	V32	All exc. wagons	
	Heater deleted	C48	All	
	Lock, compartment	A96	Station wagons	
	Luggage carrier, roof	V35		
	Pad, instrument panel	B70	All	
	Radio, manual	U60		
	Radio, push-button	U63		
	Radio and auxiliary rear speaker, push-button	Z02		
	Radio, AM-FM	U69		
	Radio and auxiliary speaker, AM-FM	Z10		
	Roof covering, vinyl soft trim	C08	13-14-17-1847	
	Seat, split second	A66	Station wagons	
	Seat, 6-way electric front	A42	15-16-17-1800	
	Tachometer	U16	12-14-16-1800	
	Taxicab	B02	11-1269	
	Top, folding	C05	13-14-17-1867	
Window, electric tailgate	A33	2-seat wagons		
Windows, electric	A31	13-14-15-16-17-1800		
Wipers and washers, windshield 2-speed	C14	All		
Windshield glass, tinted	A02			

(a) Z13 contains remote control o/s mirror.

DEALER INSTALLED ACCESSORIES

ITEM	MODELS
Alarm - Parking brake	11-12-15-1600
Antenna - Front fender radio	All
Antenna - Rear fender radio	All except wagons
Antenna - Rear fender dummy radio	
Belt - Custom Deluxe seat	All
Brake - Power	
Cap - Gas tank filler locking	Station wagons
Carrier - Roof luggage (Deluxe or Custom)	11-12-15-1600
Clock - Instrument panel	All except convertibles
Compass - Auto	
Conditioning - Air (Custom)	All
Control - Speed and Cruise (NA on 409 V-8)	
Control - Headlamp automatic beam	
Container - Litter	
Cover - Front and rear seat cushion	Front-All exc. conv.; Rear-All exc. wagons
Cover - Luggage carrier	Station wagons
Cover - Wheel trim - Simulated wire wheel	All
Deflector - Rain	All except sport models
Defogging Unit - Rear window	All except conv. & station wagons
Dispenser - Tissue	All
Extinguisher - Fire	
Fan - Thermomodulated	12-14-16-1800
Frame - License plate	All
Guard - Bumper rear	All except wagons
Guard - Door edge	All
Guard - Rear body splash	Station wagons
Guard - Front bumper	
Guard - Gas tank filler door	All
Hitch - Trailer	
Lamp - Back up	11-12-15-1600
Lamp - Courtesy	All except 13-14-17-1847, 67
Lamp - Luggage compartment	All except wagons
Lamp - Portable spot	All
Lamp - Spot and bracket	
Lamp - Glove compartment	11-1200
Lamp - Underhood	All
Lamp - Ash tray	
Lock - Rear compartment	All wagons
Lock - Rear door safety	All 4-doors
Mat - Front and rear floor deluxe	All
Mat - Front floor full width	
Mat - Rear compartment floor	Station wagons
Mat - Front and rear floor (plastic)	
Mirror - Outside rear view (door mount)	
Mirror - Prismatic - Inside rear view	All
Mirror - Visor vanity	
Mirror - Outside remote control	
Molding - Deck lid and hood	All exc. 13-14-17-1800
Radio - Manual	
Radio - Push button	All
Radio - AM-FM	
Release - Rear compartment lid vacuum	All except wagons
Screen - Radiator insect	
Speaker - Radio auxiliary	All
Switch - Traffic hazard flasher	
Tool Kit	
Washer - Windshield push button	

TAXI-CAB EQUIPMENT-RPO B02

MODEL APPLICATION:

4-Door Sedan - 1169, 1269

BODY EQUIPMENT

INTERIOR TRIM

Biscayne
Standard ----- Cloth/vinyl fawn
Optional ----- All vinyl, fawn

FLOORS, FRONT AND REAR

Covering ----- Waterproof asphalt
impregnated paper felt, .125 minimum thickness.
Mats ----- Black rubber (no spatter
design), .125 minimum thickness.

SEAT CUSHIONS AND BACKRESTS

Construction, front and rear ----- Heavy-duty
"S" wire springs, reinforced.
Padding ----- 1/2" jute pad on front seat cushion

DOOR JAMB SWITCH

Dome lamp operation ----- LH & RH
front and rear doors

INSTRUMENT PANEL

Open-door red warning lamp
Location ----- Bright metal bracket under
instrument panel, left of steering column.
Switch ----- All door jamba

CHASSIS EQUIPMENT

FRAME

Type ----- Heavy duty with added weld reinforced
front cross member, rear spring brackets, rear shock
absorber brackets, front upper control arm brackets,
and reinforcements at front extension.

SUSPENSION

Coil Springs & Shock Absorbers, Front and Rear
Type ----- Heavy-duty
Spherical Joints, Front
Type ----- Metal lined
Rear Axle Lower Control Arm Bushings
Type ----- Heavy-duty;
inner and outer metal sleeves with rubber insert.
Front Wheel Hubs and Drums
Type ----- Heavy-duty;
includes heavy duty front brake drum webs.

WHEELS AND TIRES

Wheel Size ----- 15 x 5K
Tire type and size ----- Blackwall tubeless rayon
6.70 x 15-4

LUBRICATION FITTINGS

Used at U-joints of front, intermediate, and rear pro-
peller shaft.

REAR AXLE (3.36:1)

Type ----- Heavy-duty, includes
heavy-duty wheel roller bearings, parking brake
cable with nylon liner, and cadmium plated rear
brake flange plate mounting bolts and nuts.

BRAKES

Type ----- Heavy-duty front and rear,
extra thick brake facings

POWER TRAIN EQUIPMENT

SIX-CYLINDER MODELS

Spark Plugs ----- AC 46
Clutch ----- 11" heavy-duty
Push Rod ----- Heavy-duty, hardened tipped
Carburetor
Model @
3-Speed ----- 7023005
Powerglide ----- 7023004
Transmission 3-Speed ----- Heavy-duty; incorporates
heavy-duty clutch gear and mainshaft bearings
Transmission (Powerglide) ----- Incorporates
5-plate heavy-duty clutch with high temperature oil
seals and water cooling, 11-3/4 diameter heavy-duty
converter assembly including drain plugs (6-cylinder
Powerglide only), and oil pan with drain plug.
Radiator (Powerglide) ----- Incorporates
transmission oil cooler
Battery ----- 12 volts, 61 amp hour, 11 plate

HEAVY DUTY CHASSIS AND BODY EQUIPMENT

MODEL APPLICATION:

2-Door Sedan - 1111-1211
4-Door Sedan - 1169-1269
4-Door Station Wagon - 1135-1235

BODY EQUIPMENT RPO 801

INTERIOR TRIM

Standard (Sedans) ----- Cloth/vinyl, fawn, aqua or red
Optional (Sedans) ----- All vinyl; fawn
Standard (Station wagon) ----- All vinyl; fawn

FLOORS

Covering
Front and Rear ----- Waterproof asphalt
impregnated paper felt, .125 minimum thickness.

Mats

Front and Rear ----- Black rubber (no spatter
design) .125 minimum thickness.

SEAT CUSHIONS AND BACKRESTS

Front, all models ----- Heavy duty
"S" wire springs, reinforced.
Rear, sedans only ----- Same as front

CHASSIS EQUIPMENT RPO 204

SUSPENSION

Coil Springs & Shock Absorbers, Front & Rear
Type ----- Heavy duty
Spherical Joints, Front
Type ----- Metal lined

REAR AXLE

Type ----- Heavy-duty, includes
heavy-duty wheel roller bearings, parking brake
cable with nylon liner, and cadmium plated rear
brake flange plate mounting bolts and nuts.

Rear Axle Lower Control Arm Bushings

Type ----- Heavy duty;
inner and outer metal sleeves with rubber insert.

Front Stabilizer Bar

Regular equipment on V-8, provided on 6-cyl.
Clutch (6 cylinder) ----- 10" with H.D. driven disc &
clutch spring

BRAKES

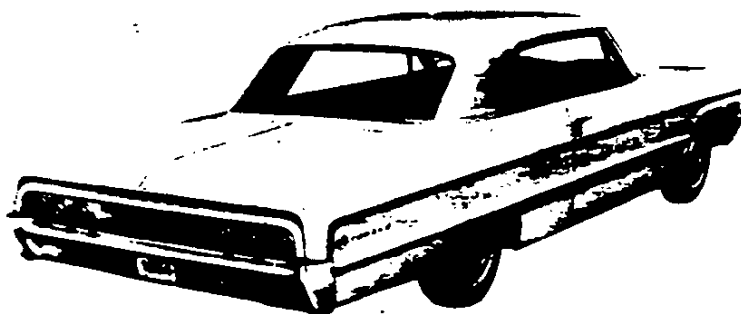
Type ----- Heavy duty front and rear,
with extra thick brake facings, and heavy
duty front brake drum webs.

TRANSMISSION

Type ----- Heavy duty, incorporates heavy duty clutch
gear and mainshaft bearings. (6-cylinder only)
Transmission (Powerglide) ----- Incorporates
5-plate heavy-duty clutch with high temperature oil
seals and water cooling, 1 1/4 diameter heavy-duty
converter assembly including drain plugs (6-cylinder
Powerglide only), and oil pan with drain plug.
Radiator (Powerglide) ----- Incorporates
transmission oil cooler

ORIGINAL COPY

**DIMENSIONS
AND
WEIGHTS**



INTERIOR DIMENSIONS ●

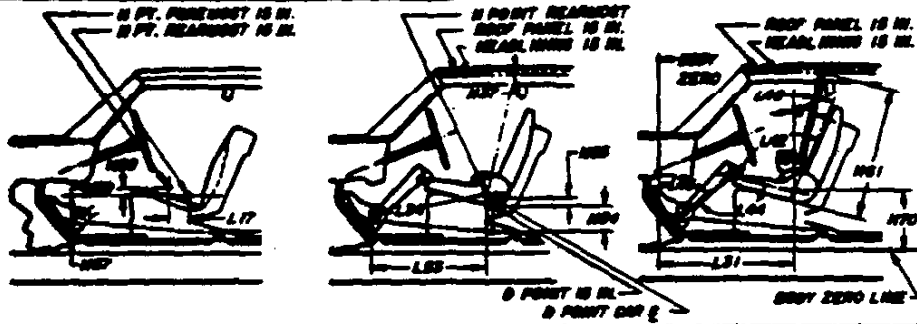
EXTERIOR DIMENSIONS ●

STATION WAGON THIRD SEAT DIMENSIONS ●

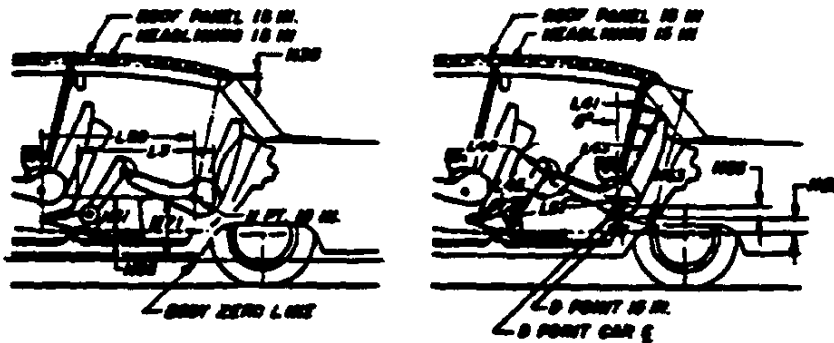
STATION WAGON CARGO AND SEDAN TRUNK SPACE .. ●

VEHICLE WEIGHTS ●

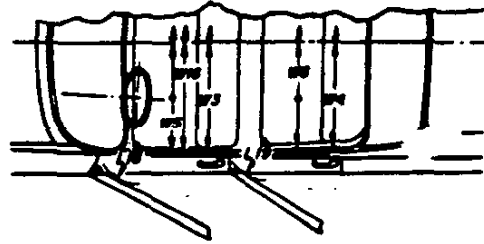
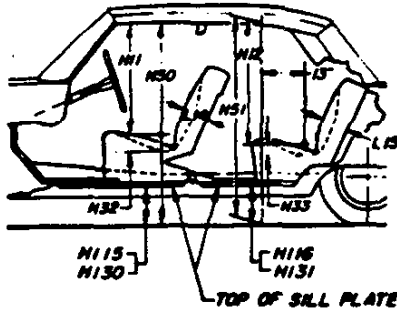
INTERIOR DIMENSIONS



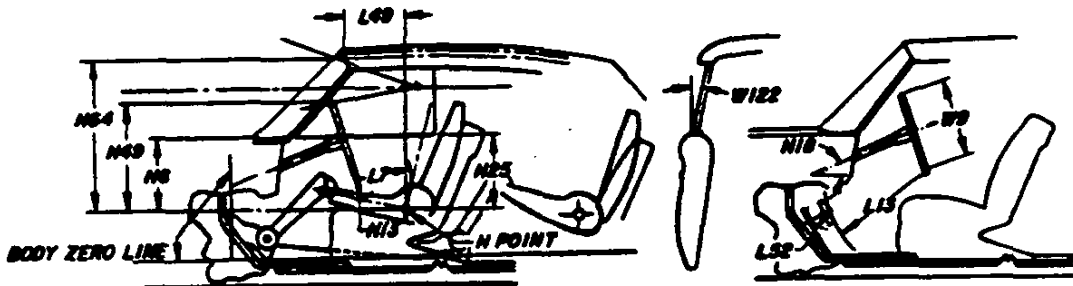
CODE	DESCRIPTION	MODELS					
		Sedans 2-Dr. | 4-Dr.	Sport Sedan	Sport Coupe 1847 | 1447		Convertible 1867 | 1467		Station Wagons
L51	Body zero line to H point	42.5	42.5	41.8	42.1	41.8	42.5
H5	H point to ground	20.5	20.4	20.3	20.4	20.3	20.3
H61	Effective head room	39.2	38.5	38.1	38.3	39.1	39.3
H57	Headlining to roof height	.5	.6	---	---	---	.9
L34	Maximum effective leg room - accelerator	41.8	41.4	41.2	41.4	41.2	41.8
H30	H point to heel point	8.6	8.4	8.6	8.4	8.4	8.6
H67	Depressed floor covering thickness		.3				
L40	Back angle	34°	36°	33°	36°	35°	35°
L42	Hip angle	96°	97°	95°	94°	95°	96°
L44	Knee angle	128°	125°	124°	125°	124°	128°
L46	Foot angle	87°	85°				88°
H65	H point differential, side to center	.7	.6	---	.6	---	.7
H54	H point to tunnel	3.8	2.7	---	2.7	---	3.9
L53	H point to accelerator floor point	34.0	33.6	33.5	33.6	33.5	34.0
L17	H point travel		4.8				
H38	H point rise	.8	.7	.8	.7	.8	.7



CODE	DESCRIPTION	MODELS					
		Sedans 2-Dr. | 4-Dr.	Sport Sedan	Sport Coupe 1847 | 1447		Convertible 1867 | 1467		Station Wagons
L50	H point crotch distance	34.8	33.7	33.1	33.3	33.1	33.3
H10	H point to ground	20.0	20.1	18.6			19.8
H63	Effective head room	38.0	37.2	38.3		38.1	39.8
H58	Headlining to roof height	.8	.6	.5	.6	---	.8
L81	Minimum effective leg room	38.3	36.8	35.0	36.1	35.0	36.1
H51	H point to heel point	11.8	12.0	10.5	10.4	10.5	10.4
H68	Depressed floor covering thickness		.4				
L48	Minimum knee room	4.6	3.6	3.4	3.7	3.4	3.7
L3	Rear compartment room	37.8	26.8	26.1	25.7	26.2	28.4
L41	Back angle		25°		19°		25°
L43	Hip angle	92°	90°	77°	79°	77°	91°
L45	Knee angle	105° | 106°	99°	90°	93°	90°	108°
L47	Foot angle	114°	110°	10°	109°	110°	114°
H56	H point differential, side to center	.6		.8			.3
H55	H point to tunnel	1.7	2.2		.7		1.7

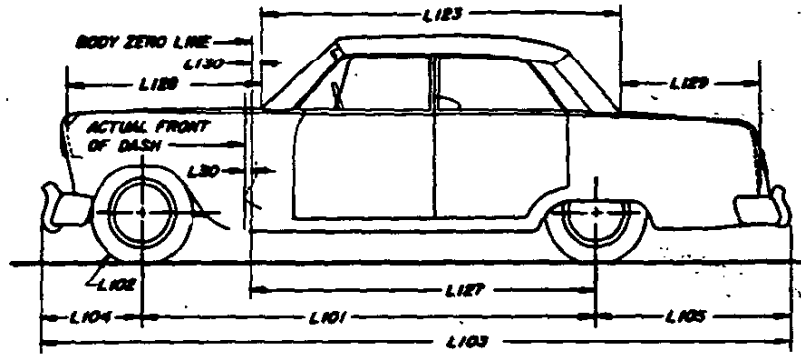


SEAT AND ENTRANCE	CODE	DESCRIPTION	MODELS								
			Sedans		Sport Sedan	Sport Coupe		Convertible		Station Wagons	
			2-Dr.	4-Dr.		1847	1447	1867	1467	2-Dr.	4-Dr.
	W1	Hat room	57.8		57.7						
	W3	Shoulder room	58.8								
	W5	Hip room	63.7	63.5			63.6				
	W16	Seat width	57.6		27.4	57.6	27.4	57.6			
	H3	Seat chair height	11.0		11.4	11.0	11.4				
	H30	Upper body opening to ground	50.6	50.8	49.5		49.1				
	H11	Entrance height	30.1	30.3	29.1	29.2	28.7	28.8		30.1	
	L18	Entrance - foot clearance	14.9		14.3	14.9	14.3				
	H32	Seat cushion deflection	9.2	4.5	4.7	4.2	4.7	4.2			
	L14	Thickest point of seat back, at C/LO	7.1	7.4			6.4		7.4		
	H26	Interior body height - at car C/L	42.3	41.1	41.0	---		41.4	---		
	H27	Interior body height - at C/LO	44.2	43.4	43.3	43.0	43.8	43.4		44.5	
	W2	Hat room	55.3	54.0			54.8		51.8	57.2	
	W4	Shoulder room	57.5	58.2		57.6		51.5		58.0	
	W6	Hip room	62.6	63.3			55.2		51.7		
	H8	Seat chair height	14.0		15.1			13.6			
	H51	Upper body opening to ground	---		50.3			---			
	H12	Entrance height	---		30.5	30.1	---		---		
	H69	Exit height	29.6		29.4			---			
	L19	Entrance - foot clearance	11.6	11.7	11.3	9.0	9.6	9.0	9.6		
	H33	Seat cushion deflection	3.8	4.3	5.1	---		4.3		4.4	
	L15	Thickest point of seat back, at C/LO	8.3		9.0	7.4	---		7.7	6.1	
	H28	Interior body height - at car C/L	40.9		39.7			39.0		42.7	
	H29	Interior body height - at C/LO	43.6		42.8	42.3		41.5		45.4	

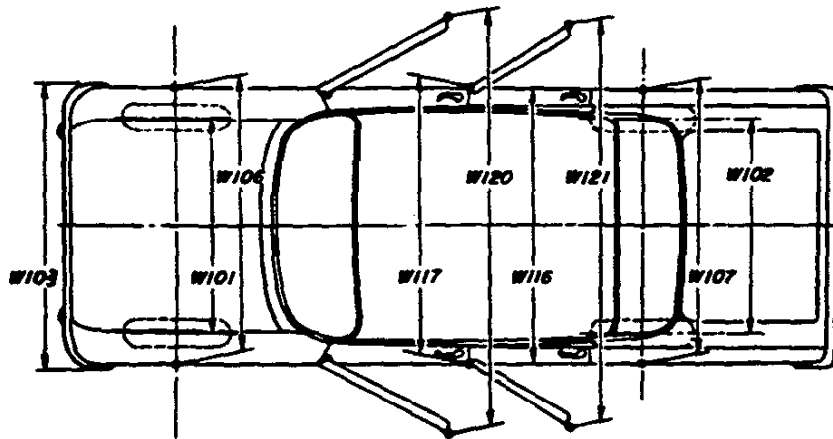


VISION CONTROL	CODE	DESCRIPTION	MODELS								
			Sedans		Sport Sedan	Sport Coupe		Convertible		Station Wagons	
			2-Dr.	4-Dr.		1847	1447	1867	1467	2-Dr.	4-Dr.
	H6	H point to windshield bottom	19.0								
	H64	H point to windshield upper DLO	33.1	32.8	31.0	31.8	32.0	31.7	31.9	32.8	
	L49	H point to windshield upper DLO	12.0		15.0	13.7	13.5	13.7	13.5	12.0	
	H25	Belt height - front	16.8			17.0		16.8	17.0		
	W7	Steering wheel center to C/L of car	15.9								
	W9	Steering wheel outside diameter	17.0								
	H18	Steering column angle - horizontal	16.5°								
	H49	H point to top of steering wheel	23.3								
	L7	Steering wheel torso clearance	11.3		10.9	10.8	10.7	10.8		11.3	
	H13	Steering wheel thigh clearance	3.5		---		3.4		3.5		
	L52	Brake pedal to accelerator	4.3								
	W122	Tumble - home	11.8°								

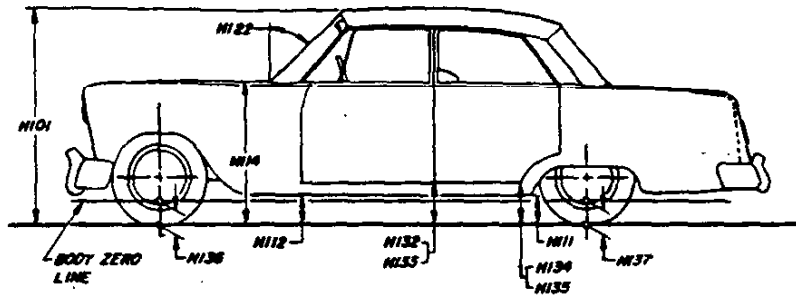
EXTERIOR DIMENSIONS



CODE	DESCRIPTION	MODELS					
		Sedans		Sport	Sport	Convertible	Station Wagons
		2-Dr.	4-Dr.	Sedan	Coupe		
L130	Body O line to actual front of dash				.5		
L101	Wheelbase				119.0		
L104	Overhang, front				33.3		
L105	Overhang, rear				57.6	58.5	
L103	Overall length				209.9	210.8	
L128	Hood length at centerline				51.2		
L123	Body upper structure length at car G	102.6	105.3	102.6	105.1	140.6	
L129	Deck length at centerline	49.2	46.5	49.2			
L127	Body O line at G of rear wheels				100.0		
L130	Body O line to windshield cowl point				4.8		
L102	Tire size (standard)	7.00 x 14-4			7.50 x 14-4	8.00 x 14-4	
LC103	Overall length - less bumpers				205.8	206.7	

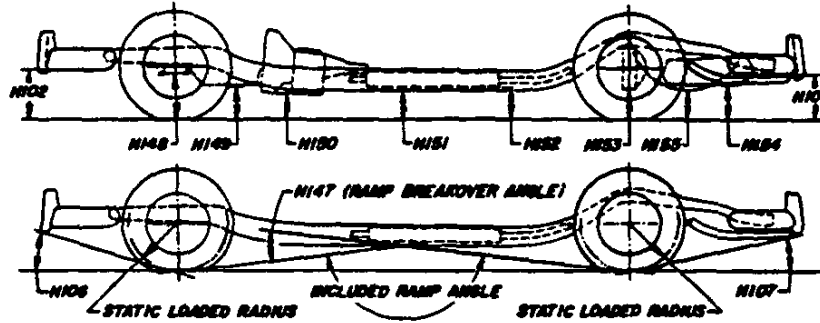


CODE	DESCRIPTION	MODELS					
		Sedans		Sport	Sport	Convertible	Station Wagons
		2-Dr.	4-Dr.	Sedan	Coupe		
W101	Tread - front				60.3	61.3	
W102	Tread - rear				59.3	60.3	
W103	Maximum overall width of car				78.1		
W116	Maximum overall width of body				77.0		
W117	Maximum body width at #2 pillar		76.5			76.5	
W106	Front fender overall width				76.7		
W107	Rear fender overall width				77.0		
W120	Maximum overall width, front doors open	136.6	141.6		136.6	141.6	
W121	Maximum overall width, rear doors open		138.1	137.1		138.1	



CODE	DESCRIPTION	MODELS					
		Sedans		Sport Sedan	Sport Coupe	Convertible	Station Wagons
		2-Dr.	4-Dr.				
H101	Overall Height (Design)	56.2	54.9	55.1	55.8	56.7	
H114	Hood at rear to ground	37.7		38.0		38.3	
H112	Rocker panel to ground - front	8.9		9.2		9.5	
H111	Rocker panel to ground - rear	8.5		8.8		9.1	
H115	Step height - front (Design)	12.7		13.0		13.3	
H116	Step height - rear (Design)	---	12.7	---	---	13.3	
H130	Step height - front (Curb)	14.7		15.0		15.3	
H131	Step height - rear (Curb)	---	12.7	---	---	13.3	
H132	Bottom of door to ground, open-front	12.8	12.7	12.9		12.7	
H133	Bottom of door to ground, closed-front	11.5	11.6	11.5		11.7	
H134	Bottom of door to ground, open-rear	---	11.3	---	---	11.5	
H135	Bottom of door to ground, closed-rear	---	11.3	---	---	11.5	
H102	Front bumper to ground	12.4		12.7		13.0	
H104	Rear bumper to ground	12.1		12.4		9.9	
H122	Windshield slope angle	55.5°					
H136	Body O line to ground - front	5.4					
H137	Body O line to ground - rear	5.4				5.0	
H125	Headlamp to ground	27.3					
H126	Taillamp to ground	23.4		23.7		22.7	
H158	Roof thickness	5.8	4.4	5.5	6.6	6.3	
H159	DLO height	13.2	13.8	12.4	11.9	13.2	
H160	Body thickness	28.3					
H301	Lift over height	22.1					
HC101	Overall height (Curb)	56.5	55.8	56.0	56.7	57.6	

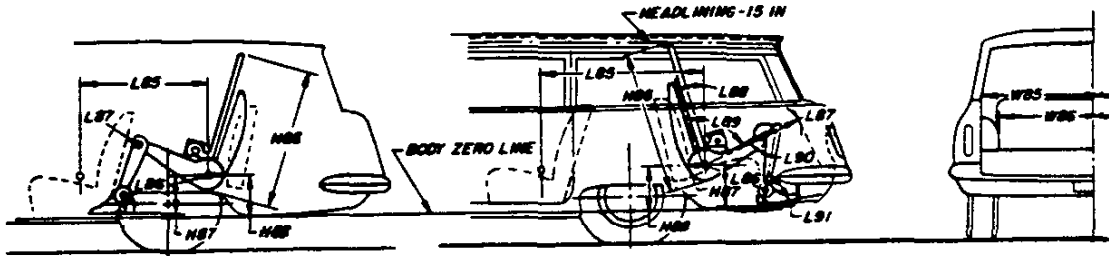
HEIGHTS



CODE	DESCRIPTION	MODELS					
		Sedans		Sport Sedan	Sport Coupe	Convertible	Station Wagons
		2-Dr.	4-Dr.				
H106	Angle of approach	26°		26°	27°	27°	
H107	Angle of departure	13°				12°	
H147	Ramp breakover angle	10°		13°			
H148	Front suspension to ground	7.1		7.4		7.7	
H149	Oil pan to ground	6.6		6.9		7.2	
H150	Flywheel housing to ground	6.4		6.7		7.0	
H151	Frame to ground	7.1		7.4	7.7		
H152	Exhaust system to ground	5.5		5.8		6.1	
H153	Rear axle to ground	7.1		7.4		7.7	
H154	Fuel tank to ground	8.0		8.3		9.3	
H155	Tire well to ground	---	---	---	---	8.5	
H156	Minimum ground clearance	5.5		5.8		6.1	

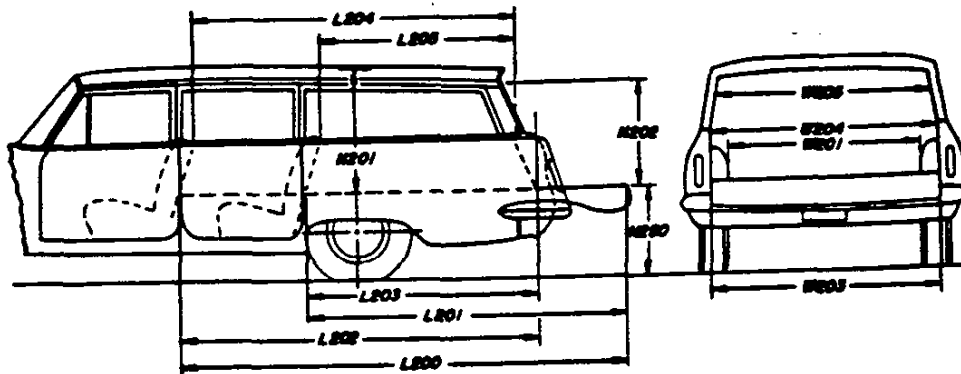
CLEARANCES

STATION WAGON THIRD SEAT



THIRD SEAT	CODE	DESCRIPTION	MODELS	
			1645	1845
	W85	Shoulder room		52.0
	W86	Hip room		46.7
	L85	H point couple distance		40.0
	H85	H point to ground		22.2
	H86	Effective head room		37.2
	L86	Effective leg room		32.5
	H87	H point to heel point		12.3
	L87	Knee room		9.5
	L88	Back angle		18°
	L89	Hip angle		80°
	L90	Knee angle		82°
	L91	Foot angle		113°

STATION WAGON CARGO AND SEDAN TRUNK SPACE



CARGO DIMENSIONS

CODE	DESCRIPTION	MODELS	
		6-Passenger 1235-1635-1835	9-Passenger 1645-1845
L200	Maximum cargo length - front seat		118.7
L201	Maximum cargo length - second seat		84.7
L202	Cargo length at floor - front seat		94.2
L203	Cargo length at floor - second seat		60.2
L204	Cargo length at belt - front seat		82.2
L205	Cargo length at belt - second seat		47.2
L206	Cargo length at roof - front seat		74.5
L207	Cargo length at roof - second seat		39.5
W200	Cargo width - front		62.2
W201	Cargo width - wheelhouse		46.1
W203	Rear opening width at floor		56.4
W204	Opening width at belt		54.7
W205	Maximum rear opening width above belt		54.2
H201	Maximum cargo height		31.5
H202	Rear opening height		30.5
H250	Tailgate to ground height		23.3

CARGO CAPACITIES CU FT

1235	6-Passenger Wagon	Rear seat folded	97.5 (inc. 10.5 for hidden comprt.)
1635		Rear seat erect	49.5
1835			
1645	9-Passenger Wagon	Rear and third seat folded	87.0 (plus 5.7 for hidden comprt.)
1845		Rear seat erect and third seat folded	49.5
		Rear and third seat erect	5.6

TRUNK CAPACITIES CU FT

Model	Overall		Standard Luggage
Sedans and Coupes	29.7		19.0
Convertibles	Top up	29.7	19.0
	Top down	28.2	

VEHICLE WEIGHTS

1100-1200 BISCAYNE SERIES

Model	VEHICLE TYPE Description	SHIPPING WEIGHT			CURB WEIGHT			DESIGN WEIGHT †		
		Front	Rear	Total	Front	Rear	Total	Front	Rear	Total
1111	2-Door Sedan 6-cylinder	1710	1520	3230	1725	1650	3375	1950	2176	4125
1111P		1725	1520	3245	1740	1650	3390	1960	2180	4140
1211	2-Door Sedan 8-cylinder	1815	1550	3365	1840	1680	3520	2065	2205	4270
1211P		1825	1550	3375	1850	1685	3535	2075	2210	4285
1135	4-Door Station Wagon 6-cylinder	1665	2035	3700	1660	2180	3840	1885	2705	4590
1135P		1680	2035	3715	1675	2180	3855	1900	2705	4605
1235	4-Door Station Wagon 8-cylinder	1760	2060	3820	1765	2210	3975	1990	2735	4725
1235P		1770	2065	3835	1775	2215	4000	2000	2740	4740
1169	4-Door Sedan 6-cylinder	1715	1585	3300	1730	1715	3445	1955	2240	4195
1169P		1730	1585	3315	1740	1720	3460	1965	2245	4210
1269	4-Door Sedan 8-cylinder	1820	1610	3430	1840	1750	3590	2065	2270	4335
1269P		1830	1615	3445	1850	1750	3600	2075	2275	4350

1300-1400 IMPALA SUPER SPORT

1347	2-Door Sport Coupe 6-cylinder	1765	1560	3325	1775	1695	3470	1980	2090	4070
1347P		1775	1565	3340	1790	1700	3490	1995	2095	4090
1447	2-Door Sport Coupe 8-cylinder	1860	1590	3450	1885	1720	3605	2090	2115	4205
1447P		1870	1590	3460	1895	1725	3620	2100	2120	4220
1367	2-Door Convertible 6-cylinder	1785	1650	3435	1800	1780	3580	2000	2175	4175
1367P		1800	1650	3450	1810	1785	3595	2015	2180	4195
1467	2-Door Convertible 8-cylinder	1885	1670	3555	1905	1805	3710	2110	2200	4310
1467P		1895	1675	3570	1915	1810	3725	2120	2205	4325

1500-1600 BEL AIR SERIES

1511	2-Door Sedan 6-cylinder	1715	1520	3235	1730	1650	3380	1955	2180	4135
1511P		1730	1525	3255	1740	1655	3395	1965	2180	4145
1611	2-Door Sedan 8-cylinder	1820	1550	3370	1840	1685	3525	2065	2210	4275
1611P		1830	1555	3385	1850	1685	3535	2075	2210	4285
1535	4-Door Station Wagon 6-cylinder	1665	2040	3705	1665	2180	3845	1890	2710	4600
1535P		1680	2040	3720	1675	2185	3860	1900	2710	4610
1635	4-Door Station Wagon 8-cylinder	1760	2065	3825	1765	2210	3975	1990	2735	4725
1635P		1770	2070	3840	1775	2205	3980	2000	2740	4740
1545	4-Door Station Wagon 6-cylinder*	1645	2100	3745	1645	2240	3885	1900	3185	5085
1545P		1660	2100	3760	1660	2245	3905	1915	3190	5105
1645	4-Door Station Wagon 8-cylinder*	1740	2125	3865	1745	2275	4020	2005	3215	5220
1645P		1750	2130	3880	1755	2275	4030	2015	3220	5235
1569	4-Door Sedan 6-cylinder	1720	1585	3305	1730	1720	3450	1955	2245	4200
1569P		1735	1590	3325	1745	1720	3465	1970	2245	4215
1669	4-Door Sedan 8-cylinder	1820	1620	3440	1845	1750	3595	2070	2275	4345
1669P		1830	1620	3450	1855	1755	3610	2080	2280	4360

VEHICLE WEIGHTS-Cont'd.

1700-1800 IMPALA SERIES

VEHICLE TYPE		SHIPPING WEIGHT			CURB WEIGHT			DESIGN WEIGHT †		
Model	Description	Front	Rear	Total	Front	Rear	Total	Front	Rear	Total
1735	4-Door Station Wagon 6-cylinder	1675	2050	3725	1675	2195	3870	1900	2720	4620
1735P		1690	2050	3740	1690	2200	3890	1915	2725	4640
1835	4-Door Station Wagon 8-cylinder	1770	2080	3850	1780	2220	4000	2005	2750	4755
1835P		1780	2080	3860	1790	2230	4020	2015	2755	4770
1739	4-Door Sport Sedan 6-cylinder	1750	1620	3370	1765	1750	3515	1990	2275	4265
1739P		1765	1620	3385	1780	1750	3530	2005	2275	4280
1839	4-Door Sport Sedan 8-cylinder	1850	1640	3490	1875	1770	3645	2100	2300	4400
1839P		1860	1645	3505	1885	1775	3660	2110	2300	4410
1745	4-Door Station Wagon 6-cylinder*	1660	2110	3770	1655	2260	3915	1915	3200	5115
1745P		1675	2115	3790	1670	2260	3930	1925	3200	5125
1845	4-Door Station Wagon 8-cylinder*	1750	2145	3895	1760	2285	4045	2015	3230	5245
1845P		1760	2145	3905	1770	2290	4060	2025	3235	5260
1747	2-Door Sport Coupe 6-cylinder	1745	1550	3295	1760	1680	3440	2035	2155	4190
1747P		1760	1550	3310	1770	1685	3455	2050	2155	4205
1847	2-Door Sport Coupe 8-cylinder	1845	1570	3415	1870	1700	3570	2145	2180	4325
1847P		1855	1575	3430	1880	1710	3590	2155	2180	4335
1767	2-Door Convertible 6-cylinder	1770	1630	3400	1780	1765	3545	2055	2240	4295
1767P		1780	1635	3415	1795	1765	3560	2070	2240	4310
1867	2-Door Convertible 8-cylinder	1865	1660	3525	1890	1790	3680	2165	2265	4430
1867P		1875	1660	3535	1900	1795	3695	2175	2265	4440
1769	4-Door Sedan 6-cylinder	1735	1605	3340	1750	1735	3485	1975	2260	4235
1769P		1750	1605	3355	1765	1735	3500	1990	2260	4250
1869	4-Door Sedan 8-cylinder	1835	1625	3460	1855	1760	3615	2080	2285	4365
1869P		1845	1630	3475	1865	1765	3630	2090	2290	4380

P - Powerglide
 * - 9-Passenger

SHIPPING WEIGHT: The weight of the basic vehicle with all regular equipment and with grease and oil where required. It does not include the weight of gasoline and water.

CURB WEIGHT: The weight of the empty vehicle ready to drive. It is the shipping weight plus the weights of gasoline and water. For the weight of gasoline add 118 pounds to station wagons, and 121 pounds to all others. For the weight of water add 25 pounds to the 6-cylinder models, 36 pounds to the 283, 38 to the 327, and 46 pounds to the 409 V-8 models.

DESIGN WEIGHT: The curb weight of the basic vehicle plus 150 pounds for each passenger (5-passengers, 2 front, 2 rear).

Example:
 Model 1169 (5-passengers) ----- 3445 + 750 = 4195

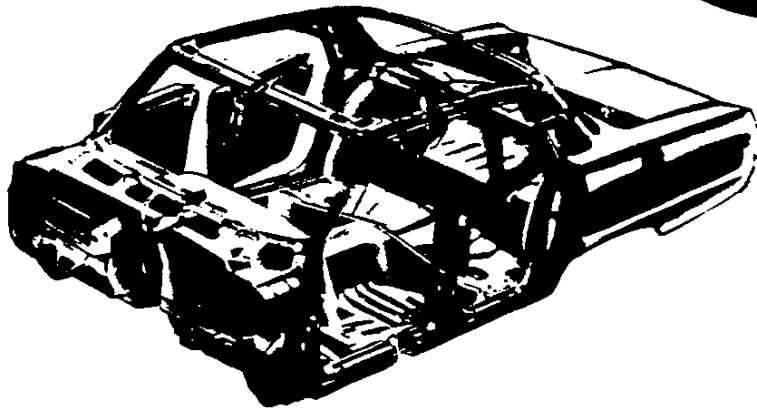
PERFORMANCE WEIGHT: The curb weight of the lowest priced 4-door sedan with regular equipment plus 600 pounds for 4-passengers.

Example:
 Model 1169 ----- 3445 + 600 = 4045

† - Based on passenger weight distribution for number of passengers in front and rear. For total loaded weight, add 150 pounds for each passenger to the designated passenger carrying capacity for the particular vehicle.

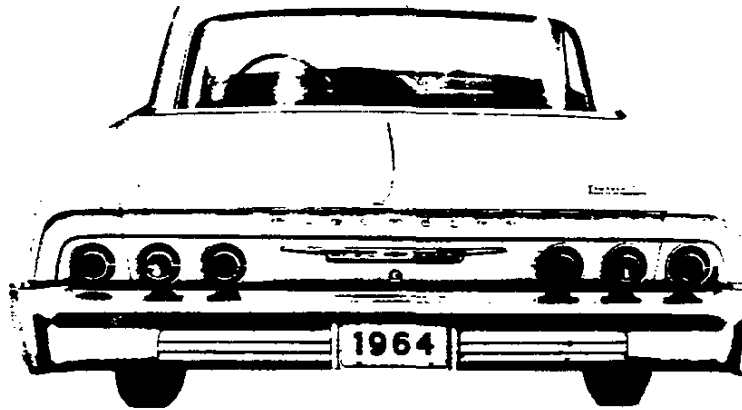


BODY



- EXTERIOR PAINT 2
- EXTERIOR-INTERIOR COLOR COMBINATIONS 3
- BODY GLASS 6
- BODY CONSTRUCTION 7

EXTERIOR PAINT PROCESS



NINE STEP FINISHING PROCESS

1. **RUSTPROOFING . . .** Bare steel is thoroughly treated with chemicals that etch the metal for improved paint adhesion. This chemical also cleans the metal to give it a corrosion-resisting surface.
2. **BODY AND SHEET METAL PRIMER . . .** Four different and specially formulated corrosion resistant primers are used during sub-assembly of the body where rust could possibly develop. Areas considered especially critical are subsequently coated with another type rust inhibiting compound, after the lacquer coats have been applied.
A primer coat is applied to all outside and inside surfaces of the front fenders and hood. This is done by dipping or flowcoating to insure coating in all seams and secluded areas, and then baking at 390 degrees F for 30 minutes. After baking, a coat of sealer is applied to all surfaces requiring a subsequent coat of lacquer.
3. **PRIMER-SURFACER COAT AND FLASH PRIME COAT . . .** An air dried flash prime coat is applied to surfaces below the beltline. Next, a full primer-surfacer coat is applied to all outside surfaces of the body receiving lacquer and then oven baked for 45 minutes at 285 degrees F.
4. **SANDING . . .** Power wet sanding followed by hand sanding is done on all surfaces requiring lacquer.

Upon inspection, spot sanding assures an absolutely smooth surface for the lacquer. After lacquer application and initial baking, final wet sanding, both power and hand, prepares the body for final baking by removing surface irregularities.

5. **LACQUERING . . .** Many coats of acrylic lacquer are now sprayed on the surfaces to build up a finish of the required thickness for each color.
6. **INITIAL BAKING . . .** To set up the paint hardness for final sanding the body is baked for approximately 10 minutes at 200 degrees F.
7. **FINAL BAKING . . .** To assure a durable, hard, high luster finish the lacquer is now baked for 30 minutes at 275 degrees F. Reheating the lacquer after final sanding permits paint film to soften and allows surface blemishes and sanding scratches to disappear during the thermo-reflow process.
8. **UNDERCOATING . . .** An asphaltic based-asbestos fiber type sound deadener is sprayed inside the wheel housings and on the underside of the underbody at designated locations to block out road noises.
9. **PAINT REPAIR . . .** Any slight mars, nicks, or scratches that might occur during final assembly are factory-repaired and corrected before shipment. Light "slush" polishing is done to bring painted surfaces to a high luster finish. Wax is sprayed on each vehicle for protection during transit.

EXTERIOR - INTERIOR COLOR COMBINATIONS

1100-1200 BISCAYNE SERIES

1500-1600 BEL AIR SERIES

INTERIOR TRIM COLORS AND RPO NUMBERS										
			Fawn	Aqua	Red	Fawn	Aqua	Red	Blue	Green
			Models 1211-69			Models 1611-69-35-45				
			860	852	876					
EXTERIOR			Model 1235			863	850	872	839	823
RPO	Color	Sales Name	861	855	877					
900	Black	Tuxedo Black	X	X	X	X	X	X	X	X
905	Med. Green	Meadow Green	X							X
908	Dk. Green	Bahama Green	X							X
912	Med. Blue	Silver Blue	X						X	
916	Dk. Blue	Daytona Blue	X						X	
918	Med. Aqua	Azure Aqua		X			X			
919	Dk. Aqua	Lagoon Aqua		X			X			
920	Med. Fawn	Almond Fawn	X			X				
922	Med. Red	Ember Red	X		X	X		X		
932	Lt. Saddle	Saddle Tan	X			X				
936	White	Ermine White	X	X	X	X	X	X	X	X
938	Beige	Desert Beige	X		X	X		X		X
940	Silver	Satin Silver		X	X		X	X	X	
943	Yellow	Goldwood Yellow								
948	Maroon	Palomar Red	X		X	X		X		
Two-Tone (Upper/Lower)										
952	Dk. Green/Med. Green		X							X
954	White/Med. Green		X							X
959	White/Med. Blue		X						X	
960	Dk. Blue/Med. Blue		X						X	
965	White/Dk. Aqua			X			X			
971	Beige/Lt. Saddle		X			X				
975	Beige/Med. Red		X		X	X		X		
982	Dk. Blue/Silver		X						X	
988	Med. Aqua/White			X			X			
993	Beige/Maroon		X			X				
995	Silver/Maroon				X			X		

EXTERIOR - INTERIOR COLOR COMBINATIONS - Cont'd.

1700-1800 IMPALA SERIES

EXTERIOR			INTERIOR TRIM COLORS AND RPO NUMBERS							
			Fawn	Aqua	Red	Blue	Green	Saddle	Black	
			Models 1839-47-69							(a)
			866	853	874	842	826	857	811	
EXTERIOR			Models 1867-35-45							
			870	847	886	836	829	859	814	
RPO	Color	Sales Name								
900	Black	Tuxedo Black	X	X	X	X	X	X		
905	Med. Green	Meadow Green					X	X		
908	Dk. Green	Bahama Green					X	(c)		
912	Med. Blue	Silver Blue				X		X		
916	Dk. Blue	Daytona Blue				X				
918	Med. Aqua	Azure Aqua		X				X		
919	Dk. Aqua	Lagoon Aqua		X						
920	Med. Fawn	Almond Fawn	X				X	X		
922	Med. Red	Ember Red	X		X			X		
932	Lt. Saddle	Saddle Tan	X				X			
936	White	Ermine White	X	X	X	X	X	X		
938	Beige	Desert Beige	X		X		X	X		
940	Silver	Satin Silver		X	X	X		X		
943	Yellow	Goldwood Yellow						X		
948	Maroon	Palomay Red	(c)		X			X		
Two-Tone (Upper/Lower)										
952	Dk. Green/Med. Green						X			
954	White/Med. Green						X	X		
959	White/Med. Blue				X					
960	Dk. Blue/Med. Blue				X					
965	White/Dk. Aqua		X							
971	Beige/Lt. Saddle						X			
975	Beige/Med. Red		X		X					
982	Dk. Blue/Silver				X					
988	Med. Aqua/White			X						
993	Beige/Maroon		(d)		(d)			X		
995	Silver/Maroon				X			X		

Convertible top: white (Reg. Prod.), black (RPO C05AA) or beige (RPO C05BA) with any exterior color.
 Sport Top, 1847 only: black (RPO C08AA) or white (RPO C08BA) with any exterior color.

- (a) 1839-47 only.
- (b) 1867 only.
- (c) 1867-35-45 only.
- (d) 1835-45 only.

1300-1400 IMPALA
SUPER SPORT SERIES

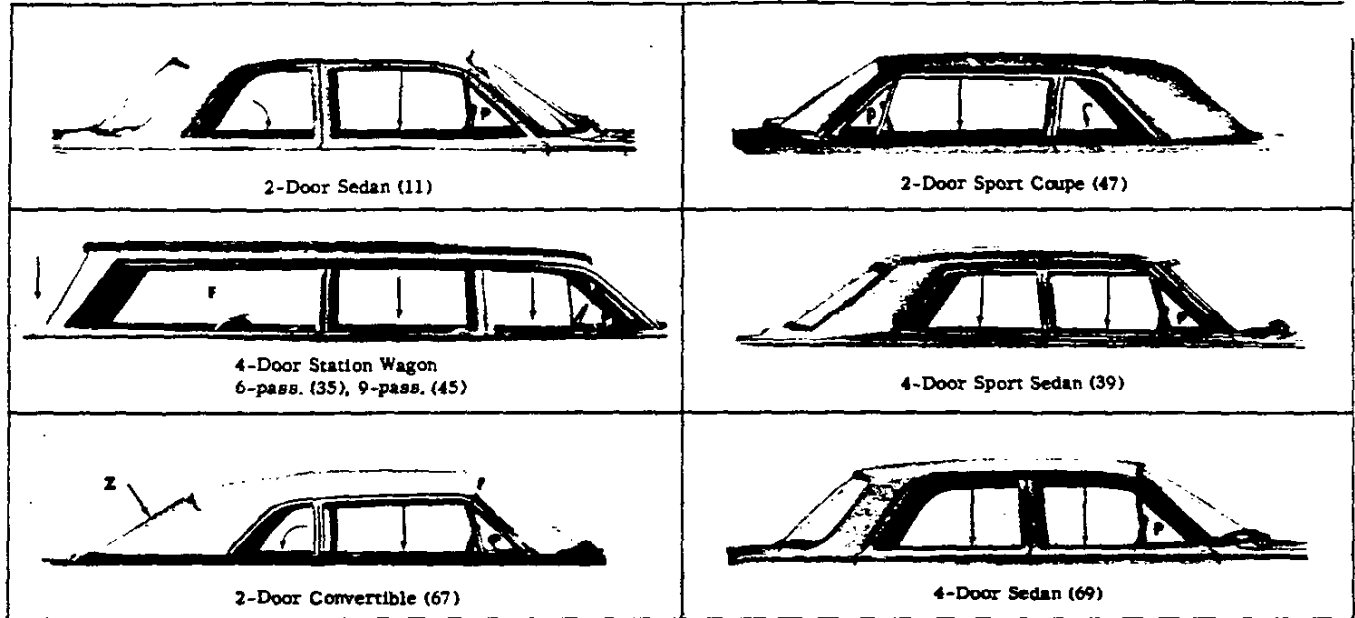
			INTERIOR TRIM COLORS AND RPO NUMBERS							
			Fawn	Red	Blue	Saddle	Black	White	White	Silver
			Models 1447-67							
EXTERIOR			856	879	831	862	815	845 (a)	878 (b)	805 (c)
RPO	Color	Sales Name								
900	Black	Tuxedo Black	X	X	X	X	X	X	X	X
905	Med. Green	Meadow Green	X				X			
908	Dk. Green	Bahama Green	X			X				
912	Med. Blue	Silver Blue			X		X			
916	Dk. Blue	Daytona Blue			X					
918	Med. Aqua	Azure Aqua					X	X		
919	Dk. Aqua	Lagoon Aqua						X		
920	Med. Fawn	Almond Fawn	X			X	X			
922	Med. Red	Ember Red	X	X			X		X	X
932	Lt. Saddle	Saddle Tan	X			X				
936	White	Ermine White	X	X	X	X	X	X	X	X
938	Beige	Desert Beige	X	X		X	X			
940	Silver	Satin Silver		X	X		X			X
943	Yellow	Goldwood Yellow					X			
948	Maroon	Palomar Red	X	X			X		X	X
Two-Tone (Upper/Lower)										
952	Dk. Green/Med. Green						X			
954	White/Med. Green						X			
959	White/Med. Blue				X					
960	Dk. Blue/Med. Blue				X					
965	White/Dk. Aqua							X		
971	Beige/Lt. Saddle					X				
975	Beige/Med. Red		X	X						
982	Dk. Blue/Silver				X					
988	Med. Aqua/White							X		
993	Beige/Maroon		X	X					X	
995	Silver/Maroon			X			X		X	X

Convertible top: white (Reg. Prod.), black (RPO C05AA) or beige (RPO C05BA) with any exterior color.
Sport top: black (RPO C08AA) or white (RPO C08BA) with any exterior color.

- (a) Instrument panel, steering wheel, carpet are aqua.
- (b) Instrument panel, steering wheel, carpet are red.
- (c) Instrument panel and steering wheel are black, carpet is dark gray.

BODY GLASS

WINDOW ACTION

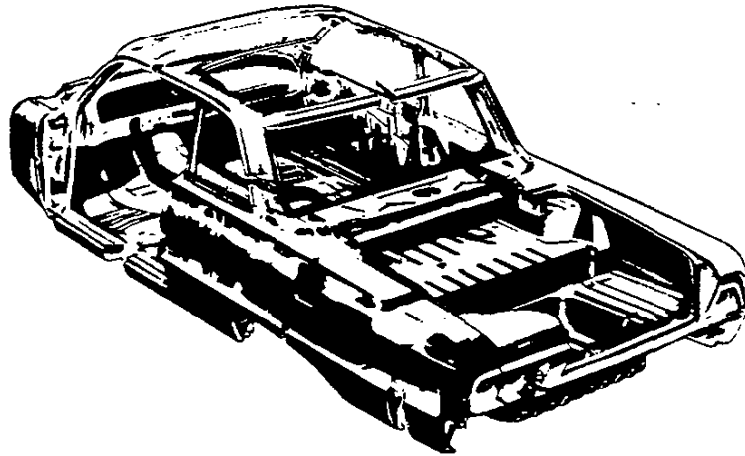


P - Pivoting, crank vent
 F - Fixed glass
 Z - Zip out
 ⤴ - "Monkey" action
 ↻ - Rotating

BODY GLASS TYPE AND VISIBILITY AREA

Location	69	39	11	47	67	35	45
Windshield	Laminated safety plate, compound curve element						
	1587.5	1405.7	1587.5	1461.2			1587.5
Front door	Safety Solid Plate						
	Ventipane	96.0	88.8	96.0	72.3		96.0
Rear door window	Safety Solid Plate						
	Window	571.0	624.8	816.4	796.1	768.2	571.0
Rear quarter	Safety Solid Plate						
	Window			433.9	367.8	275.0	
Back window	Safety Solid Plate						
	Rear side						1181.6
Total visibility area	Safety Solid Plate			Plastic		Safety Solid Plate	
	1257.1	1239.9	1257.1	941.9	1103.0		938.3
Total visibility area	4167.4	4006.2	4184.4	3639.3	3679.7		5200.1

BODY CONSTRUCTION



GENERAL

Type ----- Unisteel, with cowl, roof, underbody and body panels welded to form body shell. Doors, front and rear lids are of double-panel construction and hinge assembled to body. Separate frame and bolt-on front end sheet metal.

DOORS AND LOCKS

Door construction ----- Double steel panels, hinged at front.
 Door handles ----- Push-button with rotary type latches. Inside push button locks on all doors.
 Door ventipanes ----- Crank operated

HOOD AND TRUNK LID

Type ----- Counterbalanced, with spring loaded toggle action hinges on rear of hood and boxed hinges on trunk lid with torsion rod.
 Hood release ----- External

VENTILATION

High level with double wall plenum chamber, providing washing and air drying of rocker panels for corrosion resistance. Air and water travel through rocker panels and drain at ends of rocker inner panels.

SEAT CONSTRUCTION

Type
 Front seat cushion ----- 11-12-15-16-17-1835, 45, 1" poly foam; other 1800 models, 1-3/4 poly foam; 13-1400 Super Sport, formed foam rubber
 Rear seat cushion ----- 11-12-15-1600, 3/4 poly foam; 13-14-17-1800, 1-3/4 poly foam; 15-16-17-1845 third seat, 3/4 poly foam

WINDSHIELD WIPERS

Type ----- Dual single speed electric
 Linkage ----- Parallel acting

SPARE TIRE AND TOOLS

Location ----- Sedans and sport coupe, horizontal on center of shelf in trunk compartment; Station wagon, vertically in right hand side of cargo compartment rear of wheelhouse behind removable cover. Convertible, right side of trunk compartment rearward of wheelhouse. Tools consist of bumper jack with combination lever handle and wheel nut wrench stored under tire.

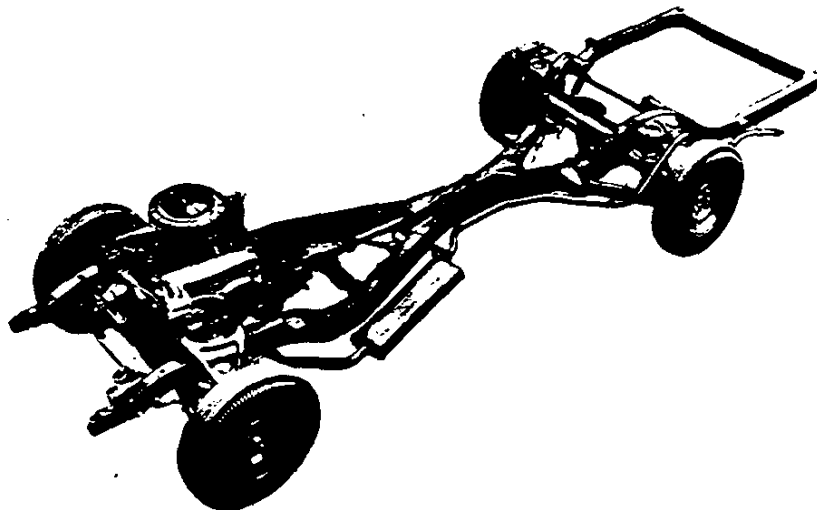


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CHASSIS

FRAME	2
FRONT SUSPENSION	2
STEERING	5
DRIVELINE	6
REAR SUSPENSION	6
REAR AXLE	8
BRAKES	9
WHEELS AND TIRES	10
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FRAME

General

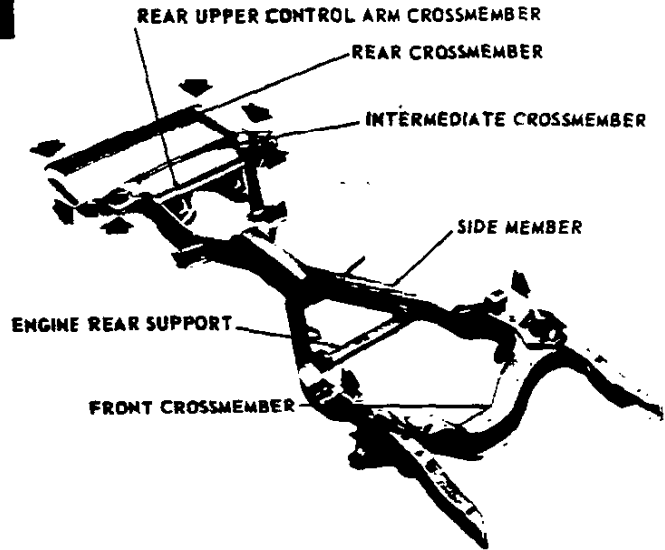
Description ----- All welded X frame with 4 crossmembers and box girder side rails; front suspension crossmember box section, rear crossmember C section, rear intermediate crossmember channel section and special channel crossmember for mounting rear suspension upper control arms. Center beam reinforced box girder construction. Convertible frame same except steel plates welded to top and bottom of side rails and center beam.

Overall dimensions

Length ----- 194.50
 Width ----- 47.50
 Height -----

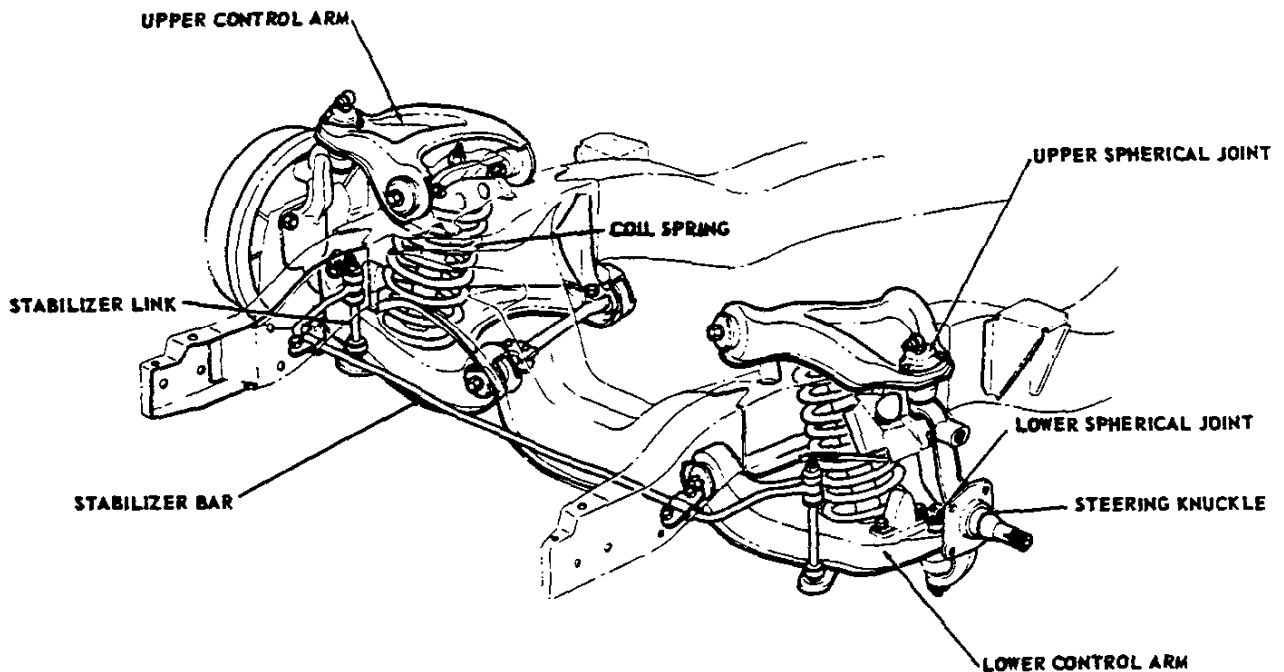
Mounting points

For body -----
 Except convertible ----- 8
 Convertible ----- 12
 For engine ----- 3



BODY MOUNTING POINTS

FRONT SUSPENSION



GENERAL

Description ----- Independent, SLA type with coil spring and concentric shock absorber, and spherically-jointed steering knuckle, for each wheel. Adjustments to front suspension achieved with shims at pivot shaft.

Wheel travel, from design height
Jounce ----- 4.24
Rebound ----- 4.30
Wheel to spring ratio ----- 1.87

CONTROL ARMS

Description
Upper and lower ----- Each is stamped A frame rubber-bushed at pivots.

Bushings
Type ----- Pre-loaded, steel encased rubber.

STEERING KNUCKLES

Description ----- Forged steel with integral brake cylinder mounting, and detachable steering knuckle arm.

Spindle diameters
At inner bearing ----- 1.2493-1.2498
At outer bearing ----- .7492-.7497
Spindle thread size ----- 3/4-20 NEF-3 (modified)

WHEEL BEARINGS

Type ----- Taper roller
Quantity ----- Two per spindle

SPHERICAL JOINTS

Type ----- Ball studs, upper self-adjusting for wear
Quantity ----- Two per steering knuckle
Bearing surfaces
Material
Upper ----- Two bearings, both non-metallic; the upper surface a teflon-coated phenolic; the lower surface, a teflon-cotton composition
Lower ----- One upper surface, a teflon-cotton composition

Seals
Description
Upper ----- Reinforced neoprene secured by retainer
Lower ----- Neoprene secured by retainer
Lubrication
Upper and lower ----- High pressure grease fitting

SHOCK ABSORBERS

Type ----- Direct, double-acting, hydraulic
Secured (through coil spring) to ----- Lower control arm and front suspension crossmember
Piston diameter and travel (unassembled) ----- 1.00; 5.25
Piston rod plating ----- Chrome

STABILIZER BAR

Type ----- Link
Material ----- HR steel
Diameter ----- .6875
Bushing material ----- Natural or synthetic rubber
Application ----- All except 11 and 1500-11, -69

FRONT WHEEL ALIGNMENT

Design
Camber (degrees) ----- 0 to P1
Caster (degrees) ----- P1 to P2
Toe-in, per wheel -----

Curb
Camber (degrees) ----- 0 to P1
Caster (degrees) ----- N-1/2 to P-1/2
Toe-in, per wheel ----- 1/32 to 3/32
Steering axis inclination (degrees) ----- 6-3/4 to 7-3/4

Continued on page 4

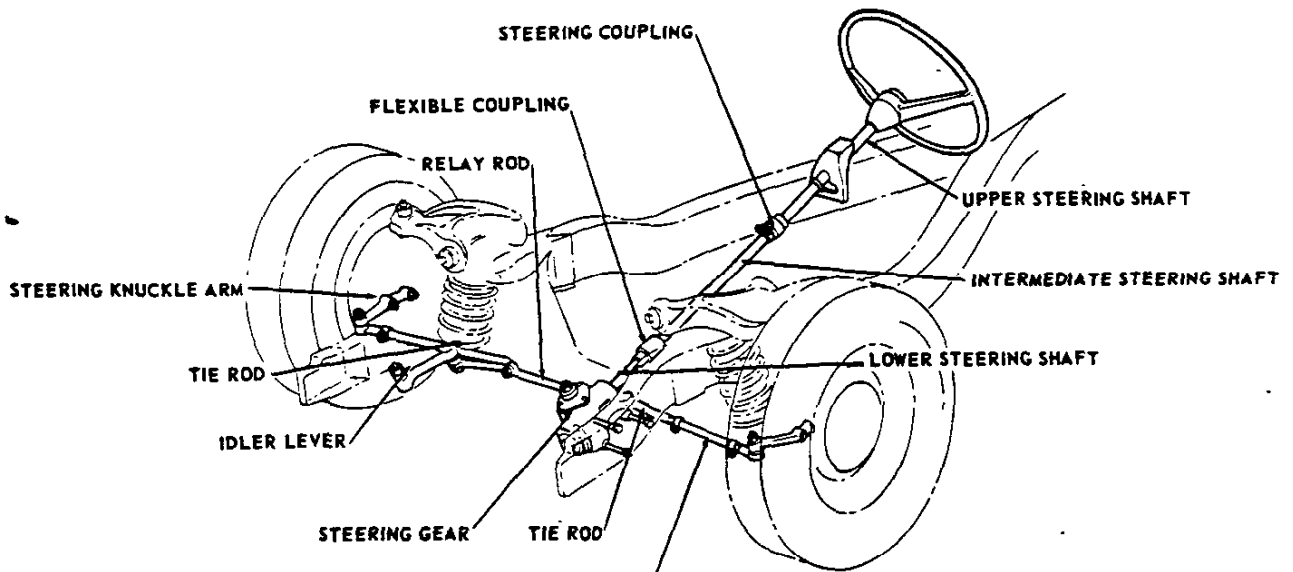
FRONT SPRINGS

ENGINES TRANSMISSIONS	Regular production engines					Part number and reference
	3-Speed	Overdrive	Automatic			
1111, 1169, 1447, 1467, 1511, 1545, 1569, 1745	A					
1211, 1611, 1739, 1747, 1767, 1769	B					
1645, 1845	C					
1235, 1269, 1635, 1669, 1835, 1839, 1847, 1867, 1869	D					
1447, 1467	K					
1135, 1535, 1735	E					
1347, 1367	F					
ENGINES, RPO-1	L30	L74	L33	L31	L80	
TRANSMISSIONS	3-Speed	4-Speed		4-Speed		
	4-Speed	Auto- matic				
	Automatic					
1645, 1845	G					
1211, 1269, 1611, 1669, 1839, 1869	G					
1447, 1467	G ●					
1211, 1611	A					
1235, 1269, 1635, 1669, 1835, 1839, 1847, 1867, 1869	I					
1235, 1635, 1645, 1835, 1845, 1847, 1867	J					
1645, 1845	J					

3827038-A
3827034-B
3827039-C
3827035-D
3827033-E
3861037-F ●
3827104-G
3827036-I
3827105-J
3741497-K ●

Type	Material	Cut-off length	Number of coils (active, total)	Wire diameter	Outside diameter	Pitch diameter	Heights		Deflection rate between 8.67 and 11.67 (lb per inch)	
							Free	Working (inches @ lb)	@ Spring	@ Wheel (wheel rate)
A	Steel alloy heat treated and drawn	128.09	7.67, 9.11	.664	5.130	4.466	15.20	10.50 @ 1740	370	126.4
B		141.25	8.67, 10.2	.630	5.062	4.432	17.01	10.50 @ 1790	275	101.2
C		128.09	7.67, 9.11	.664	5.130	4.466	15.47	10.50 @ 1840	370	126.4
D		141.25	8.67, 10.2	.630	5.062	4.432	17.34	10.50 @ 1880	275	101.2
E		141.25	8.67, 10.2	.630	5.062	4.432	16.68	10.50 @ 1700	275	101.2
F		140.96	8.67, 10.0	.630	5.060	4.430	16.84	10.50 @ 1745	275	101.2
G		128.09	7.67, 9.11	.664	5.130	4.466	15.69	10.50 @ 1920	370	126.4
I		141.25	8.67, 10.2	.630	5.062	4.432	17.63	10.50 @ 1960	275	101.2
J		128.09	7.67, 9.11	.664	5.130	4.466	15.90	10.50 @ 2000	370	126.4
K		141.25	8.67, 10.1	.630	5.062	4.432	17.25	10.50 @ 1855	275	101.2

STEERING



GENERAL

Description ----- Semi-reversible, recirculating ball and nut steering gear. Manual steering standard; power optional. Tilt steering available with power steering only*

Steering gear

Gear ratio	
Manual -----	24:1
Power -----	20:1
Overall ratio	
Manual -----	28:1
Power -----	24:1

Turning characteristics

Turning diameters (ft)	
Outside front	
Wall to wall	
Right and left -----	44.1
Curb to curb	
Right and left -----	40.8
Inside rear	
Wall to wall	
Right and left -----	24.2
Curb to curb	
Right and left -----	24.5
Number of wheel turns, lock to lock	
Manual -----	5.80
Power -----	5.06
Outside wheel angle with inside wheel @ 20 degrees	17.87

* Not available with 3-speed

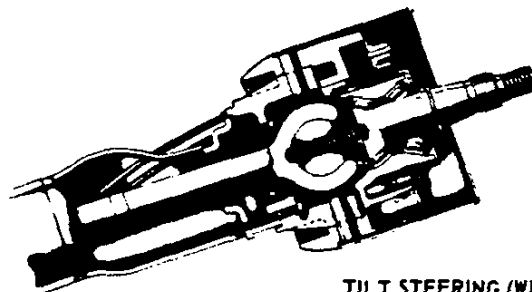
AXLE TIE ROD SLEEVE

Steering Shaft

Number -----	2
Diameter -----	.75
Steering wheel	
Type -----	Deep dished
Diameter -----	16.5
Linkage	
Type -----	Relay
Location -----	Front of wheels
Number of tie rods -----	2
Lubrication points -----	4: one at each end of each tie rod.

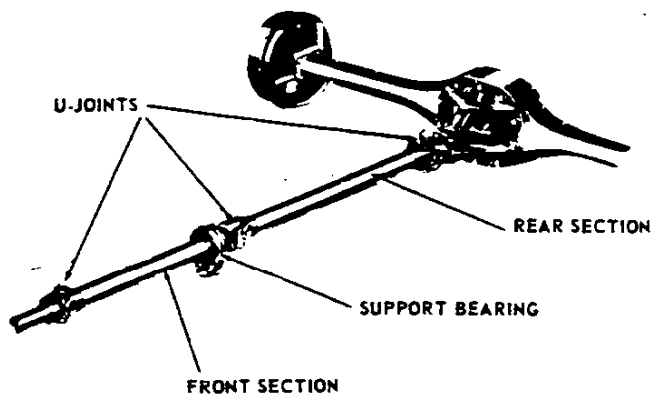
POWER STEERING, RPO 1-N40

Description -----	Hydraulic; pump powered cylinder assisting linkage.
Drive	
Type -----	V-belt from crankshaft
Pump pulley	
PD -----	5.60
"V" Angle -----	36 degrees
Width @ PD -----	.38
Crankshaft pulley	
PD -----	6.64
"V" angle -----	36 degrees
Width @ PD -----	.38
Belt	
● Pitch line length	
230 cubic inch L-6 -----	49.5
283 cubic inch V-8 -----	35.0
● Lubrication points -----	Two additional, fittings; at cylinder piston rod ball stud, and at valve adapter



TILT STEERING (WITH 4-SPEED)

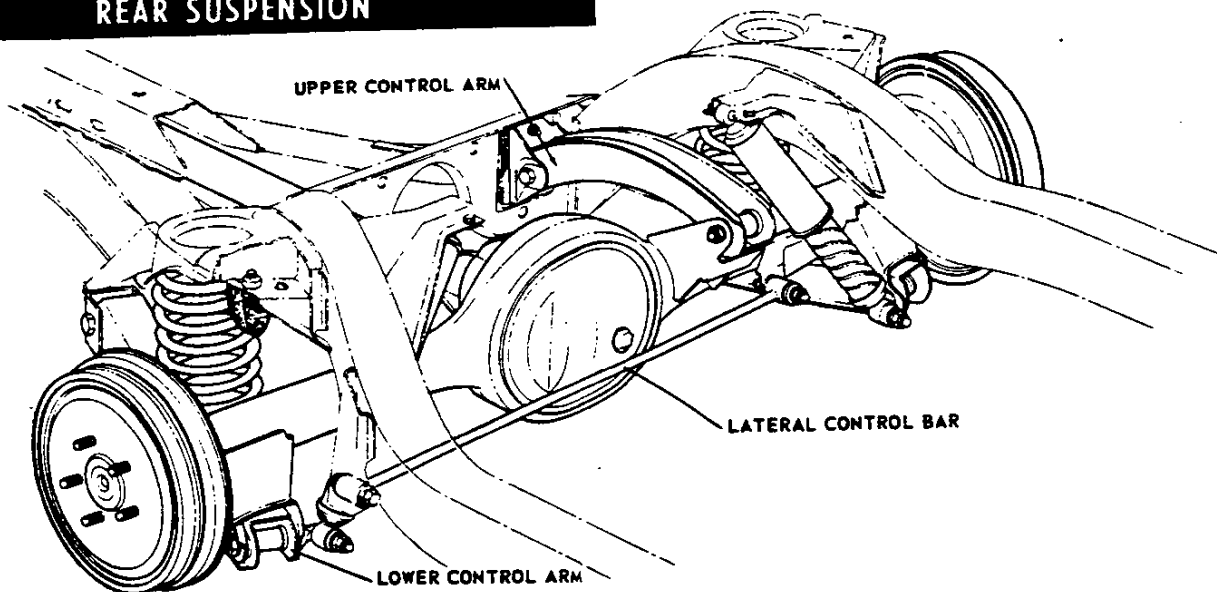
DRIVELINE



PROPELLER SHAFT

Type	Exposed, supported
Quantity	2
Construction	Bearing supported, two-section tubular construction with 3 universal joints; bearing integral with front section
Tubes	
OD	1.997-2.003
Wall thickness	.092-.097
Length between axes of yoke bores	
Front section	
3-speed	30.1
4-speed and overdrive	25.0
Automatic	27.2
Rear section, all transmissions	
Support bearing	35.0
Type	Single row ball, sealed

REAR SUSPENSION



GENERAL

Type	Four-link suspension with a lower control arm for drive torque for each wheel, an upper control arm for braking torque, and a lateral control bar. Damping provided by coil springs and shock absorbers.
● Wheel travel, from design height	
Jounce	4.32
Rebound	5.56
Wheel to spring ratio	1.51:1

SHOCK ABSORBER

Type	Direct, double acting, hydraulic
Secured to	Short cantilever bracket welded to frame side member at upper end (rear of) lower control arm at lower end.
Piston diameter and travel (unassembled)	1.00, 8.50

LATERAL CONTROL BAR

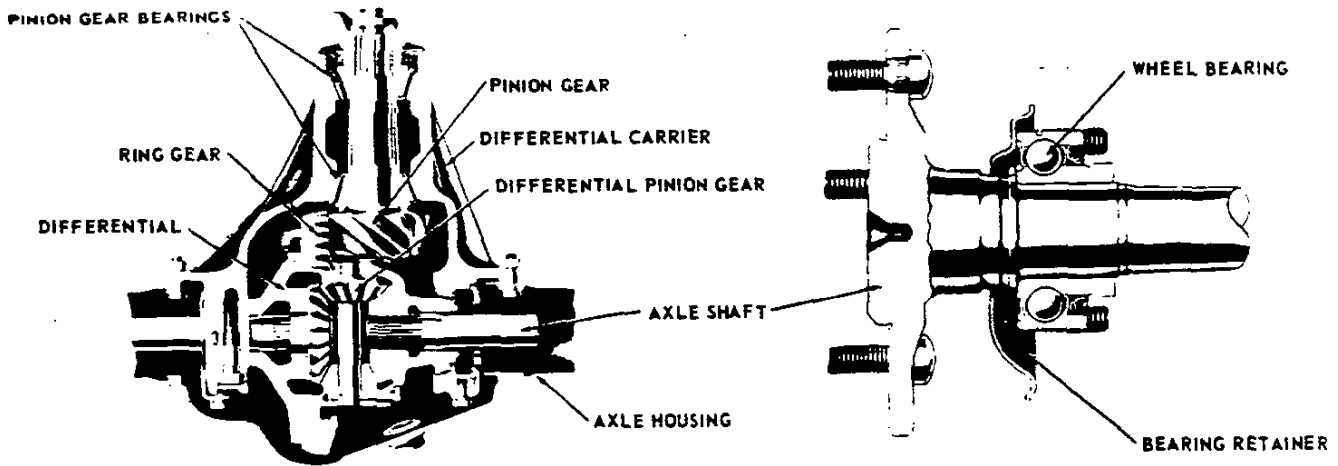
Material	AISI M-1015 or M1018
Diameter	.750

REAR SPRINGS

ENGINE	Regular production L6 and V8					Part Number and Reference 3827042-A 3844118-B 3827040-C 3827041-D 3861038-E ● 3844119-F 3855647-G 3813818-H 3861039-J ●
TRANSMISSION	3-Speed	Overdrive	Automatic			
1111, 1169, 1511 1569	A					
1135, 1235, 1535 1635, 1735, 1835	B					
1211, 1611, 1747 1767, 1847, 1867	C					
1269, 1669, 1739 1769, 1839, 1869	D					
1347, 1447	E					
1545, 1645, 1745 1845	F					
1367, 1467	J ●					
ENGINE RPO 1-	L30	L74	L33	L31	L80	
TRANSMISSION	3-Speed		4-Speed			
	Automatic					
	1211, 1611, 1847 1867	D		- H		
1269, 1669, 1839 1869	H					
1235, 1635, 1835	F					
1447	G					
1467	H					

	Type	Material	Cut-off length	Number of coils (active, total)	Wire diameter	Outside diameter	Pitch diameter	Heights		Deflection rate between 8.78 and 11.78 (lb per inch)	
								Free	Working (inches @ lb)	@ Spring	@ Wheel (wheel rate)
A	Right hand helix	Steel alloy, heat treated and drawn	125.18	7.8, 9.41	.587	4.812	4.225	15.37	9.88@1455	265	124.5
B			140.52	8.8, 10.39	.652	4.942	4.290	16.70	11.08@1915	340	158.5
C			138.27	8.8, 10.41	.583	4.804	4.221	16.14	9.88@1440	230	108.6
D			138.27	8.8, 10.41	.583	4.804	4.221	16.49	9.88@1520	230	108.6
E			138.27	8.8, 10.41	.583	4.804	4.221	15.77	9.88@1355	230	108.6
F			127.98	7.8, 9.39	.681	5.000	4.319	15.76	10.58@2330	450	205.7
G			126.25	7.8, 9.41	.630	4.898	4.268	14.17	9.88@1460	340	158.5
H			126.25	7.8, 9.41	.630	4.898	4.268	14.35	9.88@1520	340	158.5
J			138.27	8.8, 10.41	.583	4.804	4.221	16.03	9.88@1415	230	108.6

REAR AXLE



GENERAL

Type ----- Semi-floating; 2-piece rear beam consisting of a pressed steel banjo axle housing and bolted-on differential carrier.

Lubricant

Type ----- Military MIL-L-2105-B
 Viscosity ----- SAE80
 Filler plug ----- 1-3/8 hex hd., 1-20 Am.Nat. thread
 Capacity (pts.) ----- 4

Regular production ratio

11, 12, 13, 15, 16 and 1700 sedans and coupes --- 3.08:1
 13 and 1700 convertibles, 12 and 1600 station wagons, and all 14 and 1800 models ----- 3.36:1
 11, 15 and 1700 station wagons ----- 3.55:1

Differential carrier

Type ----- Hypoid gear with overhung pinion gear supported by two taper roller bearings.
 Offset ----- 1.50
 Hypoid gear PD ----- 8.375
 Pinion adjustment ----- Shim
 Cover assemblage ----- (Stamping) welded to housing

DIFFERENTIAL

Type ----- Two pinion in ArmaSteel housing supported by 2 taper roller bearings

AXLE

Type ----- Forged and hardened steel with integral drive flange

Wheel bearings

Type ----- Single row ball, sealed
 Quantity ----- 1 per wheel
 Oil seal ----- Steel encased spring loaded synthetic rubber (part of rear wheel bearing assembly)

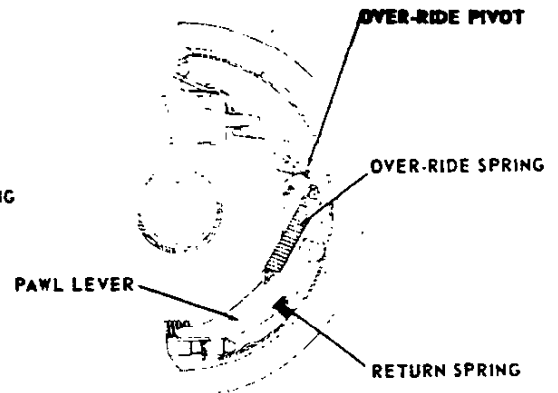
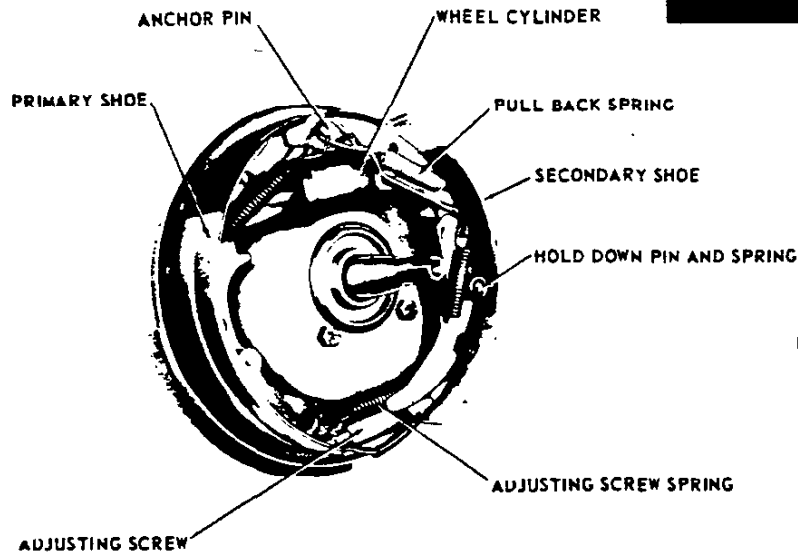
HYPOID AND PINION GEAR TOOTH COMBINATIONS

3.08:1 Ratio	
Hypoid gear	37
Pinion gear	12
3.36:1 Ratio	
Hypoid gear	37
Pinion gear	11
3.55:1 Ratio	
Hypoid gear	32
Pinion gear	9

POSITRACTION DIFFERENTIAL (for availability, see POWER TRAINS)

Type ----- 4 pinion with dual disk clutches

BRAKES



SELF-ADJUSTING MECHANISM

SERVICE BRAKES, Regular Production

General

Type	Duo servo, 4-wheel Hydraulic, reverse self-adjusting
Line pressure, psi, @ 100 lb pedal load	750
Braking ratios	
Pedal	6.21:1
Hydraulic	4.82:1
Overall	29.93:1
Distribution of braking effort (theoretical, percent)	
Front wheels	58.5
Rear wheels	41.5
Brake drum	
Construction	Composite, web cast into rim
Material	
Web	HR steel
Rim	Cast iron alloy
Web thickness	
Front	.109-.119
Rear	.095-.105
Swept drum area, sq. inches	328
Diameter, front and rear	11.0
Brake lining	
Material	Full molded asbestos composition
Length	
Primary shoe	9.34
Secondary shoe	11.75
Width	
Front shoes	2.75
Rear shoes	2.00
Thickness, minimum @ centerline	.168

Method of attachment	Bonded
Total effective area, sq. inches	185.2
Gross lining area, sq. inches	200.4
Master Cylinder	
Location	Engine compartment on dash panel
Piston diameter	1.00
Piston travel (with available pedal travel)	1.03
Wheel cylinders	
Location	
Front	Steering knuckle
Rear	On backing plate
Piston diameter	
Front	1.1875
Rear	1.00
Foot pedal	
Type	Pendant
Travel	6.38

PARKING BRAKE

Type	Mechanical pull rods and cables operate two rear service brakes
Total effective area, sq. inches	77
Control	Apply by pendulum foot pedal; release by T handle below instrument panel to left of steering column.

STOPLIGHT SWITCH

Type	Mechanical, make-break, normally on
Location	On dash panel brace
Activation	Brake pedal

Continued on page 10

SERVICE BRAKES, METALLIC, RPO 1-J65

Same as Service Brakes, Regular Production, except as follows

General	
Line pressure, psi, @ 100 pedal load	980
Braking ratios	
Pedal	6.21:1
Hydraulic	6.30:1
Overall	39.12:1
Brake drum	
Web thickness	
Front	.125-.135
Brake lining	
Material	Sintered iron segments
Size	
Front wheel segments	
Primary	1.64 x 1.37 x .175
Secondary	1.64 x 1.37 x .295
Rear wheel segments	
Primary	2.00 x 1.00 x .175
Secondary	2.00 x 1.00 x .295
Segments per shoe	
Primary, front and rear	6
Secondary	
Front	12
Rear	10
Method of attachment	Welded
● Total effective area, sq. inches	145.2
Master cylinder	
Piston diameter	.875

POWER BRAKES, RPO 1-J50

Same as service brakes, regular production, except as follows

General	
Type	Vacuum power unit added to assist regular production master cylinder
Pedal effort	Approximately 30% less than regular production brakes at same deceleration rate
● Braking ratios	
With regular production linings	
Pedal	3.43
Hydraulic	4.82
Overall	16.53
With metallic linings	
Pedal	3.43
Hydraulic	6.30
Overall	21.61
Master cylinder	
Piston travel (with foot pedal)	1.31
Foot pedal	
Travel	4.50

WHEELS AND TIRES

WHEELS, regular production

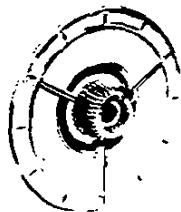
Type	Short spoke spider
Attachment to hub	5 hex nuts, 7/16-20 UNF-2B, arranged on a 4.75 dia bolt circle
Rim size	
Except wagons	14 x 5J
Wagons	14 x 6JK
Offset	
14 x 5J	.56
14 x 6JK	.06

TIRES, regular production

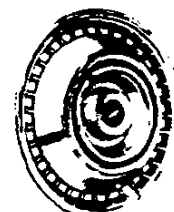
Type	Rayon, tubeless, blackwall
Construction	2 ply
Size	
Except convertibles and wagons	7.00 x 14-4PR
Convertibles	7.50 x 14-4PR
Wagons	8.00 x 14-4PR

Specifications

7.00 x 14-4PR	
Loaded rolling radius	12.35
Loaded rev/mi	817
Capacity (lb @ psi)	975
Recommended inflation, psi (cold)	
Front	24
Rear	24
7.50 x 14-4PR	
Loaded rolling radius	12.60
Loaded rev/mi	800
Capacity (lb @ psi)	1085
Recommended inflation, psi (cold)	
Front	24
Rear	24
8.00 x 14-4PR	
Loaded rolling radius	12.85
Loaded rev/mi	785
Capacity (lb @ psi)	1175
Recommended inflation, psi (cold)	
Front	24
● Rear	24 except wagons 28



SUPER SPORT WHEEL DISK



ACCESSORY WHEEL DISK

ELECTRICAL

LAMP	NO. REQUIRED	TRADE NO.	CANDLE POWER PER LAMP
Ash tray	1	1445	1
Automatic trans. dial indicator	1	1445	1
Back up	2	1156	32
Compass	1	53	1
Courtesy			
Instrument panel	2	631	6
Rear quarter	1	90	6
Seat separator	1	211	12
Direction signal indicator	2	1445	1
Dome			
Roof center	1	211	12
Rear quarter	2	90	6
Side rail	2	90	6
Fuel gage	1	1895	2
Generator indicator	1	1895	2
Glove compartment			
Instrument panel	1	1895	2
Seat separator	1	1816	2
Headlamp			
Outer	2	4002	High beam 37.5W Low beam 55W ●
Inner	2	4001	High beam 37.5W
Headlamp hi-beam indicator	1	1895	2
Heater controls	1	1895	2
Ignition switch	1	1445	1
Instrument cluster	4	1895	2
License plate, rear	1	1155	4
Luggage compartment	1	1003	15
Oil pressure indicator	1	1895	2
Parking			
Park	2	1157	4
Turn			32
Parking brake alarm	1	257	2
Radio	1	1893	2
Spot lamp			
Inside operated	1	4405	30W
Portable	1	4416	30W
Tachometer	1	53	1
Tail			
Tail only	2	1155	4
Tail,	2		4
Stop and	or	1157	32
Turn	4		32
Temperature indicators	2	1895	2
Traffic hazard indicator	1	1445	1
Underhood	1	93	15

DEVICE PROTECTED

Air conditioning
 Ash tray lamp
 Automatic trans. dial indicator lamp
 Backup lamps
 Cigarette lighter
 Clock
 Compass lamp
 Courtesy lamps
 Defogging blower
 Direction signal indicator lamps

TYPE OF PROTECTION LOCATION AND CIRCUIT *

2 AGC 30 fuses In line
 AGC 3 fuse Fuse panel (f)
 AGC 3 fuse Fuse panel (c)
 AGC 10 fuse Fuse panel (c)
 AGC 15 fuse Fuse panel (d)
 AGC 15 fuse Fuse panel (b)
 AGC 15 fuse Fuse panel (b)
 AGC 3 fuse Fuse panel (c)
 AGC 15 fuse Fuse panel (b)
 AGC 5 fuse Fuse panel (d)
 AGC 3 fuse Fuse panel (c)

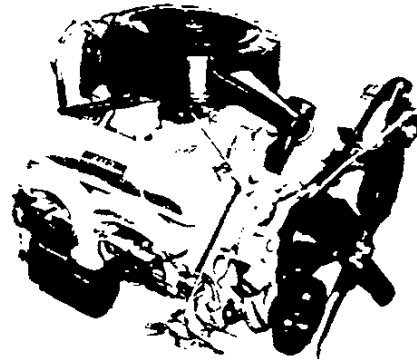
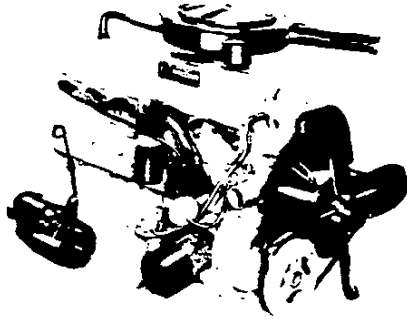
*Letter suffix indicates same circuit ●

Continued on page 12

DEVICE PROTECTED	TYPE OF PROTECTION	LOCATION AND CIRCUIT *
Dome lamps	AGC 15 fuse	Fuse panel (b)
Fuel gage	AGC 10 fuse	Fuse panel (d)
Folding top motor	40 amp CB	Hinge pillar (h)
Generator indicator lamp	AGC 10 fuse	Fuse panel (d)
Glove compartment lamp	AGC 15 fuse	Fuse panel (b)
Headlamps	15 amp CB	Light switch (a)
Headlamps hi-beam indicator lamp	15 amp CB	Light switch (a)
Heater	AGC 10 fuse	Fuse panel (f)
Heater controls lamp	AGC 3 fuse	Fuse panel (c)
Ignition switch lamp	AGC 3 fuse	Fuse panel (c)
Instrument cluster lamps	AGC 3 fuse	Fuse panel (c)
License lamp	AGC 15 fuse	Fuse panel (b)
Luggage compartment lamp	AGC 15 fuse	Fuse panel (b)
Oil pressure indicator lamp	AGC 10 fuse	Fuse panel (d)
Overdrive solenoid	AGC 15 fuse	In line
Park and turn lamps	15 amp CB	Light switch (a)
Parking brake alarm	AGC 10 fuse	Fuse panel (d)
Power seats	40 amp CB	Hinge pillar (i)
Power windows	40 amp CB	Hinge pillar (j)
Radio and radio lamp	AGC 2.5 fuse	Fuse panel (g)
Spot lamp		
Inside operated	AGC 15 fuse	In line
Portable	AGC 15 fuse	Fuse panel (b)
Tachometer	AGC 10 fuse	Fuse panel (d)
Tachometer lamp	AGC 3 fuse	Fuse panel (c)
Tail lamps	AGC 15 fuse	Fuse panel (b)
Tailgate motor	40 amp CB	Hinge pillar (k)
Temp. indicator lamps	AGC 10 fuse	Fuse panel (d)
Traffic hazard indicator	AGC 15 fuse	Fuse panel (b)
Underhood lamp	SAE 4 fuse	In line
W/S wiper, single speed	SAE 20 fuse	Fuse panel (c)
W/S wiper, two speed	SAE 20 fuse	Fuse panel (e)
	14 amp CB	Switch (l)

*Letter suffix indicates same circuit ●

POWER TRAINS



POWER TEAM COMBINATIONS	2
TURBO-THRIFT 230 SIX CYLINDER ENGINE	4
TURBO-FIRE 283 V-8 ENGINE	11
TURBO-FIRE 327 V-8 ENGINE	18
TURBO-FIRE 409 V-8 ENGINE	27
CLUTCHES	35
THREE AND FOUR SPEED TRANSMISSIONS	37
OVERDRIVE UNIT	39
POWERGLIDE	40

POWER TEAM COMBINATIONS

<u>ENGINE</u>	<u>EQUIPMENT</u>	<u>TRANSMISSION</u>	<u>AXLE RATIOS**</u>			
			<u>General Purpose Standard</u>	<u>Special Purpose or Mountain</u>	<u>Performance</u>	<u>Performance Cruise</u>	High Performance
230 CUBIC INCH L-6 TURBO-THRIFT 230 140 HORSEPOWER	SINGLE BARREL CARBURETOR HYDRAULIC LIFTERS	3-SPEED & POWERGLIDE				
		SEDANS & COUPES	3.08:1	3.55:1	3.36:1	
		CONVERTIBLE	3.36:1	3.55:1		
		STATION WAGONS	3.55:1			
		OVERDRIVE	3.70:1			
283 CUBIC INCH V-8 TURBO-FIRE 283 195 HORSEPOWER	2-BARREL CARBURETOR HYDRAULIC LIFTERS	3-SPEED & POWERGLIDE				
		12 and 1600 SEDANS	3.08:1	3.55:1	3.36:1	
		14 and 1800 MODELS	3.36:1	3.55:1		
		ALL STATION WAGONS	3.36:1	3.55:1		
		OVERDRIVE	3.70:1			
327 CUBIC INCH V-8 TURBO-FIRE 327 250 HORSEPOWER RPO L30	4-BARREL CARBURETOR HYDRAULIC LIFTERS	3-SPEED (2.58:1 low)	3.36:1			
		4-SPEED (2.56:1 low)	3.36:1			
		POWERGLIDE				3.08:1 (Std.)
327 CUBIC INCH V-8 TURBO-FIRE 327 300 HORSEPOWER RPO L74	LARGE 4-BARREL ALUMINUM CARBURETOR HYDRAULIC LIFTERS	3-SPEED (2.58:1 low)	3.36:1			
		4-SPEED (2.56:1 low)	3.36:1			
		POWERGLIDE	3.36:1			
● 409 CUBIC INCH V-8 TURBO-FIRE 409 340 HORSEPOWER RPO L33	LARGE 4-BARREL CARBURETOR HYDRAULIC LIFTERS	4-SPEED (2.56:1 low)	3.36:1			
		POWERGLIDE	3.08:1			
409 CUBIC INCH V-8 TURBO-FIRE 409 400 HORSEPOWER RPO L31	LARGE 4-BARREL ALUMINUM CARBURETOR SPECIAL CAMSHAFT MECHANICAL LIFTERS	4-SPEED (2.20:1 low)	3.36:1			4.11:1 4.56:1
		4-SPEED (2.56:1 low)	3.36:1			
409 CUBIC INCH V-8 TURBO-FIRE 409 425 HORSEPOWER RPO L80	TWO 4-BARREL ALUMINUM CARBURETOR SPECIAL CAMSHAFT MECHANICAL LIFTERS	4-SPEED (2.20:1 low)	3.36:1			4.11:1 4.56:1
		4-SPEED (2.56:1 low)			3.36:1*	3.08:1 (Std.)

** - POSITRACTION AXLE RATIOS AVAILABLE IN COMBINATIONS SHOWN

* - AVAILABLE AS POSITRACTION AXLE ONLY

1964

MULTIPLICATION FACTORS

WITH MANUAL TRANSMISSIONS

ENGINE	CARBU- RETION	TRANS- MISSION	TOTAL GEAR REDUCTION*					AXLE RATIO	MAX. AXLE TORQUE LOW# GEAR (LB-FT)
			1st	2nd	3rd	4th	Rev		
140 HP Six Cyl Turbo-Thrift	Single Barrel	3-Speed	9.06	5.17	3.08		9.06	3.08:1	1579
		Overdrive	out 10.88	6.22	3.70		10.88	3.70:1	1896
195 HP V-8 Turbo-Fire	2-Barrier	3-Speed	9.06	5.17	3.08		9.06	3.08:1	1887
		Overdrive	out 10.88	6.22	3.70		10.88	3.70:1	2265
250 HP V-8 Turbo-Fire RPO L30	4-Barrier	3-Speed	8.67	4.97	3.36		8.67	3.36:1	2321
		4-Speed	8.60	6.42	4.97	3.36	8.87	3.36:1	2303
300 HP V-8 Turbo-Fire RPO L74	4-Barrier Aluminum	3-Speed	8.67	4.97	3.36		8.67	3.36:1	
		4-Speed	8.60	6.42	4.97	3.36	8.87	3.36:1	
340 HP V-8 Turbo-Fire RPO-L33	4-Barrier	4-Speed	8.60	6.42	4.97	3.36	8.87	3.36:1	
400 HP V-8 Turbo-Fire RPO L31	4-Barrier Aluminum Special Cam	4-Speed	8.60	6.42	4.97	3.36	8.87	3.36:1	
		4-Speed	7.39	5.51	4.30	3.36	7.63	3.36:1	
425 HP V-8 Turbo-Fire RPO L80	2 x 4 Barrel Special Cam	4-Speed	7.88	5.88	4.55	3.08	8.13	3.08:1	
		4-Speed	7.39	5.88	4.30	3.36	7.63	3.36:1	

WITH AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE MULTIPLICATION*	AXLE RATIO
140 HP Six Cyl Turbo-Thrift	Powerglide	Drive	11.77:1 - 3.08:1	3.08:1
		Low & Reverse	11.77:1 - 5.61:1	
195 HP V-8 Turbo-Fire	Powerglide	Drive	11.77:1 - 3.08:1	3.08:1
		Low & Reverse	11.77:1 - 5.61:1	
250 HP V-8 Turbo-Fire RPO-L30	Powerglide	Drive	11.40:1 - 3.08:1	3.08:1
		Low & Reverse	11.40:1 - 5.42:1	
300 HP V-8 Turbo-Fire RPO-L74	Powerglide	Drive	12.43:1 - 3.36:1	3.36:1
		Low & Reverse	12.43:1 - 5.91:1	
340 HP V-8 Turbo-Fire RPO-L33	Powerglide	Drive	11.40:1 - 3.08:1	3.08:1
		Low & Reverse	11.40:1 - 5.42:1	

* - Axle ratio x transmission ratio.

- Gear reduction x maximum net torque x efficiency factor (0.90 in drive, 0.85 all others).

230 CUBIC INCH SIX CYLINDER ENGINE

1964

GENERAL DATA

Piston Displacement (Cu. In.)	Synchromesh	Overdrive	Powerglide
Type	230		
Number Cylinder	Valve-in-head		
Bore and Stroke (nominal)	6		
Compression Ratio	3.875 x 3.25		
Taxable (SAE) Horsepower	8.5:1		
Firing Order	36		
Idling Speed (RPM)	1-5-3-6-2-4		
Compression Press. (PSI) @ Cranking Speed, Engine Hot	500 in neutral		475 in drive
Lubrication	140		
Power Plant Mounting	Full pressure		
Measurements	Two at center, combination compression & shear type; one rear, full shear type		
	Fan to rear of engine block		34.96 (a)
	Top of oil filler to bottom of oil pan		26.67
	Oil filter to air cleaner (width)		28.37

(a) - Including fan spacer of 2.29 inches.

ADVERTISED ENGINE RATINGS

Engine	Turbo-Thrift 230		
Carburetor	Single Barrel		
Brake Horsepower	Gross	140 @ 4400 RPM	
	Net	120 @ 3600 RPM	
Torque (Lb.-Ft)	Gross	220 @ 1600 RPM	
	Net	205 @ 1600 RPM	

ENGINE SPEED AND PISTON TRAVEL

Transmission	3-Speed	3-Speed with Overdrive		Powerglide
		OD Locked Out	OD Locked In	
Rear Axle Ratio	3.08:1#	3.70:1		3.08:1#
Tire Size	7.00 x 14-4 PR*			
Crankshaft Revolutions per Mile	2516.4	3022.9	2116.0	2516.4
Crankshaft RPM @ 1 MPH	Low	123.3	148.1	76.3
	Second	70.5	84.6	59.3
	Third	41.9	50.4	41.9 (direct)
	Reverse	123.3	148.1	76.3
Piston Travel (ft/mile)	1363.1	1637.4	1146.2	1321.5

* - 7.50 x 14-4 PR standard on Convertible and 8.00 x 14-4 PR standard on Station Wagons.

- 3.36:1 on Model 1767 Impala convertible and 3.55:1 on Station Wagons.

VEHICLE PERFORMANCE FACTORS

(Model 1569)

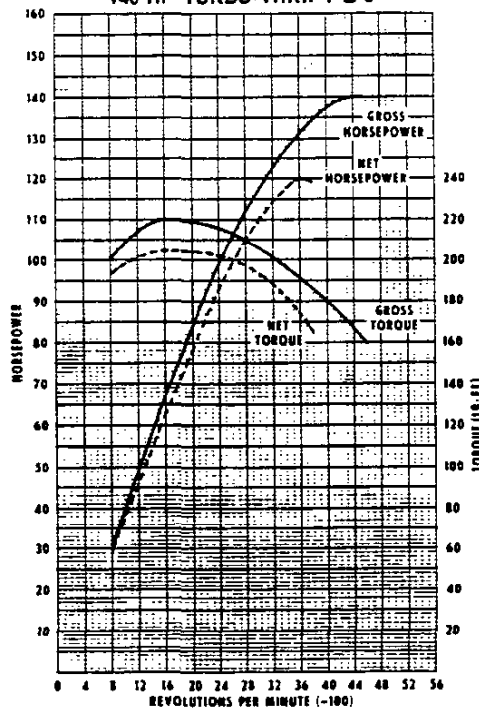
Transmission	3-Speed	3-Speed with Overdrive		Powerglide*
		Locked out	Locked in	
Performance Weight (pounds)	4054	4088	4070	4070
Pounds per Gross Horsepower	28.96	29.20	29.07	29.07
Pounds per Cu. In. Displacement	17.63	17.77	17.70	17.70
Gross HP per Cu. In. Displacement	.609			
Power Displacement (Cu. Ft./mile)	167.47	201.18	140.82	167.47
Displacement Factor (Cu. Ft./ton mile)	82.62	98.42	68.90	82.29

* - Data computed assuming zero slippage in torque converter.

GLOSSARY

Performance Weight	Curb Weight plus 600 Lb (weight of four 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs./Mi} \times \text{Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

140 HP TURBO-THRIFT L-6



The engine performance curves represent full throttle performance as obtained from dynamometer test data corrected to standard barometric pressure 29.92 inches of mercury and standard temperature of 60 degrees F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system,

no fan, generator not charging, optimum spark advance, and optimum fuel setting.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle, except the generator is not charging.

230 CUBIC INCH SIX CYLINDER ENGINE - Cont'd.

PRINCIPAL COMPONENTS

CYLINDER BLOCK

Material ----- Cast alloy iron
 Bore Diameter ----- 3.8745-3.8775
 No. of Bulkheads ----- 7
 Water Jacket ----- Full length
 Cylinder Numbering Arrangement
 Front to Rear ----- 1-2-3-4-5-6
 Bore Spacing (Centerline to centerline) ----- 4.4

CYLINDER HEAD

Material ----- High chrome cast alloy iron
 Bolt No. & Size ----- 10; .500 dia., 13 threads/in.

● COMBUSTION CHAMBER VOLUME ----- 5.31 cu.in.

INLET MANIFOLD

Material ----- Cast alloy iron
 Type ----- 3 port, rectangular section
 Heat Provision ----- Headed by exhaust gases

EXHAUST MANIFOLD

Material ----- Cast alloy iron
 Type ----- 4 port, rectangular section
 Outlet Diameter (nominal) ----- 2.00

CRANKSHAFT

Material ----- Nodular iron casting
 End Play ----- .002-.006

Counter Weights ----- 4
 Crank Arm Length ----- 1.625
 Vibration Damper ----- Rubber mounted inertia
 Timing Gear and Tooth Type ----- Steel, helical cut
 Pulley Pitch Diameter ----- 6.64

MAIN BEARING

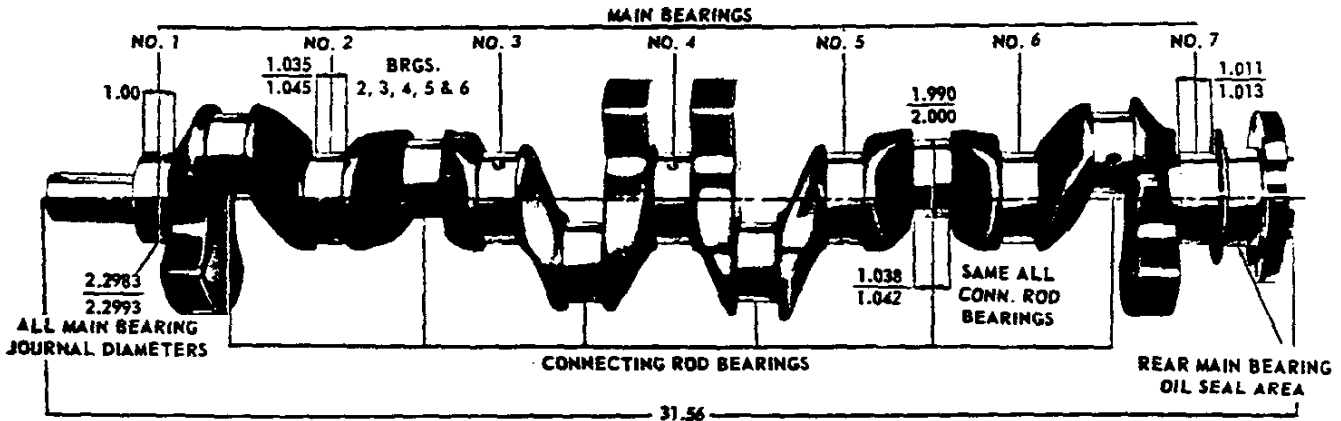
Material ----- Copper lead alloy or steel backed babbit
 Type ----- Precision removable
 Thrust Against Bearing No. ----- 7
 Clearance ----- .0003-.0029

Bearing	Theoretical Inner Dia.	Effective Length	Projected Area
1-6	2.3004	.75	1.7299
7	2.3004	.75	1.7483

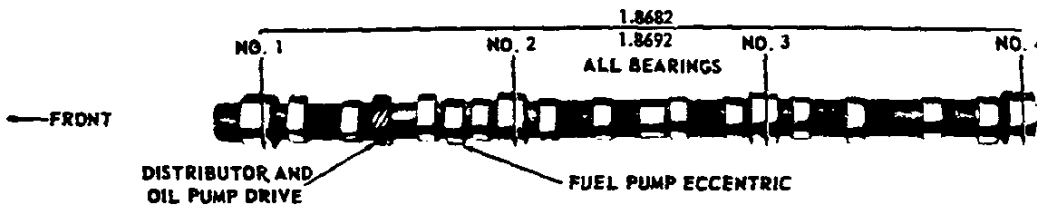
CAMSHAFT

Material ----- Cast alloy iron
 Drive ----- Gear; bakelite and fabric composition with steel hub
 Lobe Lift
 Inlet ----- .1914
 Exhaust ----- .1914
 Bearings
 Number ----- 4
 Material ----- Steel backed babbit

CRANKSHAFT AND BEARINGS



CAMSHAFT AND BEARINGS



PRINCIPAL COMPONENTS - Continued

VALVE TRAIN

Type ----- Individually mounted
overhead rocker arms, push rod actuated
Lifters ----- Hydraulic
Push Rods
Type & Material ----- Hollow steel
Ends ----- Hardened
Rocker Arms
Material ----- Stamped steel
Ratio ----- 1.75:1

VALVE SPRINGS

Diameter (I.D.) ----- .880
Installed Length (in. @ lb.)
Valves Closed ----- 1.66 @ 84-92
Valves Open ----- 1.33 @ 166-176
Free Length ----- 2.03
Valve Spring Damper ----- None

VALVES

Inlet Material ----- Carbon steel
Coating ----- None
Exhaust Material ----- High alloy steel
Coating ----- None

VALVE LIFT

Inlet ----- .3350
Exhaust ----- .3350

VALVE TRAIN LASH

Inlet ----- Zero
Exhaust ----- Zero

VALVE TIMING

	Excluding Ramps	Including Ramps
Inlet Valve		
Opens - BTC	18°	34°
Closes - ABC	54°	86°
Duration	252°	300°
Exhaust Valve		
Opens - BBC	52°	68°
Closes - ATC	20°	52°
Duration	252°	300°

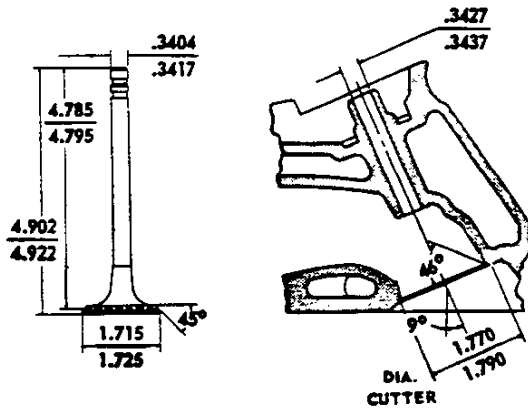
PISTON

Material ----- Cast aluminum alloy
Head Type ----- Flat notched
Skirt Type ----- Slipper
Top Land Clearance ----- .035-.044
Skirt Clearance ----- .0005-.0011
Compression Ring Groove Depth ----- .2153-.2218
Oil Ring Groove Depth ----- .2093-.2158
Pin Bore Offset ----- .055-.065
Compression Height ----- 1.799-1.801

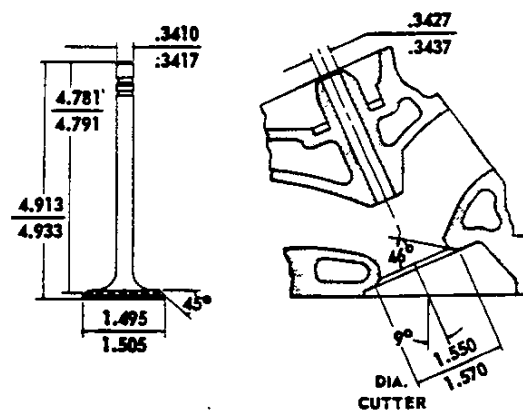
COMPRESSION RING - UPPER

Material ----- Cast alloy iron
Inside Bevel ----- Bottom of ring 30 degrees
to piston vertical axis
Ring Face ----- Tapered
Coating ----- Flash chrome plating
Width ----- .0775-.0780
Wall Thickness ----- .179-.194
Gap ----- .010-.020

INLET VALVE



EXHAUST VALVE



230 CUBIC INCH SIX CYLINDER ENGINE - Cont'd.

PRINCIPAL COMPONENTS - Continued

COMPRESSION RINGS - LOWER

Material	Cast alloy iron
Inside Bevel	Top of ring 30 degrees to piston vertical axis
Ring Face	Tapered
Coating	Wear resistant
Width .....	.0770-.0780
Wall Thickness .....	.184-.194
Gap .....	.010-.020

OIL CONTROL RINGS

Material	Steel
Type	Multi-piece (2 rails and one spacer)
Width .....	.184-.188 assembled
Wall Thickness .....	.150-.156
Gap .....	.015-.055
Rail Coatings (O.D.)	Chrome plated

PISTON PINS

Material	Chromium steel
Length	2.990-3.010
Diameter .....	.9270-.9273
Clearance in piston .....	.00015-.00025
Pin Mounting	Locked in rod by shrink fit

CONNECTING RODS

Material	Forged steel
Length (center to center)	5.70

CONNECTING ROD BEARINGS

Material	Copper lead alloy or steel backed babbit
Type	Precision removable
Clearance .....	.0007-.0027
Theo L.D.	2.0016
Effective Length .....	.807
End Play .....	.008-.014

FUEL SYSTEM

FUEL TANK

Capacity (Gal)	
Sedans & Coupes	20
Station Wagon	19
Fuel Tank Location	
Station Wagon	In left quarter panel behind rear wheel
Remaining Models	Rearward of rear axle kick-up, in shelf area
Filler Location	Behind opening in left rear quarter panel

FUEL FILTER

In Fuel Tank	Mesh strainer in fuel line
In Carburetor Inlet	Sintered bronze filter

FUEL PUMP ASSEMBLY

Drive	Camshaft eccentric
Type	Diaphragm
Location	Right side front of engine
● Pressure Range	3.50-4.50 PSI

AIR CLEANER

Type	Oil wetted polyurethane element
------------	---------------------------------

CARBURETOR

Make	Rochester
Type	Single barrel, downdraft
SAE Flange Size	1.50
Throttle Bore	1.56
Venturi Diameter	1.34

EXHAUST and VENTILATION SYSTEM

EXHAUST SYSTEM

Type	Single
------------	--------

MUFFLERS

Type	Oval, reverse flow
Construction	Heads and body joined by rolled lock seam construction
Shell .....	.048 sheet steel
Head .....	.048 sheet steel
Baffles	6; -.036 sheet steel
Coating	Interior and exterior completely aluminized
Length, Body	29.25
Width (L.D.)	3.24
Height (L.D.)	7.74

EXHAUST PIPE

Dimensions (O.D.)	2.00
Wall Thickness .....	.057-.069

TAIL PIPE

Dimensions (O.D.)	1.875
Wall Thickness .....	.062-.076

ENGINE VENTILATION

Type	Positive;
	Fumes withdrawn into induction system, fresh air enters the crankcase through oil breather cap and oil filler tube.

LUBRICATION SYSTEM

GENERAL

Type ----- Controlled full pressure
 Main Bearings ----- Pressure
 Connecting Rods ----- Pressure
 Piston Pins ----- Splash
 Cylinder Walls ----- Main & conn. rod brg. throwoff
 Camshaft Bearings ----- Pressure
 Valve Lifters ----- Pressure
 Rocker Arms ----- Pressure
 Timing Gears ----- Oil nozzle
 Oil Pressure Sending Unit
 Type ----- Electric
 Actuation ----- Opens or closes circuit @ 2 to 6 PSI
 Oil Filler
 Cap ----- Oil wetted crimped aluminum breather
 Location ----- Forward end rocker cover

CRANKCASE CAPACITY (Quarts)

Refill ----- 4.0
 Refill with Filter Change ----- 5.0

OIL PUMP

Type ----- Gear
 Regulator Valve ----- Opens between 40-45 lbs

Oil Pressure @ 1500 RPM ----- 30-45 PSI
 Intake Type ----- Fixed pickup with screen
 Capacity (GPM @ Eng RPM) ----- 4.3 @ 2000

OIL FILTER

Type ----- Full flow throwaway canister
 Location ----- Right side front
 Capacity (qts) ----- One
 By Pass Valve ----- Opens between 9 to 11 PSI drop in pressure

LUBRICANT GRADES AND TEMPERATURES

32° F and Above ----- SAE 20W, SAE 20 or SAE 10W - 30
 0° F and Above ----- SAE 10W or SAE 10W - 30
 Below 0° F ----- SAE 5W or SAE 5W-20

OIL PAN

Type of drain plug ----- Hex head
 Location ----- Rear lower part of oil pan sump
 Size Hex Head ----- .860 - .875
 Thread ----- 1/2-20 UNF-2A
 Length ----- 0.81
 Diameter ----- .410-.430

COOLING SYSTEM

GENERAL

Type ----- Pressure
 Capacity with Heater (Standard Equipment) ----- 12 Qts

RADIATOR

Type ----- Tube on center
 Core Constant and Thickness
 ● Distance between fins ----- .28 (Syn) .25 (P/Gld)
 Distance between tubes ----- .55
 Thickness of core ----- 1.26
 Frontal Area (Sq. In.) ----- 323

RADIATOR, HEAVY DUTY (RPO-VO1)

Core Constant and Thickness
 Distance between fins ----- .22
 Distance between tubes ----- .55
 Thickness of core ----- 1.75
 Frontal Area (Sq. In.) ----- 429

RADIATOR CAP RELIEF VALVE

Opens at ----- Approx 13 PSI

THERMOSTAT

Type ----- Pellet
 Begins to Open at ----- 177°-183° F
 Fully Opened at ----- 212° F

RADIATOR HOSE

Outlet, Lower (radiator to water pump) ----- 1.75 ID
 Inlet, Upper (thermostat hsg. to radiator) ----- 1.50 ID

FAN

Number of Blades ----- 4, staggered
 Diameter ----- 17.62
 Fan Pulley Pitch Diameter ----- 7.00

WATER PUMP

Type ----- Centrifugal
 Capacity ----- 60 GPM @ 4400 RPM
 Bearing ----- Permanent lubricated double row ball
 Drive ----- Fan belt
 Ratio (pump to engine RPM) ----- .949:1

BELT, CRANKSHAFT, FAN AND GENERATOR

Number used ----- One
 Angle of "V" ----- 38°- 42°
 Pitch Line ----- 39.00
 Width ----- .380

DRAIN LOCATIONS

Radiator ----- Right side bottom
 Type ----- Petcock
 Engine Block ----- Left rear side
 Type ----- Plug

230 CUBIC INCH SIX CYLINDER ENGINE - Cont'd.

ELECTRICAL SYSTEM

SUPPLY SYSTEM

BATTERY

Make ----- Delco-Remy
 Voltage Rating ----- 12
 Capacity (SAE) ----- 44 Amp hr @ 20 hr rate
 Heavy Duty (RPO T60) ----- 70 Amp hr @ 20 hr rate
 Total Number of Plates ----- 54; Heavy Duty 66
 Number of Cells ----- 6
 Terminal Grounded ----- Negative
 Location ----- Right front engine compartment

GENERATOR

Make ----- Delco-Remy
 Type ----- Diode rectified
 Rating
 Amps ----- 9-37
 Volts ----- 12-15
 Drive ----- By fan belt
 Pulley Pitch Diameter ----- 2.70
 Ratio (Gen to Engine Speed) ----- 2.46:1

REGULATOR

Make ----- Delco-Remy
 Type ----- Two unit, Vibrator
 Voltage Regulator
 Voltage ----- 13.8-14.8 @ 85°F
 Field Relay (Combination light and field relay)
 Closing Voltage ----- 1-3 Volts @ 80°F
 Location ----- Left side front engine compartment

STARTING SYSTEM

STARTING MOTOR

Make ----- Delco-Remy
 Rotation (drive end view) ----- Clockwise
 Test Conditions ----- Engine at operating temp
 No Load Test
 Amps ----- 49-76
 Volts ----- 10.6
 RPM ----- 6200-9400

Motor Drive

Engagement ----- Solenoid
 Pinion meshes at ----- Rear
 Pinion tooth no. ----- 9
 Flywheel tooth no. ----- 153
 Mounting ----- Cylinder block flange

IGNITION SYSTEM

COIL

Make ----- Delco-Remy
 Type ----- 12 volt
 Amperes Drawn
 Engine stopped ----- 4.0
 Engine idling ----- 1.8

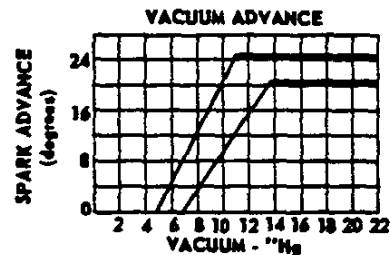
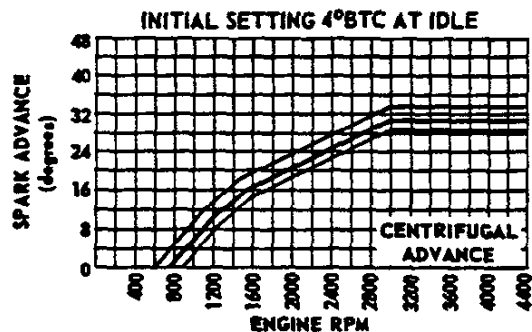
DISTRIBUTOR

Make ----- Delco-Remy
 Type ----- Single breaker
 Cam angle ----- 31°-34°
 Breaker Gap ----- .019 (new)
 Breaker Arm Tension ----- 19-23 oz
 Centrifugal Advance Begins (RPM) ----- 800
 Max Degrees @ RPM ----- 30° @ 3000
 Vacuum Advance Begins (In Hg) ----- 6
 Max Degrees @ In Hg ----- 21° @ 14.5
 Timing (Initial Design Setting)
 Crankshaft Degrees @ RPM -4° ± 1° BTC @ 450-500
 with vacuum spark line disconnected
 Timing Mark Location ----- Harmonic balancer
 Firing Order ----- 1-5-3-6-2-4

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

SPARK PLUGS

Make ----- AC46N (long reach)
 Thread Size (mm) ----- 14
 Gap ----- .033-.038
 Torque ----- 25 lb ft



283 CUBIC INCH V-8 ENGINES

1964

GENERAL DATA

Piston Displacement (Cu. In.)	Synchromesh	Overdrive	Powerglide
Type	283 Valve-in-head		
Number Cylinders	8		
Bore and Stroke (nominal)	3.875 x 3.000		
Compression Ratio	9.25:1		
Taxable (SAE) Horsepower	48.0		
Firing Order	1-8-4-3-6-5-7-2		
Idling Speed (RPM)	500 in neutral	475 in drive	
Compression Press. (PSI) @ Cranking Speed Engine Hot	150		
Lubrication	Full pressure		
Power Plant Mounting	Two front, combination compression & shear type; one rear, full shear type		
Measurements	Fan to rear of engine block	30.14	
	Top air cleaner to bottom oil pan	29.57	
	Exhaust manifold to generator (width)	28.92	

ADVERTISED ENGINE RATINGS

Engine	Turbo-Fire 283		
Carburetor	2-Barrel		
Brake Horsepower	Gross	195 @ 4800	
	Net	150 @ 4400	
Torque (Lb-Ft)	Gross	285 @ 2400	
	Net	245 @ 2400	

ENGINE SPEED AND PISTON TRAVEL

Transmission	3-Speed	3-Speed with Overdrive		Powerglide
Rear Axle Ratio	3.08:1 *	Locked out	Locked in	3.08:1 *
Tire Size	7.00 x 14-4 PR#			
Crankshaft Revolutions per Mile	2516.4	3022.9	2116.0	2516.4
Crankshaft RPM @ 1 MPH	Low	123.3	148.1	76.3
	Second	70.5	84.6	59.3
	● Third	41.9	50.4	41.9 (direct)
	Reverse	123.3	148.1	76.3
Piston Travel (ft/mile)	1258.2	1511.5	1058.0	1258.2

* - 3.36:1 on 1400 & 1800 models and Station Wagons

- 7.50 x 14-4 PR on Convertible and 8.00 x 14-4 PR on Station Wagon

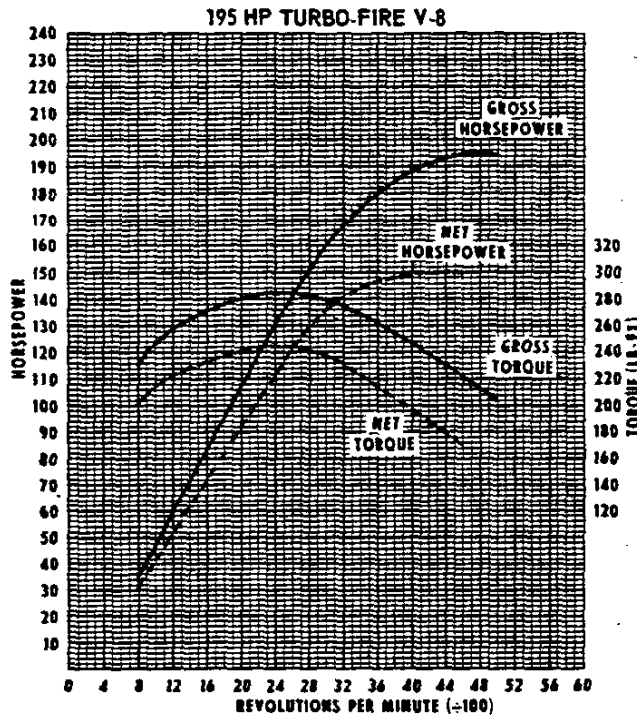
283 CUBIC INCH V-8 ENGINE - Cont'd.

VEHICLE PERFORMANCE FACTORS (Model 1669)

Transmission	3-Speed	3-Speed with Overdrive		Powerglide*
		Locked out	Locked in	
Performance Weight (pounds)	4197		4231	4211
Pounds per Gross Horsepower	21.52		21.70	21.60
Pounds per Cu. In. Displacement	14.83		14.95	14.88
Gross HP per Cu. In. Displacement			.689	
Power Displacement (Cu. Ft./mile)	206.06	247.54	173.27	206.06
Displacement Factor (Cu. Ft./ton mile)	98.21	117.04	81.93	97.89

* - Data computed assuming zero slippage in torque converter.

GLOSSARY	
Performance Weight	Curb Weight plus 600 Lb (weight of four 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi} \times \text{Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$



The engine performance curves represent full throttle performance as obtained from dynamometer test data corrected to standard barometric pressure 29.92 inches of mercury and standard temperature of 60 degrees F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system,

no fan, generator not charging, optimum spark advance, and optimum fuel setting.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle, except the generator is not charging.

PRINCIPAL COMPONENTS

CYLINDER BLOCK

Material ----- Cast alloy iron
 Bore Diameter ----- 3.8745-3.8775
 No. of Bulkheads ----- 5
 Water Jacket ----- Full length around each cylinder
 Cylinder Numbering Arrangement (Front to Rear)
 Left bank ----- 1-3-5-7
 Right bank ----- 2-4-6-8
 Bore Spacing (L to L) ----- 4.4

CYLINDER HEAD

Material ----- High chrome cast alloy iron
 Bolt No. & Size ----- 34; .4375 dia. 14 threads/in.

● COMBUSTION CHAMBER VOLUME ----- 4.39 cu. in.

INLET MANIFOLD

Material ----- Cast alloy iron
 Type ----- 8 port double-deck
 Heat Provision ----- By exhaust through crossover at carburetor base

EXHAUST MANIFOLD

Material ----- Cast alloy iron
 Type ----- Dual, 4 port, center downtake
 Outlet Diameter (nominal) ----- 2.00

CRANKSHAFT

● Material ----- Cast nodular iron or forged steel
 End Play ----- .002-.006
 Counter Weights ----- 6
 Crank Arm Length ----- 1.50
 Vibration Damper ----- None
 Timing Gear & Mtl. ----- Sprocket & Chain; Steel
 Pulley Pitch Diameter ----- 6.64

MAIN BEARINGS

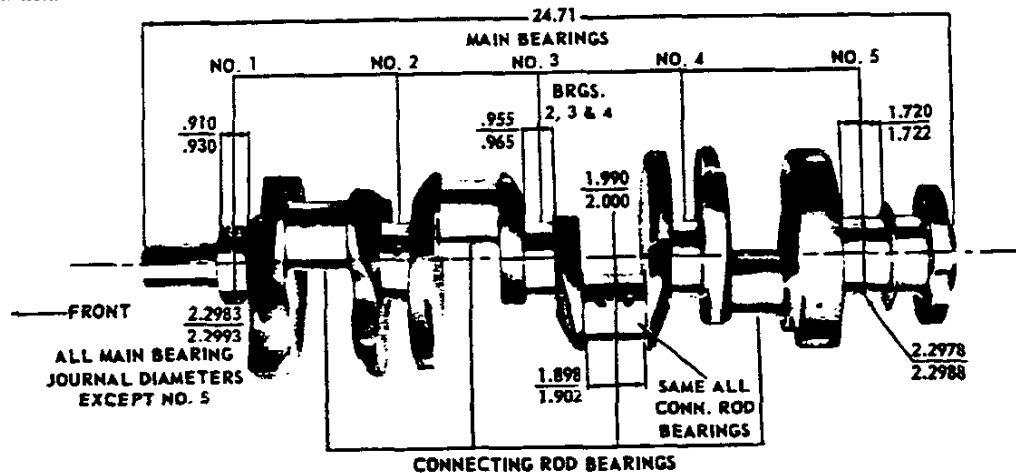
Material ---- Copper lead alloy or steel backed babbit
 Type ----- Precision removable
 End Thrust Against Bearing No. ----- 5
 Clearance ----- .0003-.0029

Bearing	Theoretical Inner Dia.	Effective Length	Projected Area
1-4	2.3004	.752	1.7299
5	2.3004	1.177	2.7076

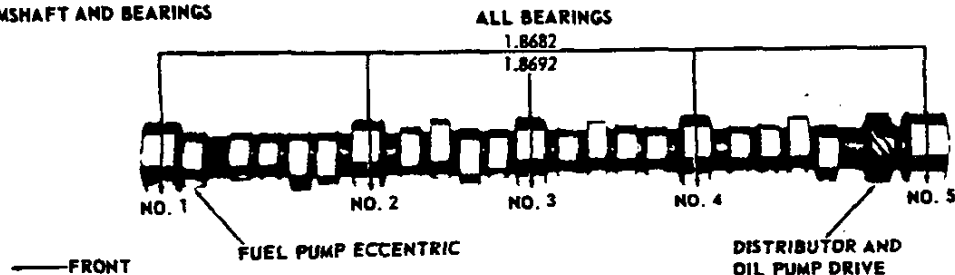
CAMSHAFT

Material ----- Cast alloy iron
 Lobe Lift
 Inlet ----- .2658
 Exhaust ----- .2658
 Bearings
 Number ----- 5
 Material ----- Extra life steel backed babbit

CRANKSHAFT AND BEARINGS



CAMSHAFT AND BEARINGS



283 CUBIC INCH V-8 ENGINE - Cont'd.

PRINCIPAL COMPONENTS - Continued

VALVE TRAIN

Type ----- Individually mounted overhead
rocker arms, push rod actuated
Lifters ----- Hydraulic
Push Rods
Type & Material ----- Hollow steel
Ends ----- Hardened
Rocker Arms
Material ----- Stamped steel
Ratio ----- 1.5:1

VALVE SPRINGS

Diameter (I.D.) ----- .872-.888
Installed Length (in. @ lb.)
Valves Closed ----- 1.80 @ 78-86
Valves Opened ----- 1.26 @ 170-180
Free Length ----- 2.08
Valve Spring Dampers ----- Steel-4 Coils

VALVES

Inlet Material ----- Carbon steel
Coating ----- None
Exhaust Material ----- High alloy steel
Coating, face ----- Aluminized

VALVE LIFT

Inlet ----- .3987
Exhaust ----- .3987

VALVE TRAIN LASH

Inlet ----- Zero
Exhaust ----- Zero

VALVE TIMING

	Excluding Ramps	Including Ramps
Inlet Valve		
Opens-BTC	12°30'	32°30'
Closes-ABC	57°30'	87°30'
Duration	250°	300°
Exhaust Valve		
Opens-BBC	54°30'	74°30'
Closes-ATC	15°30'	45°30'
Duration	250°	300°

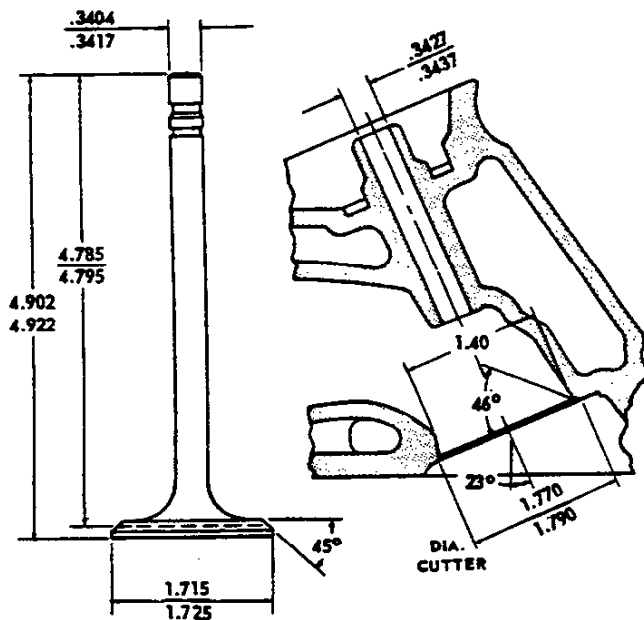
PISTON

Material ----- Cast aluminum alloy
Head Type ----- Flat, notched
Skirt Type ----- Slipper
Top Land Clearance ----- .035-.044
Skirt Clearance ----- .0005-.0011
Compression Ring Groove Depth ----- .2153-.2218
Oil Ring Groove Depth ----- .2093-.2158
Pin Bore Offset ----- .055-.065
Compression Height ----- 1.799-1.801

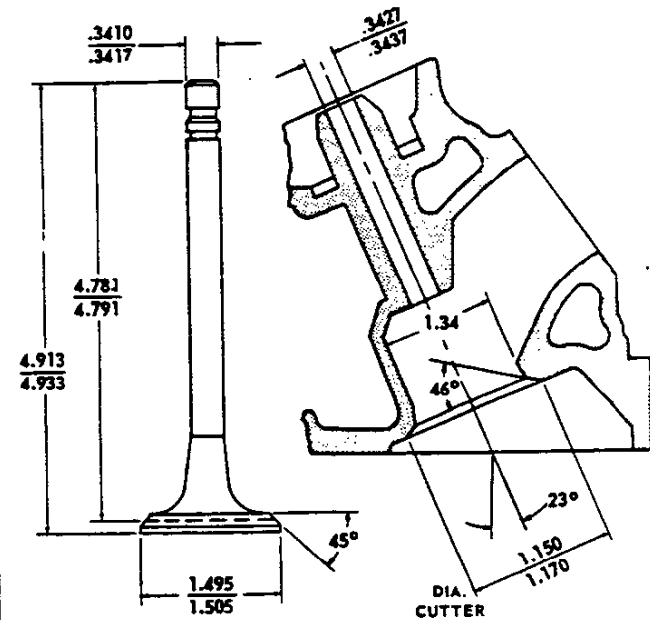
COMPRESSION RING - UPPER

Material ----- Cast alloy iron
Inside Bevel ----- Bottom edge 30 degrees
to piston vertical axis
Ring Face ----- Tapered
Coating ----- Flash chrome plate
Width ----- .0775-.0780
Wall Thickness ----- .179-.194
Gap ----- .010-.020

INLET VALVE



EXHAUST VALVE



PRINCIPAL COMPONENTS - Continued

COMPRESSION RINGS - LOWER

Material ----- Cast alloy iron
 Inside Bevel ----- Top edge 30 degrees to
 piston vertical axis
 Ring Face ----- Tapered
 Coating ----- Wear resistant
 Width ----- .0770-.0780
 Wall Thickness ----- .184-.194
 Gap ----- .010-.020

OIL CONTROL RINGS

Material ----- Steel
 Type ----- Multi-piece (2 rails and one spacer)
 Width ----- .1840-.1880 assembled
 Wall Thickness ----- .150-.156
 Gap ----- .015-.055
 Rail Coatings ----- Chrome plated

PISTON PINS

Material ----- Chromium steel
 Length ----- 2.990-3.010
 Diameter ----- .9270-.9273
 Clearance in Piston ----- .00015-.00025
 Pin Mounting ----- Locked in rod by shrink fit

CONNECTING RODS

Material ----- Forged steel
 Length (center to center) ----- 5.699-5.701

CONNECTING ROD BEARINGS

Material ----- Copper lead alloy or Steel backed babbitt
 Type ----- Precision removable
 Clearance ----- .0007-.0027
 Theo. I.D. ----- 2.0016
 Effective Length ----- .807
 End Play ----- .009-.013

FUEL SYSTEM

FUEL TANK

Capacity (Gal)
 Sedans & Coupes ----- 20
 Station Wagon ----- 19
 Fuel Tank Location
 Station Wagon ----- In left quarter panel
 behind rear wheel
 Remaining Models ----- Rearward of rear axle
 kick-up, in shelf area
 Filler Location ----- Behind opening in left
 rear quarter panel

FUEL FILTER

In Fuel Tank ----- Mesh strainer
 In Carburetor Inlet ----- Sintered bronze filter

CARBURETOR

Make ----- Rochester
 Type ----- 2 barrel, downdraft
 SAE Flange Size ----- 1.25
 Throttle Bore ----- 1.44
 Venturi Diameter ----- 1.09

AIR CLEANER

Type ----- Resin impregnated paper
 type element

FUEL PUMP ASSEMBLY

Drive ----- Camshaft eccentric
 Type ----- Diaphragm
 Location ----- Lower right front of engine
 Pressure Range ----- 5.25-6.50 PSI

EXHAUST and VENTILATION SYSTEM

EXHAUST SYSTEM

Type ----- Single

MUFFLERS

Type ----- Oval, reverse flow
 Construction ----- Heads and body joined by
 rolled lock seam construction
 Shell ----- .036 sheet steel
 Wrap ----- .030 indented asbestos steel
 Cover ----- .018 sheet steel
 Heads ----- .048 sheet steel
 Baffles ----- 5; .036 sheet steel
 Coating -- Interior and exterior completely aluminized
 Length, Body ----- 29.24
 Width (I.D.) ----- 3.24
 Height (I.D.) ----- 7.74

EXHAUST CROSS OVER PIPE

Dimensions (O.D.) ----- 2.00
 Wall Thickness ----- .067-.083

EXHAUST PIPE

Dimensions (O.D.) ----- 2.00
 Wall Thickness ----- .057-.069

TAIL PIPE

Dimensions (O.D.) ----- 1.875
 Wall Thickness ----- .062-.076

ENGINE VENTILATION

Type ----- Positive;
 Fumes withdrawn into induction system, fresh air
 enters the crankcase through oil breather cap and oil
 filler tube.

283 CUBIC INCH V-8 ENGINE - Cont'd.

LUBRICATION SYSTEM

GENERAL

Type	Controlled full pressure
Main Bearings	Pressure
Connecting Rods	Pressure
Piston Pins	Splash
Cylinder Wall	Pressure, jet cross sprayed
Camshaft Bearings	Pressure
Valve Lifters	Pressure
Rocker Arms	Pressure
Timing Gears	Nozzle sprayed
Oil Pressure Sending Unit	
Type	Electric
Actuation	Opens or closes circuit @ 2 to 6 PSI
Oil Filler	
Cap	Oil wetted crimped aluminum breather
Location	Left front of intake manifold

CRANKCASE CAPACITY (Quarts)

Refill	4.0
Refill with Filter Change	5.0

OIL PUMP

Type	Gear
Regulator Valve	Opens between 40-45 lbs

Oil Pressure at @ 1500 RPM	35-45 PSI
Intake Type	Fixed
Capacity (GPM @ Eng. RPM)	4.3 @ 2000

OIL FILTER

Make	AC
Type	Full flow, replaceable element
Location	Left rear, underside of engine
Capacity (Qts.)	1
By-Pass Valve	Opens between 9 to 11 PSI drop in pressure

LUBRICANT GRADES AND TEMPERATURES

32°F and Above	SAE 20W, SAE 20 or SAE 10W-30
0°F and Above	SAE 10W, or SAE 10W-30
Below 0°F	SAE 5W or SAE 5W-20

OIL PAN

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

COOLING SYSTEM

GENERAL

Type	Liquid, Pressurized
Capacity with Heater (Standard Equipment)	17 qts

RADIATOR

Make and Type	Harrison, tube on center
Core Constant and Thickness	
Distance between fins	.20 (Syn).18(P/G)
Distance between tubes	.55
Thickness of Core	1.26
Frontal Area (Sq. In.)	357

RADIATOR HEAVY DUTY (RPO-V01)

Core Constant and Thickness	
Distance between fins	.18(Syn).16(P/G)
Distance between tubes	.55
Thickness of Core	1.75
Frontal Area (Sq. In.)	429

RADIATOR CAP RELIEF VALVE

Opens at	Approx. 13 PSI
----------	----------------

THERMOSTAT

Type	Pellet
Begins to Open	177°-183° F
Fully Opened	212° F

RADIATOR HOSE

Outlet, Lower (radiator to water pump)	1.75 ID
Inlet, Upper (thermostat hsg. to radiator)	1.50 ID

FAN

Number of Blades	4
Diameter	17.62
Fan Pulley Pitch Diameter	7.00

BELT, CRANKSHAFT, FAN AND GENERATOR

Number Used	One
Angle of "V"	38°-42°
Pitch Line	53.25
Width	.380

WATER PUMP

Type	Centrifugal
Capacity	53 GPM @ 4200 RPM
Bearing	Permanently lubricated double row ball
Drive	Fan Belt
Ratio (pump to engine RPM)	.949:1

DRAIN LOCATIONS

Radiator	Rightside bottom
Type	Petcock
Engine Block	Right and left center
Type	Plug

ELECTRICAL SYSTEM

SUPPLY SYSTEM

BATTERY

Make ----- Delco-Remy
 Voltage Rating ----- 12
 Capacity ----- 44 amp. hr. @ 20 hr. rate
 Heavy Duty (RPO T60) ----- 70 amp. hr. @ 20 hr. rate
 Total Number of Plates ----- 54; Heavy Duty 66
 Number of Cells ----- 6
 Terminal Grounded ----- Negative
 Location ----- Right front engine compartment

GENERATOR

Make ----- Delco-Remy
 Type ----- Diode rectified
 Rating -----
 Amps ----- 9-37
 Volts ----- 12-15
 Drive ----- By fan belt
 Pulley Pitch Diameter ----- 2.70
 Ratio (Gen to Engine Speed) ----- 2.46:1

REGULATOR

Make ----- Delco-Remy
 Type ----- Two unit, Vibrator
 Voltage Regulator -----
 Voltage ----- 13.8-14.8 @ 85°F
 Field Relay (Combination light and field relay)
 Closing Voltage ----- 1-3 Volts @ 80°F
 Location ----- Left side from engine compartment

STARTING SYSTEM

STARTING MOTOR

Make ----- Delco-Remy
 Rotation (drive end view) ----- Clockwise
 Test Conditions ----- Engine at operating temp
 No Load Test -----
 Amps ----- 49-76
 Volts ----- 10.6
 RPM ----- 6200-9400

Motor Drive

Engagement ----- Solenoid
 Pinion meshes at ----- Rear
 Pinion tooth no. ----- 9
 Flywheel tooth no. ----- 153
 ● Mounting ----- Bolted to cylinder block flange

IGNITION SYSTEM

COIL

Make ----- Delco-Remy
 Type ----- 12 Volt
 Amperes Drawn -----
 Engine stopped ----- 4.0
 Engine idling ----- 1.8

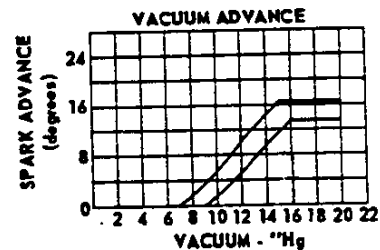
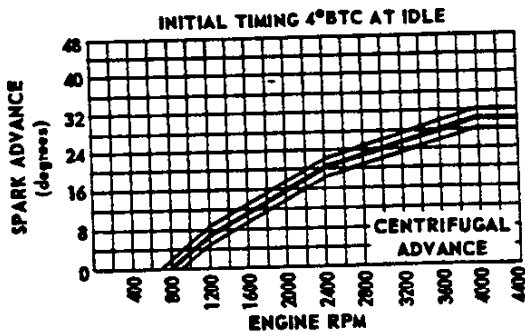
DISTRIBUTOR

Make ----- Delco-Remy
 Type ----- Single breaker
 Cam Angle ----- 28°-32°
 Breaker Gap ----- .019 (new)
 Breaker Arm Tension ----- 19-23 oz
 Centrifugal Advance Begins (RPM) ----- 800
 Max Degrees @ RPM ----- 30° @ 4000
 Vacuum Advance Begins (in Hg) ----- 8
 Max Degrees @ RPM ----- 15 @ 15.5
 Timing (Initial Design Setting)
 Crankshaft Degrees @ RPM ----- 4° ± 1° @ 550
 with vacuum spark line disconnected
 Timing Mark Location ----- On crankshaft pulley hub
 Firing Order ----- 1-5-3-6-2-4

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

SPARK PLUGS

Make ----- AC45
 Thread Size (mm) ----- 14
 Gap ----- .033-.038
 Torque ----- 25 lb ft



327 CUBIC INCH V-8 ENGINE

1964

GENERAL DATA

	Synchromesh	4-Speed	Powerglide
Piston Displacement (Cu In)	327		
Type	Valve-in-head		
Number Cylinders	8		
Bore and Stroke (nominal)	4.0 x 3.25		
Compression Ratio	10.5:1		
Taxable (SAE) Horsepower	51.2		
Firing Order	1-8-4-3-6-5-7-2		
Idling Speed (RPM)	500		475
Compression Press (PSI) @ Cranking Speed, Engine hot	160		
Lubrication:	Full pressure		
Power Plant Mounting	Two front, combination compression & shear type; one rear, full shear type		
Measurements	Fan to rear of engine block		30.64
	Top air cleaner to bottom oil pan		29.9
	Exhaust manifold to generator (width)		28.92

ADVERTISED ENGINE RATINGS

Engine	Turbo-Fire 327 250 HP		Turbo-Fire 327 300 HP
Option	RPO L70		RPO L74
Carburetor	4 Barrel		Large 4 Barrel Aluminum
Brake Horsepower	Gross	250 @ 4400 RPM	300 @ 5000 RPM
	Net	210 @ 4400 RPM	
Torque (Lb-Ft)	Gross	350 @ 2800 RPM	360 @ 3200 RPM
	Net	315 @ 2600 RPM	

ENGINE SPEED AND PISTON TRAVEL

Transmission		3-Speed	4-Speed	Powerglide
Rear Axle Ratio		3.36:1		3.08:1**
Tire Size		7.50 x 14-4 PR*		
Crankshaft Revolutions per Mile		2688.0		2464.0
Crankshaft RPM @ 1 MPH	Low	115.6	114.7	72.3
	Second	66.3	85.6	
	Third	44.8	66.3	
	Fourth		44.8	41.1 (direct)
	Reverse	115.6	118.2	72.3
Piston travel (Ft/mile)		1456.0		1334.7

- * - 8.00 x 14-4 PR Tires standard on Station Wagons
- ** - 3.36:1 on 300 HP RPO L74

VEHICLE PERFORMANCE FACTORS
(Model 1669)

ENGINE - 327 Cu. In. V-8	250 HP RPO L30	300 HP RPO L74
--------------------------	-------------------	-------------------

3-Speed Transmission

Performance Weight (pounds)	4276	4286
Pounds per Gross Horsepower	17.10	14.29
Pounds per Cu. In. Displacement	13.08	13.11
Gross HP per Cu. In. Displacement	.765	.917
Power Displacement (Cu. Ft./mile)	254.33	254.33
Displacement Factor (Cu. Ft./ton mile)	119.01	118.68

4-Speed Transmission

Performance Weight (pounds)	4282	4293
Pounds per Gross Horsepower	17.13	14.31
Pounds per Cu. In. Displacement	13.10	13.12
Gross HP per Cu. In. Displacement	.765	.917
Power Displacement (Cu. Ft./mile)	254.33	254.33
Displacement Factor (Cu. Ft./ton mile)	118.79	118.49

Powerglide *

Performance Weight (pounds)	4290	4300
Pounds per Gross Horsepower	17.16	14.33
Pounds per Cu. In. Displacement	13.12	13.15
Gross HP per Cu. In. Displacement	.765	.917
Power Displacement (Cu. Ft./mile)	233.14	254.33
Displacement Factor (Cu. Ft./ton mile)	108.69	118.29

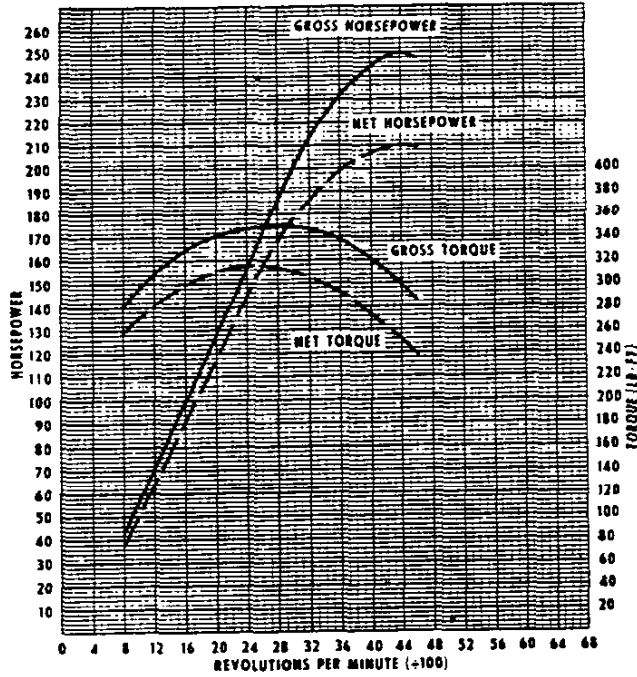
* - Data computed assuming zero slippage in torque converter.

GLOSSARY

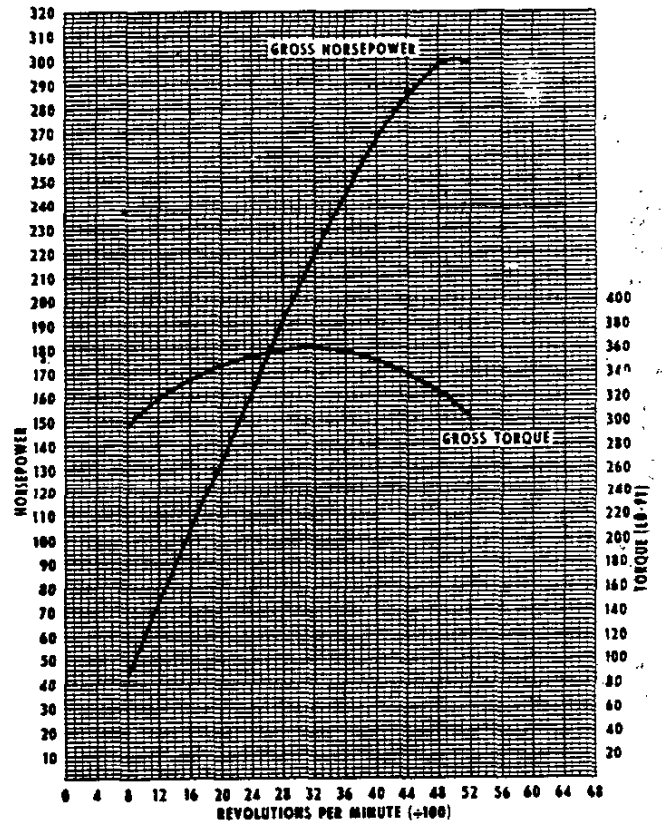
Performance Weight	Curb Weight plus 600 Lb (weight of four 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi} \times \text{Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

327 CUBIC INCH V-8 ENGINE - Cont'd.

250 HP TURBO-FIRE V-8



300 HP TURBO-FIRE V-8



The engine performance curves represent full throttle performance as obtained from dynamometer test data corrected to standard barometric pressure 29.92 inches of mercury and standard temperature of 60 degrees F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system,

no fan, generator not charging, optimum spark advance, and optimum fuel setting.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle, except the generator is not charging.

PRINCIPAL COMPONENTS

CYLINDER BLOCK

Material ----- Cast alloy iron
 Bore Diameter ----- 3.9995-4.0025
 No. of Bulkheads ----- 5
 Water Jackets ----- Full length around each cylinder
 Cylinder Numbering Arrangement (Front to Rear)
 Left Bank ----- 1-3-5-7
 Right Bank ----- 2-4-6-8
 Bore Spacing (C₁ to C₂) ----- 4.4

CYLINDER HEAD

Material ----- High chrome cast alloy iron
 Bolt No. & Size ----- 34; .4375 dia., 14 Threads/in.

● COMBUSTION CHAMBER VOLUME

RPO-L30 ----- 4.43 Cu In
 RPO-L74 ----- 4.49 Cu In

INLET MANIFOLD

Material ----- Cast alloy iron
 Type ----- 8 port double deck; (RPO-L74) large port
 Heat Provision ----- By exhaust, through crossover at carburetor base

EXHAUST MANIFOLD

Material ----- Cast alloy iron
 Type ----- Dual, 4 port, center downmake
 Outlet Diameter (nominal) ----- 2.0 (RPO-L74) 2.5

CRANKSHAFT AND BEARINGS

CRANKSHAFT

Material ----- Forged steel
 End Play ----- .002-.006
 Counter Weights ----- 6
 Crank Arm Length ----- 1.625
 Vibration Damper ----- Rubber mounted inertia
 Timing Gear & Material ----- Sprocket & chain; steel
 Pulley Pitch Diameter ----- 6.64

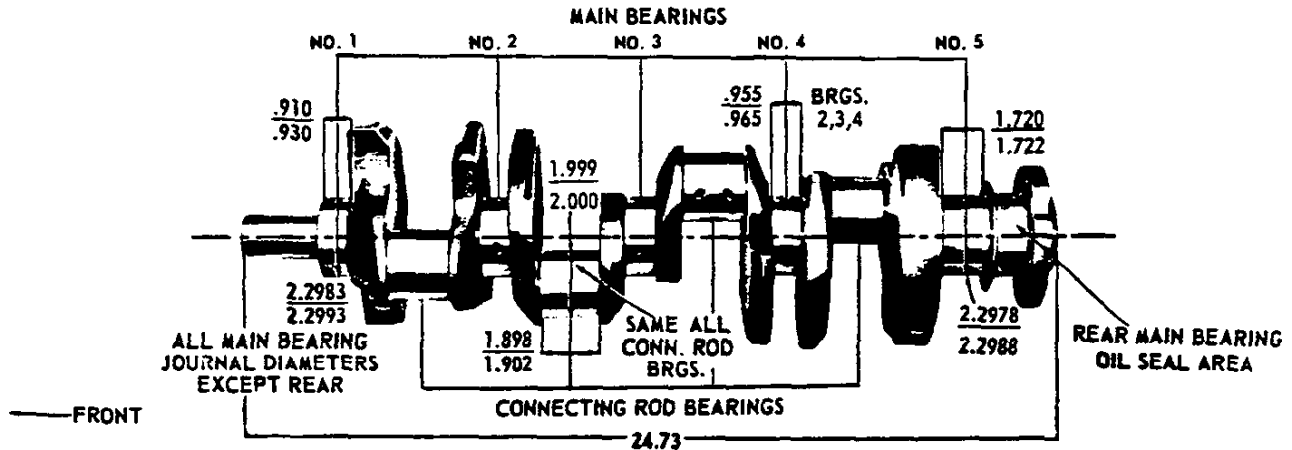
MAIN BEARINGS

Material ----- Premium aluminum except No. 5 upper - steel backed babbitt
 Type ----- Precision removable
 End Thrust Against Bearing No. ----- 5
 Clearance ----- (#1-4) .0008-.0034 (#5) .0010-.0036

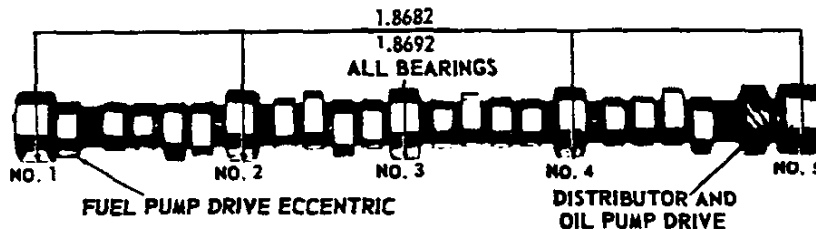
Dimensions	Theoretical Inner Dia.	Effective Length	Projected Area
Bearings			
1-4	2.3009	.752	1.7303
5	2.3006	1.1824	2.7202

CAMSHAFT

Material ----- Cast alloy iron
 Lobe Lift
 Inlet ----- .2658
 Exhaust ----- .2658
 Bearings
 Number ----- 5
 Material ----- Extra life steel backed babbitt



CAMSHAFT AND BEARINGS



327 CUBIC INCH V-8 ENGINE - Cont'd.

PRINCIPAL COMPONENTS - Continued

VALVE TRAIN

Type ----- Individually mounted overhead
 rocker arms push rod actuated
 Lifters ----- Hydraulic
 Push Rods
 Type of Material ----- Hollow steel
 Ends ----- Hardened
 Rocker Arms
 Type & Material ----- Stamped steel
 Ratio ----- 1.5:1

VALVE SPRINGS

Diameter (I.D.) ----- .872-.888
 Installed Length (in. @ lb)
 Valves Closed ----- 1.66 @ 78-86
 Valves Opened ----- 1.26 @ 170-180
 Free Length ----- 2.08
 Valve Spring Damper ----- Steel - 4 Coils

VALVES

Inlet Material ----- Carbon steel; (L74) Alloy steel
 Coating ----- None
 Exhaust Material ----- High alloy steel
 Coating, face ----- Aluminized

VALVE LIFT

Inlet ----- .3987
 Exhaust ----- .3987

VALVE TRAIN LASH

Inlet ----- Zero
 Exhaust ----- Zero

VALVE TIMING

	Excluding Ramps	Including Ramps
Inlet Valve		
Opens - BTC	12° 30'	32° 30'
Closes - ABC	57° 30'	87° 30'
Duration	250°	300°
Exhaust Valve		
Opens - BBC	54° 30'	74° 30'
Closes - ATC	15° 30'	45° 30'
Duration	250°	300°

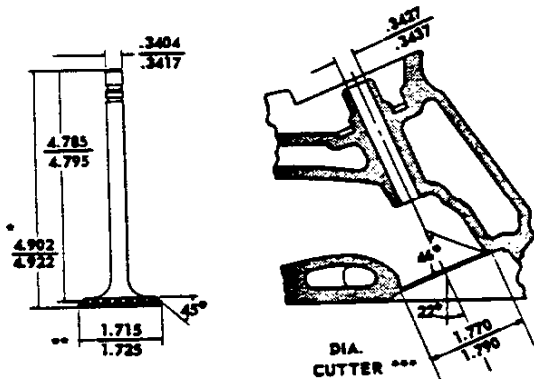
PISTON

Material ----- Cast aluminum alloy
 Head Type ----- Flat, notched
 Skirt Type ----- Slipper
 Top Land Clearance ----- .0365-.0455
 Skirt Clearance ----- .0005-.0011
 Compression Ring Groove Depth ----- .2217-.2283
 Oil Ring Groove Depth ----- .2038-.2103
 Pin Bore Offset ----- .055-.065
 Compression Height ----- 1.674-1.676

COMPRESSION RING - UPPER

Material ----- Cast alloy iron
 Inside Bevel ----- Bottom edge 30 degrees
 to piston vertical axis
 Ring Face ----- Tapered
 Coating ----- Flash chrome plate
 Width ----- .0775-.0780
 Wall Thickness ----- .190-.200
 Gap ----- .013-.023

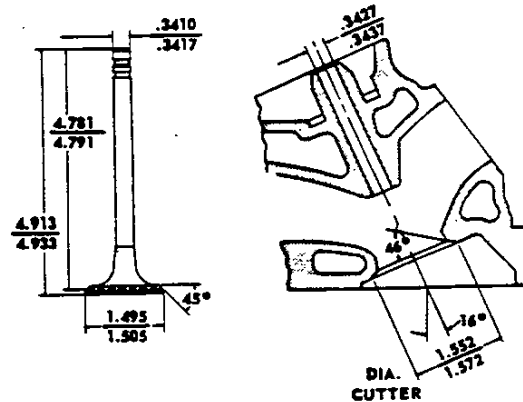
INLET VALVE



* 4.870
 4.889 on RPO L74
 ** 1.935
 1.945 on RPO L74

*** 1.890
 2.010 on RPO L74

EXHAUST VALVE



DIA. CUTTER 1.552/1.572

327 CUBIC INCH V-8 ENGINE - Cont'd.

EXHAUST and VENTILATION SYSTEM

EXHAUST SYSTEM

Type ----- Dual

MUFFLERS

Type ----- Dual, reverse flow

Construction ----- Heads and body joined by
rolled lock seam construction

Shell

Right hand ----- .036 stainless steel

Left hand ----- .036 sheet steel aluminum coating

● Wrap ----- .060 indented asbestos sheet

Cover ----- .018 sheet steel aluminum coating

Heads

Right hand ----- .048 stainless steel

Left hand ----- .048 sheet steel aluminum coating

Baffles

Right hand ----- 5;-.036 stainless steel

Left hand ----- 5;-.036 sheet steel alum. coating

Length, Body ----- 29.24

Width (ID) ----- 3.24

Height (ID) ----- 7.74

RESONATORS

Type ----- Straight through

Material ----- .036 sheet steel

Corrosion prevention ----- Interior & exterior
aluminum coated

EXHAUST PIPES

Dimensions ----- 2.00 (RPO-L30) 2.50 (RPO-L74)

Wall Thickness ----- .062-.063 (RPO-L30)
.067-.081 (RPO-L74)

TAIL PIPES

Dimensions ----- 1.87 (RPO-L30) 2.00 (RPO-L74)

Wall Thickness ----- .052-.066

ENGINE VENTILATION

Type ----- Positive; Fumes withdrawn into
induction system, fresh air enters
the crankcase through oil breather
cap and oil filler tube

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 ----- Nozzle sprayed

Oil Pressure Sending Unit

Type ----- Electric

Actuation ----- Opens or closes circuit @ 2 to 6 PSI

Oil filler

Cap ----- Oil wetted crimped aluminum breather

Location ----- Left front of intake manifold

CRANKCASE CAPACITY (Quarts)

Refill ----- 4.0

Refill with Filter Change ----- 5.0

OIL PUMP

Type ----- Gear

Normal Oil Pressure ----- 30-45 PSI @ 1500 RPM

Intake Type ----- Fixed

Capacity (GPM @ Eng RPM) ----- 4.3 @ 2000

Regulator Valve ----- Opens between 40-45 lbs

OIL FILTER

Type ----- Full flow, replaceable element

Location ----- Left rear underside of engine

Capacity (Qts) ----- 1

By-Pass Valve ----- Opens between 9 to 11 PSI
drop in pressure

LUBRICANT GRADES AND TEMPERATURES

32 degrees F and Above - SAE 20W SAE 10 or SAE 10W-30

0 degrees F and Above ----- SAE 10W, or SAE 10W-30

Below 0 degrees F ----- SAE 5W or SAE 5W-20

OIL PAN

Type of Drain Plug ----- Hex head

Location ----- Lower front edge of oil pan sump

Size Hex Head ----- .860-.875

Thread ----- 1/2-20 UNF 2A

Length ----- .081

Diameter ----- .410-.430

COOLING SYSTEM

GENERAL

Type ----- Liquid, pressurized
Capacity with Heater ----- 16 qts; (RPO L74) 18 qts

RADIATOR

Make & Type ----- Harrison; tube on center
Core Constant and Thickness -----
Distance between fins ----- .20 (Syn) .18 (P/G)
RPO L74 --- .22 (Syn & P/G)
Distance between tubes ----- .55
Thickness of core ----- 1.26; (RPO L74) 1.75
Frontal Area (Sq. In) ----- 357; (RPO L74) 429

RADIATOR HEAVY DUTY (RPO-V01)

Distance between fins ----- .18 (Syn) .16 (P/G)
RPO L74 --- .18 (Syn & P/G)
Distance between tubes ----- .55
Thickness of core ----- 1.75
Frontal Area (Sq. In) ----- 429; (RPO L74) 439

RADIATOR CAP RELIEF VALVE

Opens at ----- Approx 13 PSI

THERMOSTAT

Type ----- Peller
Begins to Open ----- 177°-183° F
Fully Opened ----- 212° F

RADIATOR HOSE

Outlet Lower (radiator to waterpump) ----- 1.75 ID
inlet, Upper (thermostat hsg to radiator) ----- 1.50 ID

FAN

Number of Blades ----- 5, staggered
Diameter ----- 18.00
Fan Pulley Pitch Diameter ----- 7.00
Drive -----
Type ----- Thermo modulated fluid coupling
Performance ----- At 4000 RPM input, fan speed
3200-3500 RPM @ 135°-150° F;
800-1600 RPM @ 120 F and below

BELT, CRANKSHAFT, FAN AND GENERATOR

Number Used ----- One
Angle of "V" ----- 38°-42°
Pitch Line ----- 53.25
Width ----- .380

WATER PUMP

Type ----- Centrifugal
Capacity ----- 55 GPM @ 4000 RPM
Bearing ----- Permanent lubricated double row ball
Drive ----- Fan belt
Ratio Pump to Engine RPM ----- .949:1

DRAIN LOCATIONS

Radiator -----
RPO-L30 ----- Left side bottom
RPO-L74 ----- Right side bottom
Type ----- Petcock
Engine Block ----- Right and left center
Type ----- Plug

ELECTRICAL SYSTEM

SUPPLY SYSTEM

BATTERY

Make ----- Delco-Remy
Voltage ----- 12
Capacity (SAE) ----- 61 amp. hr. @ 20 hr. rate
Heavy Duty (RPO-T60) ----- 70 amp. hr. @ 20 hr. rate
Total Number of Plates ----- 66
Number of Cells ----- 6
Terminal Grounded ----- Negative
Location ----- Right front engine compartment

GENERATOR

Make ----- Delco-Remy
Type ----- Diode rectified

Rating

Amps ----- 9.37
Volts ----- 10-15
Drive ----- By fan belt
Pulley Pitch Diameter ----- 2.70
Ratio (Gen to Engine Speed) ----- 2.46:1

REGULATOR

Make ----- Delco-Remy
Type ----- Two unit; Vibrator
Voltage Regulator -----
Voltage ----- 13.8-14.8 @ 85° F
Field Relay (Combination light & field relay)
Closing Voltage ----- 1-3 volts @ 80° F
Location ----- Left side front eng. compartment

327 CUBIC INCH V-8 ENGINE - Cont'd.

ELECTRICAL SYSTEM - Continued

STARTING SYSTEM

STARTING MOTOR

Make ----- Delco-Remy
 Rotation (drive end view) ----- Clockwise
 Test Conditions ----- Engine at operating temperature
 No Load Test
 Amps ----- 65-100
 Volts ----- 10.6
 RPM ----- 3600-5100
 Motor Drive
 Engagement ----- Solenoid
 Pinion meshes at ----- Rear
 Pinion tooth no. ----- 9
 Flywheel tooth no. ----- 153
 ● Mounting ----- Bolted to cylinder block flange

IGNITION SYSTEM

COIL

Make ----- Delco-Remy
 Type ----- 12 Volt
 Amperes Drawn
 Engine stopped ----- 4.0
 Engine idling ----- 1.8

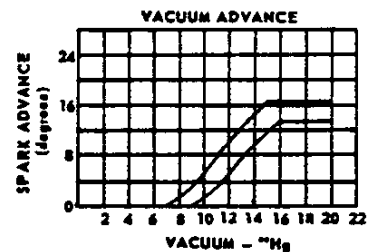
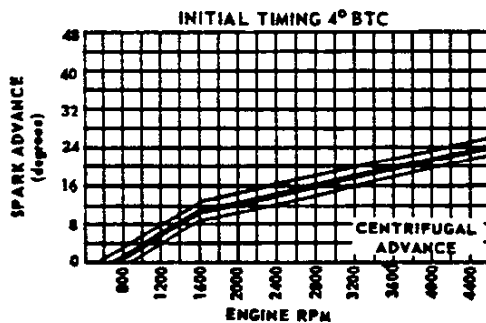
DISTRIBUTOR

Make ----- Delco-Remy
 Type ----- Single breaker
 Cam Angle ----- 28°-32°
 Breaker Gap ----- .019 (new)
 Breaker Arm Tension ----- 19-23 oz
 Centrifugal Advance begins (RPM) ----- 700
 Max Degrees @ RPM ----- 24 @ 4600
 Vacuum Advance begins (in Hg) ----- 8
 Max Degrees in Hg ----- 15 @ 15.5
 Timing (Initial Design Setting)
 ● Crankshaft Degrees @ RPM ----- 4°±1° BTC @ 550
 (RPO-L30) 8° @ 550 (RPO-L74) with
 vacuum spark line disconnected
 Timing Mark Location ----- On harmonic balancer
 Firing Order ----- 1-8-4-3-6-5-7-2

SPARK PLUGS

Make ----- AC44
 Thread Size (mm) ----- 14
 Gap ----- .033-.038
 Torque ----- 25 lb ft

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



409 CUBIC INCH V-8 ENGINE

1964

GENERAL DATA

		3-Speed	4-Speed
Piston Displacement (Cu In.)		409	
Type		Valve-in-head	
Number Cylinders		8	
Bore and Stroke (nominal)		4.3125 x 3.50	
Compression Ratio		11.00:1*	
Taxable (SAE) Horsepower		59.5	
Firing Order		1-8-4-3-6-5-7-2	
Idling Speed (RPM)		700#	
Compression Press (PSI) @ Cranking Speed, Engine Hot		150	
Lubrication		Full pressure	
Power Plant Mounting		Two front, combination compression & shear type; one rear, full shear type	
Measurements	Fan to rear of engine block	32.47	
	Top air cleaner to bottom oil pan	31.60	
	Exhaust manifold to generator (width)	31.43	

* 10.00:1 on RPO-L33

500 on RPO-L33

ADVERTISED ENGINE RATINGS

Engine	Turbo-Fire 409 340 HP	Turbo-Fire 409 400 HP	Turbo-Fire 409 425 HP
Carburetor	4-Barrel	Large 4-Barrel Aluminum	Two 4-Barrel Aluminum
Option	RPO-L33	RPO-L31	RPO-L80
Brake Gross Horsepower	340 @ 5000	400 @ 5800	425 @ 6000
Gross Torque (Lb-Ft)	420 @ 3200	425 @ 3600	425 @ 4200

ENGINE SPEED AND PISTON TRAVEL

Transmission		4-Speed		Powerglide (a) ●
Rear Axle Ratio		3.36:1 (b)	3.08:1 (c)	3.08:1
Tire Size		8.00 x 14-4PR		
Crankshaft Revolutions per Mile		2637.6	2417.8	2417.8
Crankshaft RPM @ 1 MPH	Low	112.5	103.2	70.9
	Second	84.0	77.0	
	Third	65.1	59.6	
	Fourth	44.0	40.3	40.3 (direct)
	Reverse	116.1	106.4	70.9
Piston Travel (Ft/Mile)		1538.6	1410.4	1410.4

(a) - Available with RPO-L33 only

(b) - Optional 4.11 & 4.56 axles available with 4-speed on RPO-L31 & L80

(c) - Available with RPO-L80 only

409 CUBIC INCH V-8 ENGINE - Cont'd.

VEHICLE PERFORMANCE FACTORS (Model 1669)

ENGINE - 409 Cu. In. V-8	340 HP RPO L33	400 HP RPO L31	425 HP RPO L80
--------------------------	-------------------	-------------------	-------------------

4-Speed Transmission

	4445	4424	4433
Performance Weight (pounds)	13.07	11.06	10.43
Pounds per Gross Horsepower	10.87	10.82	10.84
Pounds per Cu. In. Displacement	.831	.978	1.039
Gross HP per Cu. In. Displacement	312.15	312.15	312.15
Power Displacement (Cu. Ft./mile)	140.48	141.11	140.86

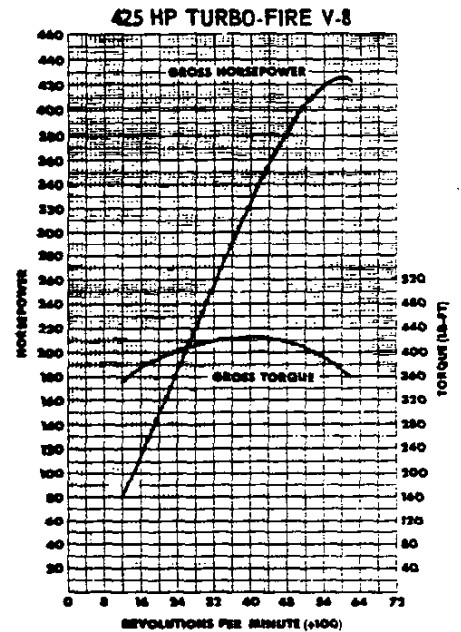
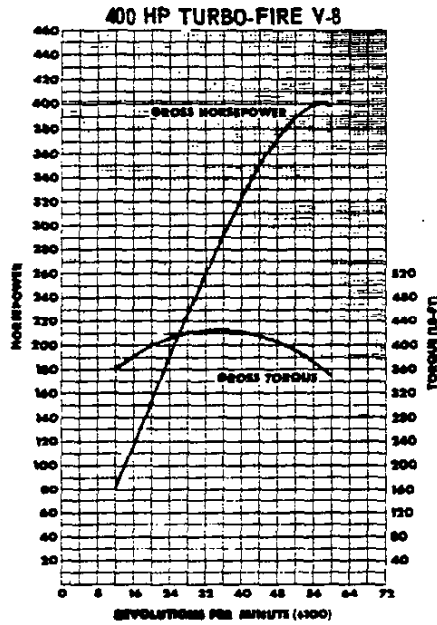
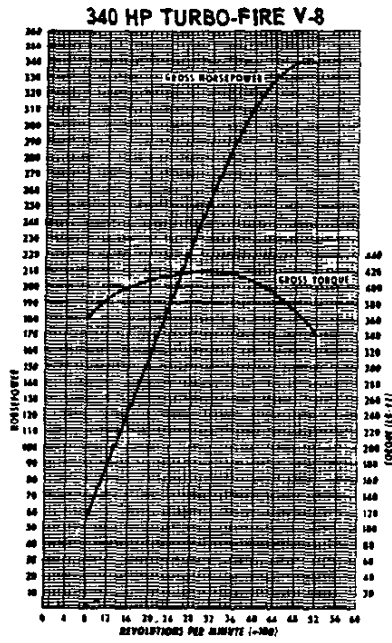
Powerglide *

Performance Weight (pounds)	4457		
Pounds per Gross Horsepower	13.11		
Pounds per Cu. In. Displacement	10.89		
Gross HP per Cu. In. Displacement	.831		
● Power Displacement (Cu. Ft./mile)	286.14		
● Displacement Factor (Cu. Ft./ton mile)	128.43		

* - Data computed assuming zero slippage in torque converter.

GLOSSARY

Performance Weight	Curb Weight plus 600 Lb (weight of four 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi} \times \text{Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$



The engine performance curves represent full throttle performance as obtained from dynamometer test data corrected to standard barometric pressure 29.92 inches of mercury and standard temperature of 60 degrees F.

GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system,

no fan, generator not charging, optimum spark advance, and optimum fuel setting.

NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle, except the generator is not charging.

409 CUBIC INCH V-8 ENGINE - Cont'd.

PRINCIPAL COMPONENTS

CYLINDER BLOCK

Material ----- Cast alloy iron
 Bore Diameter ----- 4.3120-4.3150
 No. of Bulkheads ----- 5
 Water Jacket ----- Full length around each cylinder
 Cylinder Numbering Arrangement (front to rear)
 Left Bank ----- 1-3-5-7
 Right Bank ----- 2-4-6-8
 Bore Spacing (Centerline to Centerline) ----- 4.84

CYLINDER HEAD

Material ----- High chrome cast alloy iron
 Bolt No. Size ----- 36; .4375 dia. 14 threads/in.

- COMBUSTION CHAMBER VOLUME - (L37 & L80) 5.27 cu.in.
 (L33) 6.14 cu.in.

INLET MANIFOLD

Material ----- Cast aluminum alloy
 (RPO L33) Cast alloy iron
 Type ----- 8 port double-deck
 Heat Provision ----- By exhaust gases

EXHAUST MANIFOLD

Material ----- Cast alloy iron
 Type ----- 4 Port; Center downtake
 (RPO L31 & L80) Long runners (RPO L33) Short runners

CRANKSHAFT

Material ----- Forged steel
 End Play ----- .006-.010
 Counter Weights ----- 6
 Crank Arm Length ----- 1.75
 Vibration Damper ----- Rubber mounted inertia

Timing Gear & Mtl. ----- Steel sprocket & chain
 Pulley Pitch Diameter ----- Dual; 6.64

MAIN BEARINGS

Material ----- #1-4 Premium aluminum
 #5 Steel backed babbit
 End Thrust Against Bearing No. ----- 5
 Clearance ----- (#1-4) .0006-.0032 (#5) .0018-.0034

Dimensions	Theoretical Inner Dia.	Effective Length	Projected Area
Bearing 1-4	2.5001	.992	2.4801
5	2.5008	1.2525	3.1323

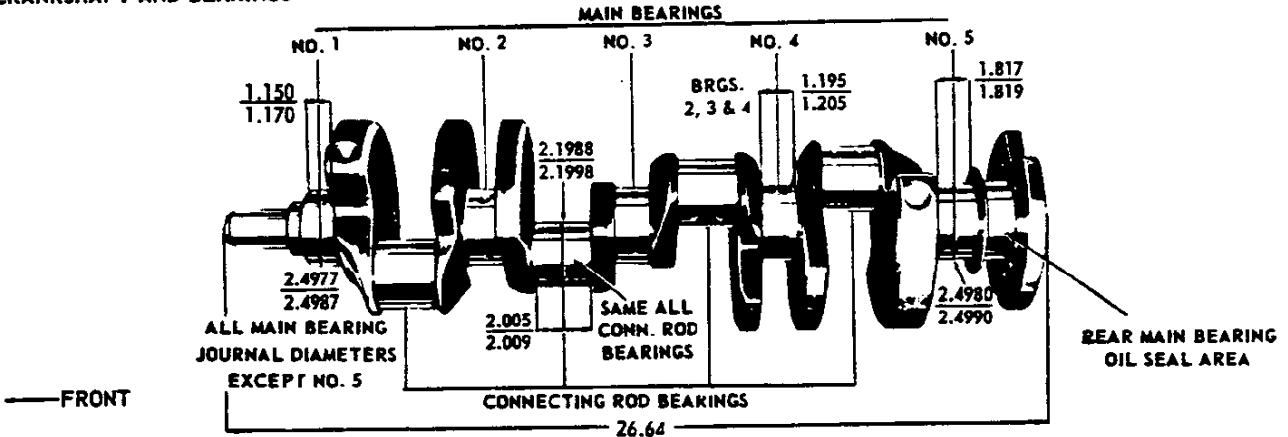
CAMSHAFT

Material ----- Cast alloy iron
 Lobe Lift
 ● RPO L31 & L80 ----- Inlet & Exhaust .3181
 RPO L33 ----- Inlet .2289 Exhaust .2354
 Bearings
 Number & Material ----- 5; Steel backed babbit

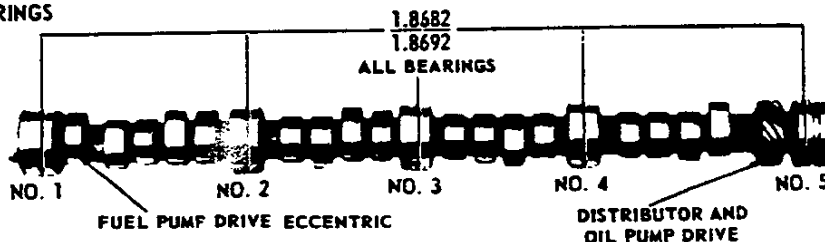
VALVE TRAIN

Type ----- Individually mounted over head rocker arms
 Lifters ----- Mechanical; (RPO L33) Hydraulic
 Push Rods
 Type & Material ----- Hollow steel
 Ends ----- Hardened steel inserts
 RPO L33 ----- Rocker arm end - Hardened
 steel inserts; Valve lifter end - Hardened tip
 Rocker Arms
 Type & Material ----- Stamped steel
 Ratio ----- 1.75:1

CRANKSHAFT AND BEARINGS



CAMSHAFT AND BEARINGS



PRINCIPAL COMPONENTS - Continued

VALVE SPRINGS	RPO L33	RPO L31 & L80
Diameter (I.D.)	.872-.888	1.070-1.090
Installed Length (in. @ lb.)		
Valves Closed	1.66 @ 84-92	1.74 @ 94-106
Valves Opened	1.33 @ 166-176	1.26 @ 271-299
Free Length	2.03	2.01
Valve Spring Damper	Inner Spring*	Steel 3.75 coils
Oil Shield		Steel cup

*Inner Spring
 Diameter (O.D.) ----- .863-.873
 Free Length ----- 1.84
 Installed Length (in. @ lb.)
 Valves closed ----- 1.488 @ 20-24
 Valves opened ----- 1.106 @ 55-61

VALVES

Inlet Material ----- Alloy steel
 Coating ----- Face & head aluminized;
 Stem chrome flash*
 Exhaust Material ----- High alloy steel
 Coating ----- Face & head aluminized;
 Stem chrome flash*

*No chrome flash on RPO L33

VALVE LIFT

Inlet ----- (RPO L31 & L80) .5567 (RPO L33) .4005
 Exhaust ----- (RPO L31 & L80) .5567 (RPO L33) .4119

VALVE TRAIN LASH

Inlet ----- (RPO L31 & L80) .018 (RPO L33) zero
 Exhaust ----- (RPO L31 & L80) .030 (RPO L33) zero

VALVE TIMING

	Exc'l Ramps		Inc'l Ramps	
	L31 & L80	L33	L31 & L80	L33
Inlet Valve			.030 lash	
Open-BTC	38°	18°30'	50°46'40"	38°30"
Closes-ABC	82°	67°30'	94°46'40"	93°30"
Duration	300°	266°	325°33'20"	312°
Exhaust Valve			.030 lash	
Opens-BBC	85°	68°30'	97°46'40"	88°30"
Closes-ATC	35°	25°30'	47°46'40"	51°30"
Duration	300°	274°	325°33'20"	320°

PISTON

Material ----- Aluminum impact extruded
 (RPO L33) Cast aluminum alloy

Head Type

RPO L31 & L80 ----- Half flat, half slant
 with valve cutout

RPO L33 ----- 2/3 flat, 1/3 slant with valve cutout

Top Land Clearance ----- .0520-.0610

(RPO L33) .0360-.0450

Skirt Clearance ----- .0030-.0036 (RPO L33) .0005-.0011

Compression Ring Groove Depth ----- .2390-.2455

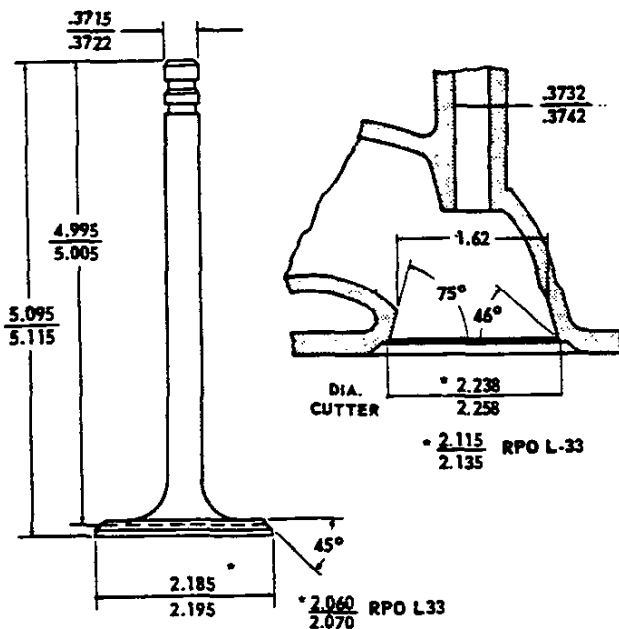
Oil Ring Groove Depth ----- .2125-.2190

Pin Bore Offset (RPO L33 only) ----- .055-.065

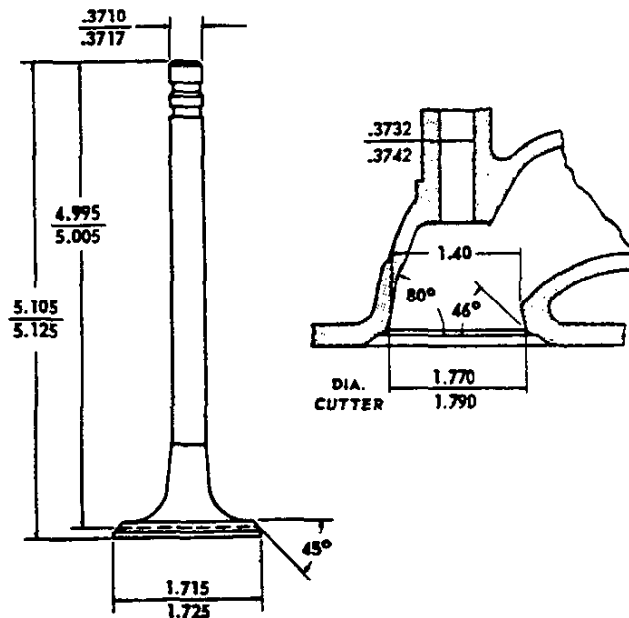
Compression Height ----- 2.304-2.308

(RPO-L33) 2.220-2.260

INLET VALVE



EXHAUST VALVE



409 CUBIC INCH V-8 ENGINE - Cont'd.

PRINCIPAL COMPONENTS - Continued

COMPRESSION RINGS - UPPER

Material ----- Cast alloy iron
 Inside Bevel --- Bottom edge 28° - 52° (RPO L31 & L80)
 30° (RPO L33) to piston vertical axis
 Ring Face ----- Tapered
 Coating ----- Chrome plate
 ● Width ----- .0775-.0780; .0770-.0775 (L33)
 ● Wall Thickness ----- .191-.201; .194-.204 (L33)
 Gap ----- .015 - .025

COMPRESSION RINGS - LOWER

Type ----- One ring and one expander
 Ring
 Material ----- Cast alloy iron
 Inside Bevel ----- Top edge 48° - 52° to piston
 vertical axis
 Ring Face ----- Tapered
 Coating ----- Wear resistant
 Width ----- .0770 - .0775
 Wall Thickness ----- .174 - .180
 Gap ----- .015 - .025
 Expander
 Material ----- Steel
 Width ----- .068 - .074

OIL CONTROL RINGS

Material ----- Steel
 Type ----- (2 rails and one spacer)
 Width ----- .1835 - .1885 assembled
 Wall Thickness ----- .135 - .141
 Gap ----- .015 - .055
 Rail Coatings ----- Chrome plated O.D.

PISTON PINS

Material ----- Chromium steel
 Length ----- 3.250 - 3.270
 Diameter ----- .9895 - .9898
 Clearance in Piston ----- .00015 - .00035
 Pin Mounting ----- Locked in rod by shrink fit

CONNECTING RODS

Material ----- Drop forged steel
 Length (center to center) ----- 6.009 - 6.011

CONNECTING ROD BEARINGS

Type ----- Premium aluminum
 Clearance ----- .0007 - .0028
 Theo. I.D. ----- 2.2011
 Effective Length ----- .857
 End Play ----- .016 - .020

FUEL SYSTEM

FUEL TANK

Capacity (Gal)
 Sedans & Coupes ----- 20
 Station Wagons ----- 19
 Fuel Tank Location
 Station Wagon ----- In left quarter panel
 behind rear axle
 Remaining Models ----- Rearward of rear axle
 kick-up in shelf area
 Filler Location ----- Behind opening in left
 rear quarter panel
 Gauge ----- AC, electric

FUEL FILTER

In Fuel Tank ----- Mesh strainer
 To Carburetor Inlet -- Glass bowl with paper element

FUEL PUMP ASSEMBLY

Drive ----- Camshaft eccentric
 Type ----- Diaphragm
 Location ----- Lower right front of engine
 Pressure Range ----- 7.25 - 8.75 psi

CARBURETOR

Make & Type
 RPO L31 ----- Carter; 4 bbl downdraft
 RPO L33 ----- Rochester; 4 bbl downdraft
 RPO L80 ----- Carter; 2 x 4 bbl downdraft
 SAE Flange Size ----- 1.50
 Throttle Bore

	Primary	Secondary
RPO L31	1.625	1.6875
RPO L33	1.56	1.68
RPO L80 (front & rear carb)	1.5625	1.6875

Secondary Throttle Actuation ----- By linkage
 approximately when primary valves are opened half
 way between closed and full open

Venturi Diameter

	Primary	Secondary
RPO L31	1.34	1.5625
RPO L33	1.3125	1.4688
RPO L80 (front & rear carb)	1.25	1.5625

AIR CLEANER

Type
 RPO L31 ----- Oil wetted polyurethane element
 RPO L33, L80 ----- Resin impregnated paper element

EXHAUST and VENTILATION SYSTEM

GENERAL		Length -----	29.24
Type -----	Dual	Width (L.D.) -----	3.24
		Height (L.D.) -----	7.74
MUFFLERS		RESONATORS	
Type -----	Dual; reverse flow	Type -----	Straight through
Construction -----	Heads and body joined by rolled lock seam construction	Material -----	.036 sheet steel, alum. coating
Shell		EXHAUST PIPE	
Right hand (L33) - Left hand (L31 & L80) ---	.036 stain- less steel	Dimensions (O.D.) -----	2.50
Left hand (L33) - Right hand (L31 & L80) ---	.036 sheet steel, aluminum coating	Wall Thickness -----	.067-.081
Wrap -----	.060 indented asbestos sheet	TAIL PIPE	
Cover -----	.018 sheet steel, aluminum coating	Dimensions (O.D.) -----	2.00
Heads		Wall Thickness -----	.052-.066
Right hand (L33) - Left hand (L31 & L80) ---	.048 stain- less steel	ENGINE VENTILATION	
Left hand (L33) - Right hand (L31 & L80) ---	.048 sheet steel, aluminum coating	● Type -----	Closed-Positive;
Baffles			fumes withdrawn into induction system from crankcase via oil filler tube and hose through fitting, with a metering orifice, at base of carburetor.
Right hand (L33) - Left hand (L31 & L80) -----	5; .036 stainless steel		
Left hand (L33) - Right hand (L31 & L80) -----	5; .036 sheet steel aluminum coating		

LUBRICATION SYSTEM

GENERAL		Intake Type -----	Fixed
Type -----	Controlled full pressure	Capacity (GPM @ Eng RPM) -----	4.3 @ 2000
Main Bearings -----	Pressure	Regulator Valve -----	Opens between 40-45 lb
Connecting Rods -----	Pressure	OIL FILTER	
Piston Pins -----	Splash	Type -----	Full flow replaceable element
Cylinder Walls -----	Pressure, jet cross sprayed	Location -----	Left rear at engine
Camshaft Bearings -----	Pressure	Capacity (Qts) -----	1
Valve Lifters -----	Pressure	By-Pass Valve -----	Opens between 9 to 11 PSI
Rocker Arms -----	Pressure	LUBRICANT GRADES AND TEMPERATURES	
Timing Gears -----	Nozzle sprayed	32°F and Above -----	SAE20W, SAE20, or SAE 10W-30
Oil Pressure Sending Unit		0°F and Above -----	SAE 10W or SAE 10W-30
Type -----	Electric	Below 0°F -----	SAE 5W or SAE 5W-20
Actuation -----	Opens or closes circuit @ 2 to 6 PSI	OIL PAN DRAIN SCREW	
Oil Filler		Type -----	Hex head
Cap -----	Positive seal	● Location -----	Lower front face of oil pan sump
Location -----	Right front of intake manifold	Size Hex Head -----	.860-.875
CRANKCASE CAPACITY (Quarts)		Thread -----	1/2-20 UNF 2A
Refill -----	5	Length -----	0.81
Refill with Filter Change -----	6	Diameter -----	.410-.430
OIL PUMP			
Type -----	Gear		
Normal Oil Pressure -----	50 PSI (min) @ 2000 RPM		

409 CUBIC INCH V-8 ENGINE - Cont'd.

COOLING SYSTEM

GENERAL

Type ----- Liquid, Pressurized
Capacity with Heater (standard equipment) ----- 22 qts

RADIATOR

Make & Type ----- Harrison, tube on center
Core Constant and Thickness
Distance between fins ----- .18
Distance between tubes ----- .55
Thickness of core ----- 1.98
Front Area (Sq In) ----- 439

RADIATOR CAP RELIEF VALVE

Opens at ----- Approx 13 psi

THERMOSTAT

Make and Type ----- Harrison, Peller
Begins to Open ----- 177°-183°F
Fully Opened ----- 212°F

RADIATOR HOSE

Outlet, Lower (radiator to water pump) ----- 1.88 ID
Inlet, Upper (thermostat hsg to radiator) ----- 1.50 ID

FAN

Number of Blades ----- 5, staggered
Diameter ----- 18.00

Fan Pulley Pitch Diameter ----- 7.00
Drive
Type ----- Thermo modulated fluid coupling
Performance ----- At 4000 RPM input, fan speed
3200-3500 RPM @ 135°-150°F
800-1600 RPM @ 120°F and below

BELT, CRANKSHAFT, FAN AND GENERATOR

Number used ----- Two
Angle of "V" ----- 38°-42°
Pitch Line
Fan, Generator and Water Pump Belt ----- 58.00
Fan and Water Pump Belt ----- 43.00
Width ----- .380

WATER PUMP

Type ----- Centrifugal
Capacity ----- 78 GPM @ 5200 RPM
Bearing ----- Permanently lubricated double row ball
Drive ----- Fan belt
Ratio (pump to engine RPM) ----- .949:1

DRAIN LOCATIONS

Radiator ----- Left side bottom
Type ----- Petcock
Engine Block ----- Right and left center
Type ----- Plug

ELECTRICAL SYSTEM

SUPPLY SYSTEM

BATTERY

Make ----- Delco-Remy
Voltage Rating ----- 12
Capacity (SAE) ----- 61 amp hr @ 20 hr rate
RPO L33 ----- 70 amp hr @ 20 hr rate
Heavy Duty (T60) ----- 70 amp hr @ 20 hr rate
Total Number of Plates ----- 66
Number of Cells ----- 6
Terminal Grounded ----- Negative
Location ----- Right front engine compartment

GENERATOR

Make ----- Delco-Remy
Type ----- Diode Rectified

Rating

Amps ----- 9-37
Volts ----- 12-15
Drive ----- By fan belt
Pulley, Pitch Diameter ----- 2.70
Ratio (Gen to Engine Speed) ----- 2.46:1

REGULATOR

Make ----- Delco-Remy
Type ----- Two-unit, Vibrator
Voltage Regulator
Voltage ----- 13.8-14.8 @ 85°F
Field Relay (Combination light & field relay)
Closing Voltage ----- 1-3 Volts @ 80°F
Location ----- Left side front engine compartment

ELECTRICAL SYSTEM - Continued

STARTING SYSTEM

STARTING MOTOR

Make	Delco-Remy
Rotation (drive end view)	Clockwise
Test Conditions	Engine at operating temperature
No Load Test	
Amps	65-100
Volts	10.6
RPM	3600-5100
Motor Drive	
Engagement	Solenoid
Pinion meshes at	Rear
Pinion tooth no.	9
Flywheel tooth no.	168
Mounting	Bolted to clutch housing

IGNITION SYSTEM

COIL

Make	Delco-Remy
Type	12 Volt
Amperes Drawn	
Engine stopped	4.0
Engine idling	1.8

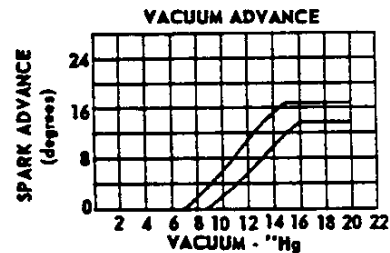
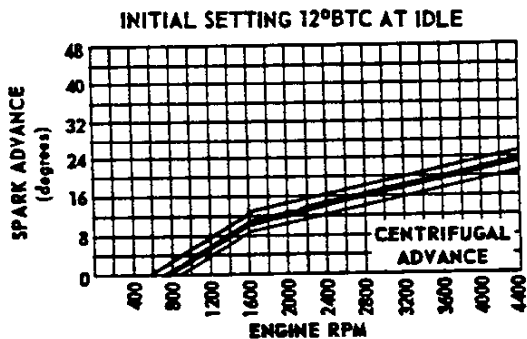
DISTRIBUTOR

Make	Delco-Remy
Type	Single breaker
Cam Angle	28°-32°
Breaker Gap	.019 (new)
Breaker Arm Tension	19-23 oz
Centrifugal Advance Begins (RPM)	700
Max Degrees @ RPM	24 @ 4600
Vacuum Advance Begins (In Hg)	8
Max Degrees @ In Hg	15 @ 15.5
Timing (Initial Design Setting)	
Crankshaft Degrees @ RPM	12° ± 1° BTC @ 600
RPO L33	6° ± 1° BTC @ 550
Timing Mark Location	On harmonic balancer
Firing Order	1-8-4-3-7-5-7-2

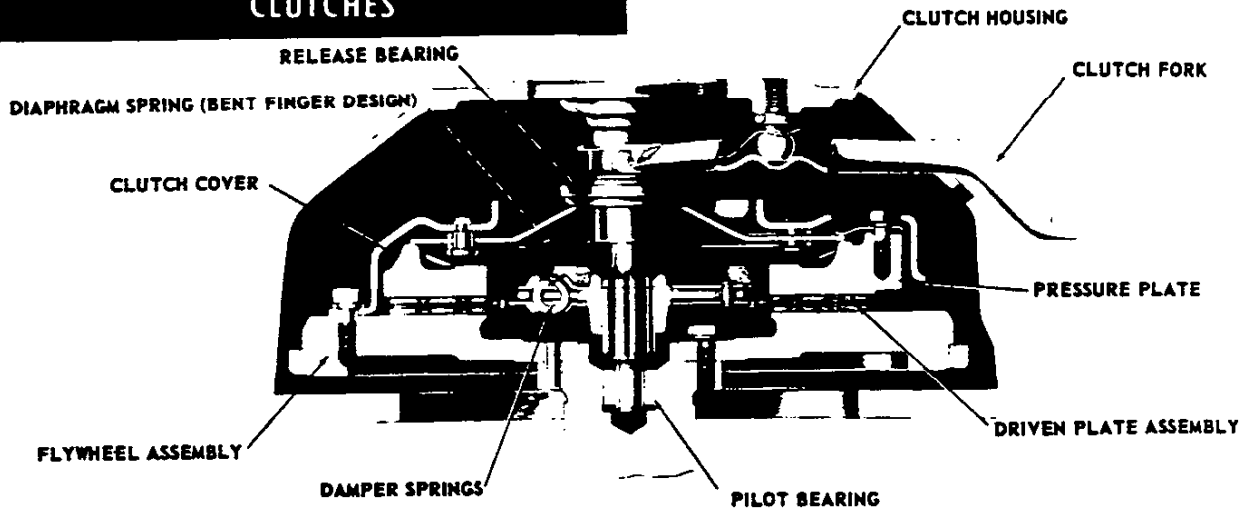
SPARK PLUGS

Make	AC43N
Thread Size (mm)	14
Gap	.033-.038
Torque	25 lb ft

CABLE ----- Linen core impregnated with electrical conducting material and insulations of rubber with neoprene jacket



CLUTCHES



ENGINE	Name		Turbo-Thrift L6		Turbo-Fire V8	
	Horsepower		125	195	250	340
			140		300	400
Displacement, cubic inches		230	283	327	409	
Clutch Identification		Regular Production (b)	Heavy Duty	Regular production (c)		4-Speed
Clutch assembly						
Type		Single dry disk			(d)	
Clutch Cover and Pressure Plate Assembly	Effective plate load, lb		1500-1800	1900-2200	1700-1950	2100-2300 2300-2600
	Type of drive		Steel straps			
	Pressure Plate	Material	Cast iron			
		Outside diameter	10.14 (e)			
	Clutch Spring	Type	Diaphragm			
		Material	Diaphragm, bent fingers			
Attachment to flywheel		Heat treated spring steel				
Type		6 bolts, 3/8-16 UNC 3A, 1.00 long				
Driven plate assembly	Type		Single disk with 2 friction surfaces			
	Cushions		Flat steel springs between friction rings			
	Dampers		6 coil springs		12 coil springs (6 sets of 2)	10 coil springs (5 sets of 2)
	Friction Rings	Outside diameter	9.12	10.0	10.0	10.4
		Inside diameter	6.12	6.0	6.5	6.5
		Total area (square inches)	71.80	100.5	90.7	103.5
Material		Woven asbestos	(a)	Woven asbestos	Premium woven asbestos	
Flywheel Assembly	Flywheel	Material	Cast iron			
		Outside diameter	12.54		13.44	
	Ring Gear	Material	Heat treated HR steel			
		No. of teeth	153		168	
		Width	.4070		.4160	
		Pitch diameter	12.75		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		Pendent, from brace on dash			
	Lubrication		Crossover shaft			
Clutch housing	Material		Aluminum alloy			
	Attachment to engine		6 bolts, 3/8-16 UNC-2A, 1.25 long			

(a) Woven asbestos front and molded asbestos rear.

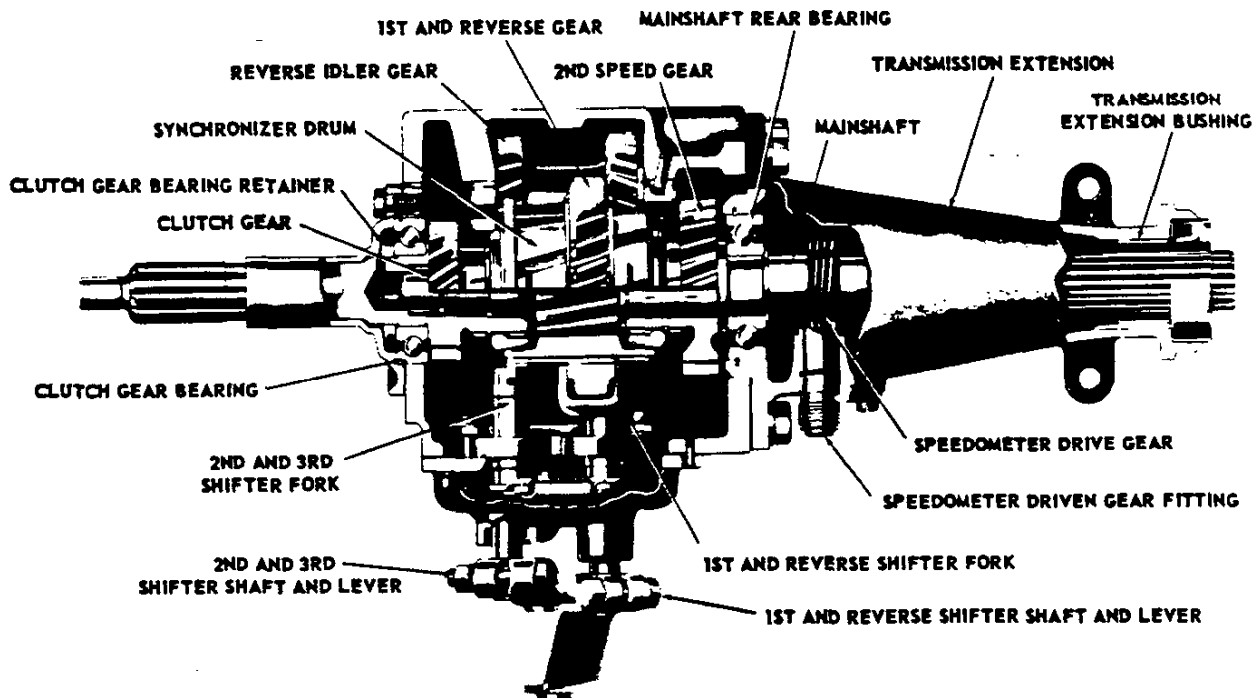
(b) Also for overdrive transmission

(c) Also for 283 cubic inch engine overdrive and 327 cubic inch engine 4-speed

(d) Single dry disk, centrifugal

(e) Nodular iron

TRANSMISSIONS

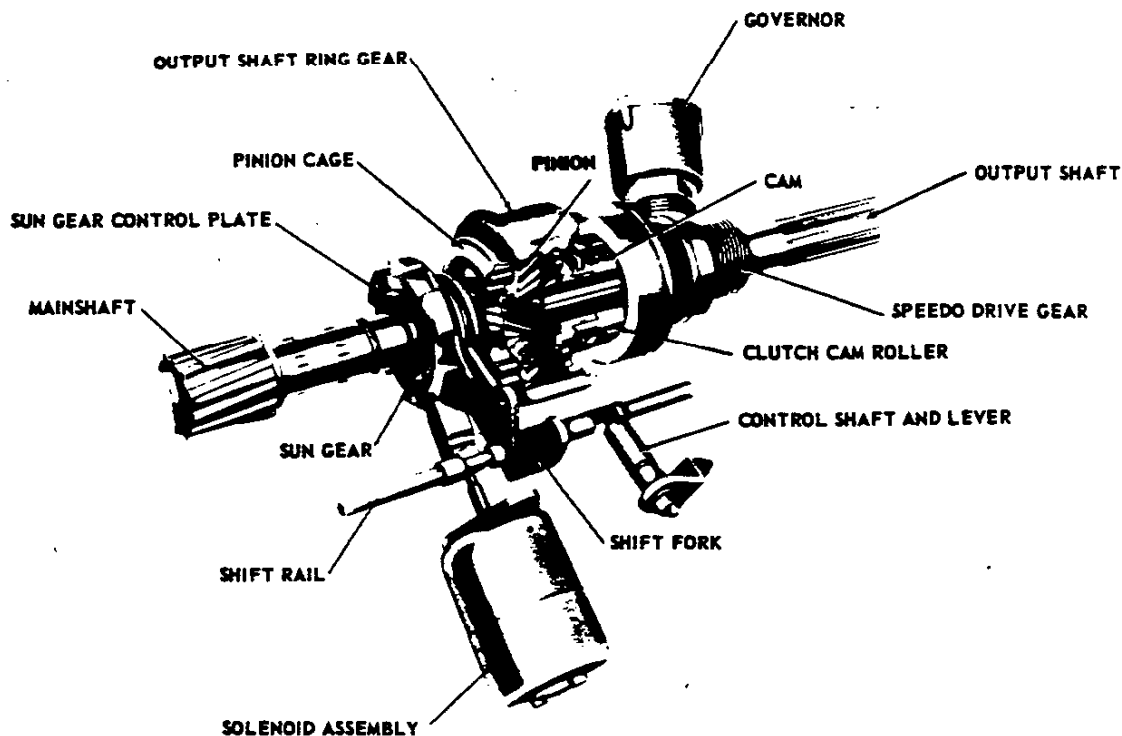


3-SPEED TRANSMISSION

Engine	Name	Turbo-Fire V8					
			Turbo-Thrift L-6				
Horsepower		125	195	250	250	340	
		140		300	300	400	
Displacement, in. ³		230	283	327	327	409	
Transmission type		3-SPEED			4-SPEED		
Case material		Cast Iron			Aluminum		
Gear Shift	Type	Remote					
	Control	Lever					
	Location	Steering Column			Floor		
Gears	Type	Helical					
	Material	Forge Steel, Hardened					
	Synchronization	Second and Third			All Forward Gears		
	Constant mesh gears	Second			All forward gears		
	Sliding gears	First and Reverse			Reverse		
	Ratios	First	2.94		2.58	2.56 [@]	
		Second	1.68		1.48	1.91	
		Third	1.0		1.0	1.48	
Fourth		---		---	1.0		
Reverse		2.94		2.58	2.64		
Lubricant	Type	Meeting Military Specification MIL-L-2105-B					
	Capacity (Pints)	2			2.5		
Extension	Material	Aluminum					
	Oil Seal	Steel encased double seal of spring loaded rubber or felt					

[@] Close ratio offered optionally with 400 and 425 HP engines; 2.20, 1.64, 1.28, 1.0 and 2.27.

TRANSMISSIONS - Continued



OVERDRIVE TRANSMISSION - RPO 1-M10

GENERAL

Type	3-pinion planetary drive unit
Description	Adaptable to 3-speed transmission. Overdrive drive unit with integral mainshaft replaces mainshaft and extension of 3-speed.
Operation	Activation by manually operated pull type lockout switch located under instrument panel to right of steering column; when fully extended, overdrive unit is inoperative. Overdrive unit can be over-riden by a downshift switch located at the carburetor and controlled by the accelerator pedal; over-riding achieved by tramping accelerator.
Lubricant	
Type	Meeting Military Specification MIL-L-2105-B
Viscosity	SAE 80
Capacity (pts)	Total 3 pints, 2 for transmission, 1 for overdrive unit
Gear ratios with overdrive locked in	
First	2.058
Second	1.176
Third	0.700
● Output Shaft RPM	
Cut-in	1440
Cut-out	1100

AUTOMATIC TRANSMISSION - RPO 1-M35

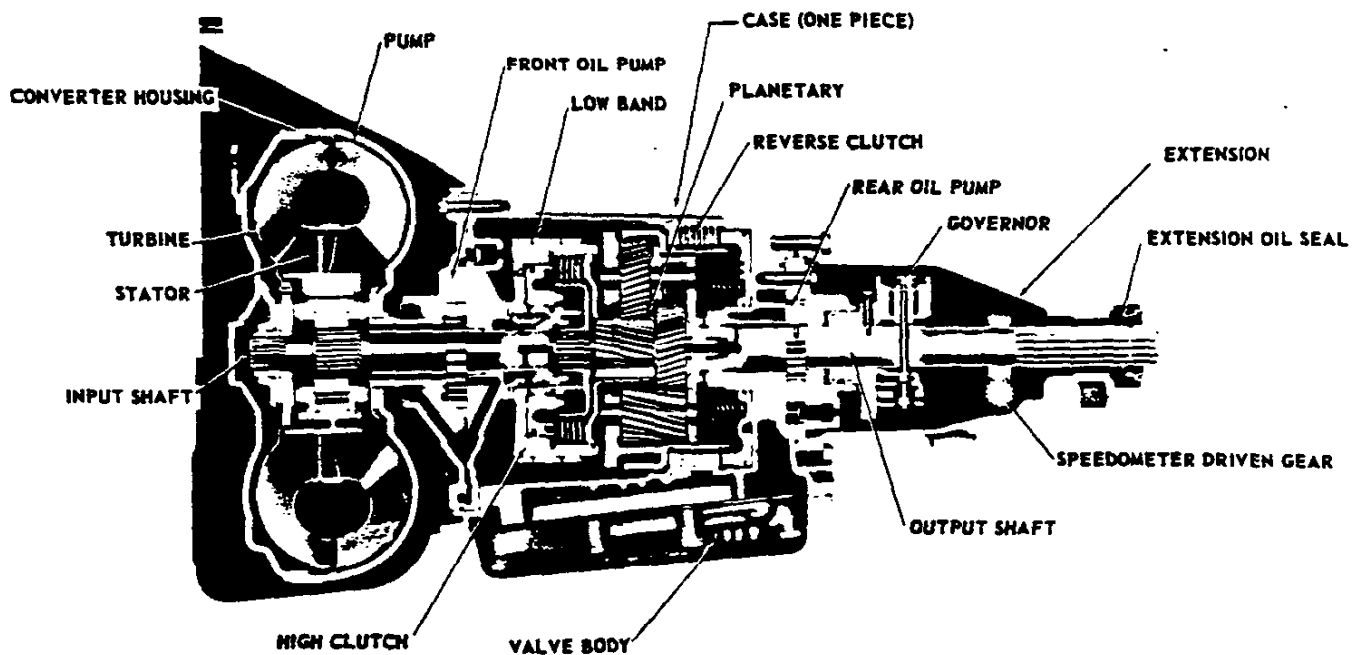
Engine	Displacement, cubic inches		230	283	327	327	409	
	Horsepower		125	140	195	250	300	340
	RPO 1 -		Z05	---	---	L30	L74	L33
AUTOMATIC TRANSMISSION								
General data	Type		Automatic hydraulic torque converter with planetary gear system for low and reverse					
	Selector level	Location	Steering column @					
		Operation	Actuates manual valve in hydraulic control system					
		Quadrant position	P-R-N-D-L					
	Parking lock	Type	Pawl and gear (on planetary)					
		Operation	Applied by selector lever thru spring loaded linkage					
	Method of cooling		Air	Water				
Flywheel assembly		Steel stamping with welded on ring gear						
Hydraulic controls	Manual valve type		Spool					
	Pressure regulator valve type		Spool					
	Pressure range, psi @	Drive	Minimum	49				
			Maximum	53				
	idle	Reverse	Minimum	127				
			Maximum	136				
			Minimum	82				
Maximum			88					
Converter assembly	Type		Three element					
	Pump		Inner and outer sheet steel shells separated by sheet steel vanes. Outer shell is pump housing which is welded to converter housing.					
	Turbine		Inner and outer shells separated by sheet steel vanes. Assembly supported in converter cover. Operation independent of cover and pump housing					
	Stator		Aluminum air foil supported on a stationary sleeve by an over-running clutch of cam and roller design.					
	Stall torque ratio		2.10:1					
Diameter (nominal)		11.0	11.75					
Planetary gear set	Type		Compound planetary					
	Range	Drive	1.82:1 to 1:1		1.76:1 to 1:1			
		Low	1.82:1		1.76:1			
		Reverse	1.82:1		1.76:1			
	Low band		Three linked circular segments					
Low band servo		Piston with release spring and inner cushion spring						
Case		Material						
Output shaft RPM and vehicle speed (MPH)	N/V		40.8	39.6	42.2			
	Upshift	Closed throttle	650 (16)	650 (16)	660 (16)			
		Throttle at detent	1900 (47)	2080 (51)	2125 (54)	2335 (55)		
		Full throttle	2205 (54)	2400 (59)	2495 (63)	2740 (64)		
	Downshift	Closed throttle	605 (15)	605 (15)	615 (15)			
		Throttle at detent	1165 (29)	825 (20)	825 (21)	865 (20)	880 (21)	
		Full throttle	2035 (51)	2280 (56)	2350 (59)	2600 (62)	2585 (61)	

@ Floor mounted on 13-1400 series models.

Continued on page 40

TRANSMISSIONS - Continued

Engine	Displacement, cubic inches		230	283	327	327	409	
	Horsepower		125	140	195	250	300	340
	RPO 1 -		205	-	-	L30	L74	L33
AUTOMATIC TRANSMISSION - Continued								
High clutch	Type		Multi-disk					
	Drive plates	Description	Waved steel with bonded organic facings					
		Number	3	4				
	Driven plates	Description	Flat steel					
Number		4	5					
Reverse clutch	Type		Multi-disk					
	Drive plates	Description	Flat steel with bonded organic facings					
		Number	4	5	6			
	Reaction plates	Description	Flat steel					
		Number	3	4	5			
Torque mult.	Maximum overall ratio		3.82:1			3.70:1		
	Low and reverse		3.82:1 to 1.82:1			3.70:1 to 1.76:1		
Lubricant	Type		Type A, suffix A					
	Capacity (pints)	Dry	15				18	
		Refill	3					
Governor	Type		Centrifugal					
	Operation		Regulates pump oil pressure to automatic shift control valve body					
	Drive		Mounted on output shaft					
	Location		In extension					
Oil pumps	Type		Internal-external gear					
	Number		Two, front and rear					
	Function		To supply pressure					
	Front pump	Drive	Converter pump					
		Function	Supply main system pressure at low vehicle speeds					
	Rear pump	Drive	Output shaft					
		Function	Supply main system pressure at high vehicle speeds and during push starts					



AMA Specifications – Passenger Car

The information contained herein is prepared, distributed by, and is solely the responsibility of the automobile manufacturing company to whose products it relates. Questions concerning these specifications should be directed to the manufacturer whose address is shown below. This uniform specification form was developed by the automobile manufacturing companies under the auspices of the Automobile Manufacturers Association.

MANUFACTURER Chevrolet Motor Division General Motors Corporation	CAR NAME CHEVROLET 12-14-16-1800 Series, With 327 Cu. In. V-8 and 409 Cu. In. V-8 Engine				
MAILING ADDRESS: [REDACTED]	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">MODEL YEAR 1964</td> <td style="width: 50%; padding: 5px;">ISSUED: 9-23-63</td> </tr> <tr> <td colspan="2" style="padding: 5px;">REVISED (6): 3 10 64 0</td> </tr> </table>	MODEL YEAR 1964	ISSUED: 9-23-63	REVISED (6): 3 10 64 0	
MODEL YEAR 1964	ISSUED: 9-23-63				
REVISED (6): 3 10 64 0					

NOTES:

1. The 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.

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Engine - Mechanical 2	Brakes 18	Body Dimensions 22	Weights 33
Electrical 10	Front Suspension & Steering . . 19	Station Wagon 31	Index 37

BODY—TYPES AND STYLE NAMES—		Body type, number of passenger & style names; use manufacturer's code for series & body style.	
	327 cu. in. V-8		409 cu. in. V-8
Biscayne	1211		2-Door Sedan - 6-Passenger
	1235		4-Door Station Wagon- 6-Passenger
	1269		4-Door Sedan- 6-Passenger
Bel Air	1611		2-Door Sedan- 6-Passenger
	1635		4-Door Station Wagon- 6-Passenger
	1645		4-Door Station Wagon- 9-Passenger
	1669		4-Door Sedan- 6-Passenger
Impala	1835		4-Door Station Wagon- 6-Passenger
	1839		4-Door Sport Sedan- 6-Passenger
	1845		4-Door Station Wagon- 9-Passenger
	1847		2-Door Sport Coupe- 5-Passenger
	1867		2-Door Convertible- 5-Passenger
	1869		4-Door Sedan- 6-Passenger
Impala Super Sport	1447		2-Door Sport Coupe- 4-Passenger
	1467		2-Door Convertible- 4-Passenger



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AMA Specifications — Passenger Car

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (c)

GENERAL SPECIFICATIONS

(All dimensions in inches unless otherwise indicated)

MODEL	12, 14, 16 and 1800	Additional Information Page No.	327 Cu. In. V-8		409 Cu. In. V-8			
			250 HP	300 HP	340 HP	400 HP	425 HP	
Wheelbase (L101)		23	119.0					
Tread	Front (W101)	22	60.3, 61.3 Wagons					
	Rear (W102)	22	59.3, 60.3 Wagons					
Maximum Overall Dimensions	Length (L103)	23	209.9 (a)					
	Width (W103)	22	● 78.1					
	Height (H101)	24	Sedans 56.2	Sp. Sedan 54.9	Sp. Coupe 55.1	Convertible 55.8	St. Wagon 56.7	
Transmission— (Specify trade name - opt., not available)	Manual	15	Synchronesh: 3-Speed Std.; 4-Speed, Optional.		Synchronesh: 4-Speed, Optional			
	Overdrive	16	Not offered					
	Automatic	16	Powerglide: Optional		Powerglide: Optional with 340 HP engine			
Axle ratio	Manual	17	3.36:1		3.36:1	3.36:1	3.36:1(b)	
	Overdrive	17	Not Offered					
	Automatic	17	3.08:1	3.36:1	3.36:1	-----		
Tire size		18	7.50 x 14		8.00 x 14			
Engine	Type, no. cyl., valve arr.	2	90° OHV V-8					
	Fuel system (Carb., other)	8	Carburetor					
	Bore and stroke	2	4.001 x 3.250		4.313 x 3.500			
	Piston displ., cu.in.	2	327		409			
	Std. compression ratio	2	10.5:1		10.0:1	11.0:1		
	Max. bhp at engine rpm	2	250 @ 4400	300 @ 5000	340 @ 5000	400 @ 5800	425 @ 6000	
	Max. torque at rpm	2	350 @ 2800	360 @ 3200	420 @ 3200	425 @ 3600	425 @ 420	

- (a) 210.8 on station wagon.
 (b) With 2.56:1 Low Gear Set, 3.08:1

AMA Specifications—Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a)12-3-63

	327 Cu. In. V-8	409 Cu. In. V-8			
MODEL	250 HP	300 HP	340 HP	400 HP	425 HP

ENGINE—GENERAL

Type, no. cyls., valve arr.		90° OHV V-8				
Bore and stroke (nominal)		4.001 x 3.250		4.313 x 3.500		
Piston displacement, cu. in.		327		409		
Bore spacing (C/L to C/L)		4.40		4.84		
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				
Compress. ratio (nominal)		10.5:1	10.0:1	11.0:1		
Cylinder Head Material		Cast alloy iron				
Cylinder Block Material		Cast alloy iron				
Cylinder Sleeve—Wet, dry, none		None				
Number of mounting points	Front	Two				
	Rear	One				
Engine installation angle		5° 11' (5° with 4-Speed and Powerglide)				
Taxable horsepower	Dis. x No. Cyl. 2.3	51.2		59.5		
Published max. bhp* @ eng. RPM		250 @ 4400	300 @ 5000	340 @ 5000	400 @ 5800	425 @ 6000
Published max. torque* (lb. ft. @ RPM)		350 @ 2800	360 @ 3200	420 @ 3200	425 @ 3600	425 @ 4200
Recommended fuel regular - premium		Premium				
Idle speed (spec. neutral or drive)	Manual	500 in neutral		700 in neutral		
	Automatic	475 in drive		--		

ENGINE—PISTONS

Material		Cast Aluminum		Aluminum impact extruded		
Description and finish		Flat head; notched, slipper skirt	2/3 flat head 1/3 slant; Valve cutout	Half flat head and half slant with valve cutout, slipper skirt		
Weight (piston only) oz.		21.6	30.37	30.00		
Clearance (limits)	Top land	.0365-.0455		.0520-.0610		
	Skirt	Top	.0005-.0011 (a)		.0030-.0036 (b)	
		Bottom	---			
Ring groove depth	No. 1 ring	.2217-.2283		.2390-.2455		
	No. 2 ring	.2217-.2283		.2390-.2455		
	No. 3 ring	.2038-.2103		.2125-.2190		
	No. 4 ring	None				

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

(a) Measured 2.24 from top of piston.

(b) Measured 2.94 from top of piston.

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a)

POWER TEAMS

(Indicate whether standard or optional)

MODEL AVAILABILITY	ENGINE					TRANSMISSION	AXLE RATIO (Std. first)			
	Displ. cu. in.	Carburetor	Compr. Ratio	BHP @ RPM	Torque @ RPM		*	*	*	*
				A	B		C	D		
1200-1400 1600-1800 V-8	327 *	4 Bbl	10.5:1	250	350	3-Speed	3.36:1	-	--	-
				@	@	4-Speed *	3.36:1			
				4400	2800	Powerglide *	-	-	3.08:1 (std)	-
		Large 4 Bbl Alum	10.5:1	300	360	3-Speed	3.36:1	-	-	-
				@	@	4-Speed *	3.36:1	-	-	-
				5000	3200	Powerglide *	3.36:1	-	-	-
	409 *	Large 4 Bbl	10.0:1	340	420	4-Speed *	3.36:1	-	-	-
				@	@	(2.56:1 Low)	3.36:1	-	-	-
		Large 4 Bbl Alum	11.0:1	5000	3200	Powerglide *	3.36:1	-	-	-
				400	425	4-Speed *	3.36:1	-	-	4.11:1 & 4.56:1
		2 x 4 Bbl Alum	11.0:1	@	@	4-Speed *	3.36:1	-	-	-
				5800	3600	(2.56:1 Low)	3.36:1	-	-	4.11:1 & 4.56:1
2 x 4 Bbl Alum	11.0:1	425	425	4-Speed *	3.36:1	-	-	4.11:1 & 4.56:1		
		@	@	4-Speed *	-	3.36:1	3.08:1 (std)	-		
				6000	4200	(2.56:1 Low)				

- * - Optional
- A - General Purpose Standard (Also available as positraction)
- B - Performance (Available as positraction only)
- C - Performance Cruise (Also available as positraction)
- D - High Performance (Available as positraction only)

AMA Specifications – Passenger Car

MAKE OF CAR	CHEVROLET	MODEL YEAR	1964	DATE ISSUED	9-23-63	REVISED	(a) 12-3-63
MODEL	1200-1400 1600-1800	327 Cu. In. V-8	409 Cu. In. V-8	250 HP	300 HP	340 HP	400 HP 425 HP

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.	Upper: Cast alloy iron, inside bevel, chrome plated Lower: Two piece; Cast alloy iron ring, wear resistant coating and steel expander	
	Width	Upper .0775-.0780 (a)	.0775-.0780, .0770-.0775
	Gap	Upper .013-.023 (b)	.015-.025
Oil	Description - material, type, coating, etc.	Multi-piece (2 rails and one spacer expander) Rails-Steel, chrome plated OD Expander-Stainless Steel	
	Width	.1840-.1880 assembled	.1835-.1885 assembled
	Gap	.015-.055	.015-.055
Expanders		In oil ring assembly	

ENGINE—PISTON PINS

Material		Chromium Steel
Length	2.990-3.010	3.250-3.270
Diameter	9270-.9273	9895-.9898
Type	Locked in rod, in piston, floating, etc.	Locked in rod
	Bushing	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.)	20.00	27.63
Length (center to center)	5.699-5.701	6.009-6.011
Bearing	Material & Type	Premium Aluminum
	Overall length	.807
	Clearance (limits)	.0007-.0028
	End play	.009-.013

- (a) - Lower .0770-.0775
 (b) - Lower .013-.025

AMA Specifications—Passenger Car

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MAKE OF CAR	CHEVROLET	MODEL YEAR	1964	DATE ISSUED	9-23-63	REVISED (a)
	1200-1400		327 Cu. In. V-8		409 Cu. In. V-8	
MODEL	1600-1800		250 HP	300 HP	340 HP	400 HP 425 HP

ENGINE—CRANKSHAFT

Material		Forged Steel				
Vibration damper type		Rubber mounted inertia damper				
End thrust taken by bearing (No.)		Five				
Crankshaft end play		.002-.006		.006-.010		
Main bearing	Material & type		Premium Aluminum except No. 5 - Steel backed babbitt			
	Clearance		See below			
	Journal dia. and bearing overall length	No. 1	2.3009 x .752	2.5001 x .992		
		No. 2	2.3009 x .752	2.5001 x .992		
		No. 3	2.3009 x .752	2.5001 x .992		
		No. 4	2.3009 x .752	2.5001 x .992		
		No. 5	2.3006 x 1.1824	2.5008 x 1.2525		
		No. 6		None		
No. 7			None			
Dir. & amt. cyl. offset		None				
Crankpin journal diameter		1.999-2.000		2.1988-2.1998		

ENGINE—CAMSHAFT

Location		In block above crankshaft				
Material		Cast alloy iron				
Bearings	Material	Extra life steel backed babbitt				
	Number	Five				
Type of Drive	Gear or chain		Chain			
	Crankshaft gear or sprocket material		Steel Sprocket			
	Camshaft gear or sprocket material		Cast alloy iron			
	Timing chain	No. of links	40	48		
		Width	.875			
Pitch		.500				

ENGINE—VALVE SYSTEM

Hydraulic lifters (Std, opt, NA)		Standard	NA
Valve rotator, type (intake, exhaust)		None	
Rocker ratio		1.5:1	1.75:1
Operating tappet clearance (indicate hot or cold)	Intake	Zero	.018
	Exhaust	Zero	.030
Timing marks on flywheel, damper, other		Damper	

#1-4 .0008-.0034
#5 .0010-.0036

(Continued)

AMA Specifications—Passenger Car

MAKE OF CAR	CHEVROLET	MODEL YEAR	1964			DATE ISSUED	9-23-63		REVISED(*)
MODEL	1200-1400	327 Cu. In. V-8		409 Cu. In. V-8					
	1600-1800	250 HP	300 HP	340 HP	400 HP	425 HP			

ENGINE—VALVE SYSTEM (cont.)

Timing *	Intake	Opens (°BTC)	32° 30'	38° 30'	49° 13' 20"	
		Closes (°ABC)	87° 30'	93° 30'	93° 13' 20"	
		Duration - deg.	300°	312°	322° 26' 40"	
	Exhaust	Opens (°BBC)	74° 30'	88° 30'	95° 20'	
		Closes (°ATC)	45° 30'	51° 30'	45° 20'	
		Duration - deg.	300°	320°	320° 40'	
Valve opening overlap		78°	90°	94° 33' 20"		
Material		Carbon Stl.	Alloy Steel			
Intake	Overall length		4.902-4.922	4.870-4.889	5.095-5.115	
	Actual overall head dia.		1.715-1.725	1.935-1.945	2.060-2.070	2.185-2.195
	Angle of seat & face		46° (seat) 45° (face)			
	Seat insert material		None			
	Stem diameter		.3404-.3417	.3715-.3722		
	Stem to guide clearance		.0010-.0033	.0010-.0027		
	Lift (@ zero lash)		.3987 (Theoretical)	.4005	.5069 (Theoretical)	
	Outer spring press. and length	Valve closed (lb. @ in.)	78-86 @ 1.660	84-92 @1.66	128-140 @ 1.68	
		Valve open (lb. @ in.)	170-180 @ 1.260	166-176 @1.33	315-339 @ 1.20	
	Inner spring press. and length	Valve closed (lb. @ in.)	Spring Damper	20-24 @1.488	Spring Damper	
		Valve open (lb. @ in.)	Spring Damper	55-61 @1.106	Spring Damper	
	Exhaust	Material		High Alloy Steel		
Overall length		4.913-4.933	5.105-5.125			
Actual overall head dia.		1.495-1.505	1.715-1.725			
Angle of seat & face		46° (seat) 45° (face)				
Seat insert material		None				
Stem diameter		.3410-.3417	.3710-.3717			
Stem to guide clearance		.0010-.0027	.0015-.0032			
Lift (@ zero lash)		.3987 (Theoretical)	.4119	.5185 (Theoretical)		
Outer spring press. and length		Valve closed (lb. @ in.)	78-86 @ 1.660	84-92 @1.66	128-140 @ 1.68	
		Valve open (lb. @ in.)	170-180 @ 1.260	166-176 @1.33	315-339 @ 1.20	
Inner spring press. and length		Valve closed (lb. @ in.)	Spring Damper	20-24 @1.488	Spring Damper	
		Valve open (lb. @ in.)	Spring Damper	55-61 @1.106	Spring Damper	

ENGINE—LUBRICATION SYSTEM

Type of lubrication (oil, grease, etc.)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Splash
	Camshaft bearings	Pressure
	Tappets	Pressure
	Timing gear or chain	Nozzle
	Cylinder walls	Pressure, jet cross sprayed

* - Including Ramps

(Continued)

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED ^(*)

	1200-1400	327 Cu. In. V-8	409 Cu. In. V-8		
MODEL	1600-1800	250 HP	300 HP	340 HP	400 HP 425 HP

ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type		Gear
Normal oil pressure (lb. @ engine rpm)	30-45 PSI @ 1500	50 PSI @ 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.)	4	5
Oil grade recommended (SAE viscosity and temperature range)	32° F and Above ----- SAE 20W, SAE 20, or SAE 10W-30 0° F and Above ----- SAE 10W or SAE 10W-30 Below 0° F ----- SAE 5W or SAE 5W-20	
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 with resonators		
Exhaust pipe dia. (O.D. & wall thickness)	Branch		
	Main	2.00 x .062	2.50 x .074
Tail pipe diameter (O.D. & wall thickness)	1.87 x .059	2.00 x .059	

ENGINE—CRANKCASE VENTILATION SYSTEM

Type (ventilates to atmos., induction system, other)	Standard	Ventilates to induction system		
	Optional	--		
Control unit	Make and model			
	Location	Rear of Carburetor		
	Energy source (manifold vacuum, carburetor air stream, other)	Manifold vacuum		
	Control method (variable orifice, fixed orifice, other)	Variable orifice		
Complete system	Discharges (to intake manifold, carb. air intake, air cleaner intake, other)	Intake manifold		
	Air inlet (breather cap, carburetor air cleaner, other)	Breather cap	Carburetor air cleaner	
	Flame arrestor (screen, check valve, other)	Check Valve		

AMA Specifications— Passenger Car

MAKE OF CAR	CHEVROLET	MODEL YEAR	1964	DATE ISSUED	9-23-63	REVISED (a)	
	1200-1400		327 Cu. In. V-8		409 Cu. In. V-8		
MODEL	1600-1800		250 HP	300 HP	340 HP	400 HP	425 HP

ENGINE—FUEL SYSTEM

(See Supplement to Page 8 for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.		Carburetor			
Fuel Tank	Capacity (gals.)	20 (19 on station wagons)			
	Filler location	In left rear quarter panel			
Fuel Pump	Type (elec. or mech.)	Mechanical			
	Locations	Lower right front corner of engine			
	Pressure range	5.25-6.50 PSI	7.25-8.75		
Vacuum booster (std., optional, none)		None			
Fuel Filter	Type	Fine mesh plastic strainer in gas tank			
	Locations	* Glass bowl with paper element between pump & carb.			
Carburetor	Choke type	Automatic			
	Intake manifold heat control (exhaust or water)	Exhaust			
	Air clnr. type	Standard	Paper element	Foam	Paper
		Optional	--		

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors		No. Used and Type	Barrel Size
			Make	Model		
1200-1400 1600-1800	327 250 hp	3-Speed	Carter	3846247	4 bbl Down-draft	1.4375 (P)
		4-Speed				
		Powerglide					Carter Rochester	3846246 7024121	1.4375 (S)
	327 300 hp	3-Speed	Carter	3826004	4 bbl Alum Down-draft	1.5625 (P)
		4-Speed				
		Powerglide					Carter	3826006	1.6875 (S)
	409 340 hp	3-Speed	Rochester	7024123	4 bbl Down-draft	1.56 (P)
		4-Speed				
		Powerglide					Rochester	7024124	1.68 (S)
	409 400 hp	3-Speed	Carter	3827324	4 bbl Alum Down-draft	1.625 (P)
		4-Speed				
	409 425 hp	3-Speed	Carter	3815403(ft) 3815404(rr)	2 x 4 Bbl Alum	1.5625 (P)
4-Speed						

* 250 HP - Sintered bronze filter in carburetor inlet

AMA Specifications – Passenger Car

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED(*)

	1200-1400	327 Cu. In. V-8	409 Cu. In. V-8		
MODEL	1600-1800	250 HP	300 HP	340 HP	400 HP 425 HP

ENGINE—COOLING SYSTEM

Type system (pressure, pressure vented, atmospheric, other)		Pressure			
Radiator cap relief valve pressure		13 ± 1 PSI			
Circulation thermostat	Type (choke, bypass)	Choke			
	Starts to open at (°F)	177°-183° F			
Water pump	Type (centrifugal, other)	Centrifugal			
	GPM @ 1000 pump rpm	55 GPM @ 4000	78 GPM @ 5200*		
	Number of pumps	One			
	Drive (V-belt, other)	V-Belt			
Bearing type		Double, roll ball			
By-pass recirculation type (Internal, external)		Internal	External		
Radiator core type (cellular, tube and fin, other)		Tube on Center			
Cooling system capacity	With heater (qt.)	16	18	22	
	Without heater (qt.)	15	17	21	
	Opt. equipment-specify (qt.)	18	18		
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	1.88	
	Upper	Number and type (molded, straight)	One, molded		
		Inside diameter	1.50	1.50	
	By-pass	Number and type (molded, straight)	None	One, molded	
		Inside diameter	None	.610	
Fan	Number of blades & Spacing		5, Staggered		
	Diameter		18.00		
	Ratio-fan to crankshaft rev.		.949:1		
	Fan cutout type		Thermo-modulated-viscous coupling		
	Bearing type		Double row ball		
*Drive belts (indicate belt used by letter)	Fan		A	D E	
	Generator		A	D	
	Water Pump		A	D E	
	Power Steering		B	F	
	Air Conditioning		C	G	

* Drive Belt Dimensions	A	B	C	D	E	F	G
Angle of V	38° -42°						
Nominal length (SAE)	53.25	41.50	57.50	58.00	43.00	44.00	61.00
Width	.380						

* - Actual flow through engine

AMA Specifications - Passenger Car

MAKE OF CAR	CHEVROLET	MODEL YEAR	1964	DATE ISSUED	9-23-63	REVISED	(a)
MODEL	1200-1400	327 Cu. In. V-8	409 Cu. In. V-8				
	1600-1800	250 HP	300 HP	340 HP	400 HP	425 HP	

ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model	Delco #1983506 (#1983508 on 340 HP)						
	Voltage Rtg. & Total Plates	12 Volt 66 plates						
	SAE Designation & Amp Hr. Rtg	61 Amp hr. @ 20 hr. (a)						
	Location	Right front of engine compartment						
	Terminal grounded	Negative						
Generator	Make	Delco-Remy						
	Model	#1100668						
	Type	Diode rectified						
	Ratio—Gen. to Cr/s rev.	2.46:1						
	Gen. cut-in (hot)—engine rpm							
Regulator	Make	Delco-Remy						
	Model	#1119515						
	Type	Vibrator						
	Cutcut relay	Closing voltage @ generator rpm	None					
		Reverse current to open						
	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	#1107320	#1107274	#1107286				
	Rotation (drive end view)	Clockwise						
	Engine cranking speed							
	Test conditions	Engine at operating temperatures						
	Lock test	Amps						
		Volts						
		Torque (lb. ft.)						
	No load test	Amps	65-100					
		Volts	10.6					
RPM (min.)		3600-5100						
Motor control	Switch (solenoid, manual)	Solenoid						
	Starting procedure	<p>SYNCHROMESH - Place gearshift in neutral and depress clutch to floor</p> <p>POWERGLIDE - Place control lever in N or P position</p> <p>INITIAL START - Press accelerator pedal to floor once to set automatic choke, then release. Turn ignit. to START- release as soon as engine starts</p>						

(a) - 70 Amp hr @ 20 hr rate for 340 HP

(Continued)

AMA Specifications – Passenger Car

MAKE OF CAR	CHEVROLET	MODEL YEAR	1964	DATE ISSUED	9-23-63	REVISED	(a) 2-3-
MODEL	327 Cu. In. V-8			409 Cu. In. V-8			
	250 HP	300 HP	340 HP	400 HP	425 HP		

ELECTRICAL—STARTING SYSTEM (cont.)

Motor Drive	Engagement type		Positive shift solenoid				
	Pinion meshes (front, rear)		Rear				
	Number of teeth	Pinion	9				
		Flywheel	168				
Flywheel tooth face width		.4135					

ELECTRICAL—IGNITION SYSTEM

Coil	Make		Delco-Remy				
	Model		#1115115	● #1115198	#1115083		
	Amps	Engine stopped	4.0				
		Engine idling	1.8				
Distributor	Make		Delco-Remy				
	Model		#1111016				#1111023
	Cent'fgal adv. in crankshaft degrees @ engine rpm (nominal)	Start (rpm)	700				
		Intermediate points deg. @ rpm					
		Max deg. @ rpm	24 @ 4600				
	Vacuum adv. in crankshaft degrees @ in. Hg. (nominal)	Start (in Hg)	8				
		Intermediate points, deg @ in Hg					
		Max. deg. in. Hg.	15 @ 15.5				
	Breaker gap (in.)		.019				
	Cam angle (deg.)		28-32				
Breaker arm tension (oz.)		19-23					
Timing	Crankshaft deg. @ rpm. ●		4° @ 550	8° @ 550	6° ± 1° @ 550	12° ± 1° @ 600	
	Mark location		Vibration 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		AC44			AC43N	
	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

Locations & type	Non-Metallic High Tension Ignition Cable
------------------	--

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 3-16-64

MODEL 12-14 16 1800 327 and 409 In³ Engines

ELECTRICAL—INSTRUMENTS AND SWITCHES

Speed-ometer	Make	AC
	Trip odometer (yes, no)	NO
Charge indicator—type		Tell-tale lamp
Temperature indicator—type		Tell-tale lamps (cold green; hot red)
Oil pressure indicator—type		Tell-tale lamp
Fuel indicator—type		Electric gauge
Other		Parking brake flasher (a)
Ignition switch	Identify positions in order and circuits controlled	2nd position CCW from vertical - ACC (accessories; 1st position CCW from vertical - LOCK (off, locked); Vertical - OFF (Unlocked); 1st position CW from vertical - ON (ignition, batt., access.); 2nd position CW from vertical - START (ignition, batt., accessories, starter; spring return to O
	Provision for illumination	1445 Lamp
	Location	Instru. panel to right of steering column
Main lighting switch	Identify positions and lamps controlled	Fully depressed - off 1st notch - Instru. panel, tail and license lamps 2nd notch - Instru. panel, head, tail and license lamps CW rotation of knob - dim and turn off instru. panel lamps CCW rotation of knob - turn on and brighten instru. panel lamps; Full CCW rotation - turn on dome lamp and/or courtesy lamps •
Other light switches	Locations and lamps controlled	Toe panel - Head lamp dimmer Glove compartment - Glove comp. lamp (b) Front door hinge pillar - Dome and courtesy lamps (c) Steering column - Turn signal lamps Under instru. panel - Stop lamps Steering mast jacket - Back-up lamps (a)
	Locations and devices controlled	Console compartment - Console compartment light (d) Accelerator linkage - Overdrive kick-down (e) Instru. panel to right of steering column - Heater blower Doors or qtr. trim panels - Power windows (e) Instru. panel, center - Radio (e) Instru. panel, left of steering column - W/S wiper Instru. panel, left of steering column - Tailgate window (h) Steering column - Trans. Neu. Saf. Sw. (e) Front seat lower panel, LH side - Power seat (j) Under instru. panel to left of steering column - Power top (k) • Instru. panel, left of strng column - CRUISE CONTROL
Windshield wiper	Make	Delco
	Type	Electric, Single-speed (f)
	Vacuum booster provision	None
Horn	Washer provision	None (g)
	Type	Vibrator
	Number used	2
	Amp draw (each)	8.00-11.0 @ 12.5 V

- | | |
|--|---|
| <p>(a) Std. on 13, 14, 17 and 1800
 (b) Std. on 13, 14, 15, 16, 17 and 1800
 (c) Std. on 13 thru 1800 except instru. panel courtesy, opt. except convertibles; door jam switches std. except 11 and 1200.
 (d) Std. on 13 and 1400</p> | <p>(e) Optional equipment
 (f) Optional electric two-speed incl. washer
 (g) Optional dealer installed accessory
 (h) Standard on 15, 16, 17 and 1845
 (j) Optional on 13, 14, 15, 16, 17 and 1800
 (k) Standard on 13, 14, 17 and 1867</p> |
|--|---|

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)3-16-6
 12-14-
 MODEL 16-1800 327 and 409 In³ Engines

ELECTRICAL—LAMP BULBS

Give quantity used and trade number, e.g., Headlamp 2-5400 S, dual headlight 2-4001, 2-4002.

Headlamps & arrangement		Dual, Horizontal: Outer, 2-4002; Inner, 2-4001
Headlamp beam indicator		1-1895
Parking		2-1157
Tail		Except Wagons, 2 or 4-1157 (a); Wagons, 2-1157
Stop		Except Wagons, 2 or 4-1157 (b); Wagons, 2-1157
Direction signal	Front	2-1157
	Rear	Except Wagons, 2 or 4-1157; Wagons, 2-1157
	Indicator	2-1445
License Plate		1-1155
Oil pressure indicator		1-1895
Charge indicator		1-1895
Instrument		4-1895
Clock		(instrument)
Radio		1-1893 Optional

Indicate also whether the following lamp assemblies are standard equipment, optional, or NA.

Ignition lock	1-1445	Reg. Prod.
Back up	2-1156	(c)
Dome	Roof Center, 1-211; Rear qtr., 2-90; Side Rail 2-90;	Reg. Prod.
Glove compartment	instr. Panel, 1-1895 (d); Seat Separator, 1-1816	Reg. Prod.
Prkg. brake signal	1-257	(c)
Luggage compartment	(Except Wagons: 1-1003 Except when DIA 1-93	(c)
Underhood	1-93	
Courtesy	instru. Panel, 2-631 (e); Rear Qtr., 1-90 Reg. Prod.; Seat Sep. 1-211 Reg. P.	
Ash Tray	1-1445	Opt.
Spot Lamps	Inside Operated, 1-4405; Portable, 1-4416	Optional
Traffic Hazard Indicator	1-1445	Optional
Compass	1-53	Optional
Tachometer	1-53	Optional

- (a) Two "tail only" on 15-1600 (inboard lamps); trade No. 1155.
- (b) Two on 11-1200, and 15-1600; four on 13-1400, and 17-1800.
- (c) Optional for 11-1200, and 15-1600.
- (d) Optional for 11-1200.
- (e) Optional except convertible.

Regular Production Items Continued

Heater Controls	1-1895
Fuel Gage	1-1895
Temp. Indicators	2-1895
Auto. Trans. Dial Indicator	1-1445

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 3-16-64

MODEL 12-14-16-1800 327 and 409 In³ Engines

ELECTRICAL—FUSE & CIRCUIT BREAKER DATA Fuses in Fuse Panel unless otherwise indicated

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 lamp SFE-10 (a), Direction indicator same as (a).

	15 C. B.	(a)	Courtesy Lamps	
Headlamp		(a)	Instr. Panel	(b)
Headlamp beam indicator		(a)	Seat Separator	(b)
Parking lamp		(a)	Rear Qtr.	(b)
Tail lamp	AGC 15	(b)	Additional Dome Lamps	-
Stop lamp		(b)	Rear Qtr.	(b)
Direction indicator	AGC 3	(c)	Side Rail	(b)
License plate lamp		(b)	Heater	AGC 10; IF A. C.,
Instrument lamp		(c)	Spotlamp	AGC 30 (f)
Ignition lamp		(c)	Inside Operated	AGC 15 (in line)
Back up lamp	AGC 10	(d)	Portable	(b)
Dome lamp		(b)	Underhood Lamp	SAE 4 (in line)
Clock		(b)	Traffic Hazard Indicator	(b)
Clock lamp	(Instrument lamp)		Compass Lamp	(c)
Radio	AGC 2.5	(g)	Air Conditioning	
Glove compartment lamp		(b)	Blower Motor	AGC 30 (in line)
Lugg. Compt. Lamp		(b)	Circuit	AGC 30 (f)
Park. Brake Alarm		(d)	Defogging Unit	AGC 5 (d)
Heater Controls Lamp		(c)	W/S Wiper (Two-Speed)	14 C. B. (switch)
Fuel Gage Lamp		(c)		(e)
W/S Wiper (Single Speed)	SAE 20	(e)	Tachometer	
Fuel Gage		(d)	Lamp	(c)
Cig. Lighter		(b)	Circuit	(d)
Oil, Temp. & Gen. Indicators		(d)	Cruise Control	(d) Ⓞ
Auto. Trans. ind. Dial		(c)		
Ash Tray Lamp		(c)		

ELECTRICAL—LOCATION OF OUTSIDE LAMPS

		Sedans	Coupes	Convertible	Wagon	
Height above ground to center of bulb	Tail	Lowest	23.4	23.7	22.7	
		Highest	23.4	23.7	22.7	
	Stop	23.4	23.7	22.7		
	Backup	23.4	23.7	22.7		
	License, rear	19.3	19.6	17.1		
	Directional	Front	16.9	17.2	17.5	
		Rear	23.4	23.7	22.7	
	Headlamp	Inside	27.6	27.6	27.9	
		Outside*	27.6	27.6	27.9	
	Distance from C/L of car to center of bulb	Tail	Inside		17.3 Impala, 23.9 Biscayne, Bel Air	
Outside				30.6	32.1	
Stop				17.3 Impala, 23.9 Biscayne, Bel Air		
Backup				23.9		
License, rear				On Centerline		
Directional		Front			27.4	
		Rear			17.3 Impala, 23.9 Biscayne, Bel Air	
Headlamp		Inside			23.5	
		Outside*			63.2	

* If single headlamps are used enter here.

AMA Specifications – Passenger Car

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MAKE OF CAR CHEVROLET	MODEL YEAR 1964	DATE ISSUED 9-23-63	REVISED (a)
1200-1400- MODEL 1600-1800	327 In ³ Engines - 250 and 300 HP. 409 In ³ Engines - 340, 400 and 425 HP		

DRIVE UNITS—CLUTCH (Manual Transmission)

Make & type	Chevrolet, Single Dry Disk, Centrifugal		
Type pressure plate springs	Diaphragm, Bent Finger Design		
Effective plate pressure (lb.)	For 327 In ³ Engines - 2100-2300; 409 In ³ Engines - 2300-2600		
No. of clutch driven discs	1 with 2 friction surfaces		
Clutch facing	Material	Premium woven asbestos	
	Outside & inside dia.	10.4, 6.5	
	Total eff. area (sq.in.)	103.54	
	Thickness	.135 each unloaded	
	Engagement cushioning method	Flat Spring steel between facings	
Release bearing	Type & method of lubrication	Single row ball, packed and sealed	
Torsional damping	Methods: springs, friction material	Coil Springs	

DRIVE UNITS—TRANSMISSIONS

Manual (std. or opt.)	3-Speed Standard with 327 in ³ Engines; 4-Speed Optional		
Manual with overdrive (std. or opt.)	Not Offered		
Automatic (std. or opt.)	Optional with 250, 300 and 340 HP engines		

DRIVE UNITS—MANUAL TRANSMISSION

3-Speed			4-Speed (a)		
Number of forward speeds	3-Speed	A	B		
Transmission ratios	In first	2.58	2.56	2.20	
	In second	1.48	1.91	1.64	
	In third	1.00	1.48	1.28	
	In fourth	----	1.00	1.00	
	In reverse	2.58	2.64	2.27	
Synchronous meshing, specify gears	2nd & 3rd		All forward gears		
Shift lever location	Steering column		Floor mounted		
Lubricant	Capacity (pt.)	2	2.5		
	Type recommended	Meeting Military Specification MIL-L-2105-B			
	SAE viscosity number	Summer	SAE80		
		Winter	SAE80		
Extreme cold		SAE80			

(a) A for all engines, B offered optionally with A for 400 and 425 HP engines.

AMA Specifications – Passenger Car

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Page 1

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)3-16-64
 MODEL 12-14-16-1800 327 In³ Engines - 250 and 300 HP
 409 In³ Engines - 340, 400 and 425 HP

DRIVE UNITS—PROPELLER SHAFT (cont.)

Inter-mediate bearing	Type (plain, anti-friction)	Single Row Ball, Sealed
	Lubrication (fitting, prepack)	Prepack
Universal joints	Make	Chevrolet
	Number used	3
	Type (ball and trunion, cross, other)	Cross
	Bearing	Type (plain, anti-friction)	Anti-Friction
Lubric. (fitting, prepack)		Prepack
Drive taken through (torque tube or arms, springs)		Control arms
Torque taken through (torque tube or arms, springs)		Control arms

DRIVE UNITS—REAR AXLE

Description (see instructions)	Regular Production - Semi-Floating, overhung pinion gear		
Limited Slip differential, type	Regular Production with Dual Disk Clutches		
Drive Pinion Offset	1.5		
No. of differential pinions	Regular Production - 2; Limited Slip, 4		
Gear ratios (Std. equip.)	Manual transmission	3-Speed - 3.36:1; 4-Speed - 3.36:1, except 425 HP Engine with wide range 4-Speed - 3.08:1	
	Overdrive transmission	Not offered	
	Automatic transmission	For 250 HP Engine - 3.08:1; 300 & 340 HP Engines - 3.36:1	
Ring gear O.D. (std. ratio)	8.375		
Pinion adjustment (shim, other)	Shim		
Pinion bearing adj. (shim, other)	None		
Wheel bearing type	Single row ball, sealed		
Lubricant	Capacity (pt.)	4	
	Type recommended	Meeting Military Specification MIL-L-2105-B	
	SAE viscosity number	Summer	SAE 80
		Winter	SAE 80
Extreme cold		SAE 80	

REAR AXLE RATIO TOOTH COMBINATIONS

(See page 3 for axle ratio usage)

Axle ratio		3.08:1	3.36:1	
No. of teeth	Pinion	12	11	
	Ring gear	37		

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET **MODEL YEAR** 1964 **DATE ISSUED** 9-23-63 **REVISED** (a)3-16-6.

MODEL 12-14-16-1800
 327 In³ Engine - 250 and 300 HP
 409 In³ Engine - 340, 400 and 425 HP

DRIVE UNITS—WHEELS

Type & material		Short Spoke Disk, Steel
Rim (size and flange type)	Std.	14 x 5J except Station Wagons, 14 x 6JK
	Opt.	14 x 6JK; 15 x 5K
Attachment	Type (bolt or stud)	Stud
	Circle diameter	4.75
	Number and size	5 Hex Nuts, 7/16-20 UNF - 2B

DRIVE UNITS—TIRES

Tubeless unless indicated otherwise

Standard (List option below)	Size & ply	Wagons & 409 In ³ Engines-8.00 x 14-4PR; Balance-7.50x14-4PR
	Type - Nylon, etc.	Blackwall, Rayon
Rev/mile at 50 mph.		7.50 x 14-800; 8.00x14 - 785
Inflation press.(cold)	Front	24
	Rear	24 except Wagons, 28
Optional tires - size and ply		6.70 x 15-4PR (*), Hyway, Nylon, Blackwall; 6.70 x 15-4PR, Hyway, Rayon, Blackwall, Tube. 7.10 x 15-4 PR (*), Hyway, Nylon or Rayon, Blackwall. 8.00 x 14-4PR, Hyway, Rayon, Whitewall; 8.00x14-4PR(*), Hyway, Nylon, Blackwall

BRAKES—SERVICE

	Regular Production	Metallic
Type (duo-servo, disc, balanced, etc.)	Duo-Servo, 4 Wheel Hydraulic, Reverse Self-Adjusting	
Self adjusting (std., opt., N.A.)	Regular Production	
Hydraulic system type (single, dual, etc.)	Single	
Power brake make & type (remote, integral, etc.)	Bendix or Delco Moraine Vacuum Power Unit Assisting Master Cylinder; Integral	
Effective area (sq. in.)*	186.2	145.2
Gross lining area (sq. in.)**	200.4	145.2
Swept drum area (sq. in.)***	328.0	
Percent brake effectiveness—front	58.5	
Drum	Front	
	Diameter	11.0
	Rear	11.0
Type and material	Composite: Rim-Cast Iron; Web-Steel	
Wheel cylinder bore	Front	1.1875
	Rear	1.00
Master cylinder bore	1.00	.875
Available pedal travel	6.38	
Line pressure at 100 lb. pedal load	750	980
Shoe clearance adjustment	Self-Adjusting	

* Excludes rivet holes, grooves, chamfers, etc.

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

*** Total swept areas for four brakes

Widest lining contact width for each brake x its drum circumference.

- (a) 7.00x14-4PR, Hyway, Rayon, Whitewall.
 7.10x15-4PR, (*), Hyway, Rayon, Blackwall; 7.10x15-4PR (*), Hyway, Nylon, Blackwall
 7.50x14-4PR (*), Hyway, Nylon, Blackwall; 7.50x14-4PR (*), Hyway, Nylon, Whitewall
 7.50x14-4PR, Hyway, Rayon, Whitewall; 7.50x14-6PR (**), Hyway, Rayon, Blackwall;
 7.50x14-4PR, Hyway, Rayon, Blackwall;
 8.00x14-4PR, Hyway, Rayon, Blackwall; 8.00x14-4PR, Hyway, Rayon, Whitewall;
 8.00x14-4PR (*), Hyway, Nylon, Blackwall.

* - Items with "4" 4 ply construction.

** - Items with "6" 6 ply construction.

(Continued)

AMA Specifications—Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED 03-16-6

327 In³ Engines - 250 and 300 HP

409 In³ Engines - 340, 400 and 425 HP

MODEL 12-14-16-1800

BRAKES—SERVICE (cont.)			Production	Metallic
Brake lining	Front Shoe	Bonded or riveted	Bonded	Welded
		Material	Molded Asbestos	Sintered Iron
		Size (length x width x thickness)	9.34 x 2.75 x .168	1.64 x 1.37 x .175
		Front wheel		
		Rear wheel	9.34 x 2.00 x .168	2.00 x 1.00 x .175
		Segments per shoe	1	6
	Rear Shoe	Material	Moulded Asbestos	Sintered Iron
		Size (length x width x thickness)	11.75 x 2.75 x .168	1.64 x 1.37 x .295
			Front wheel	
			Rear wheel	11.75 x 2.00 x .168	2.00 x 1.00 x .295
	Segments per shoe	1	Front - 12; Rear - 10	

BRAKES—PARKING

Type of control	Foot pedal for apply, "T" handled release	
Location of control	Left of Steering Column	
Operates on	Rear Service Brakes	
If separate from service brakes	Type (internal or external)	--
	Drum diameter	--
	Lining size (length x width x thickness)	--

FRAME or UNITIZED CONSTRUCTION

Type and description All welded "X" frame with box girder side rails, box section front suspension crossmember, channel section rear crossmember and reinforced box girder center beam. Special crossmember for mounting rear suspension upper control arm.

SUSPENSION—GENERAL (See Supplemental page 19 for details on Air Suspension)*

Provision for car leveling	Front Stabilizer Bar	
Provision for brake dip control	Mounting Angle of Front Upper Control Arms	
Provision for acc. squat control	Geometry of Rear Suspension Control Arms	
Special provisions for car jacking	None	
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 type with coil spring and concentric shock absorber, and spherically-jointed steering knuckle for each wheel.

* Air Suspension:
Air spring type
Compressor data
type
make
drive ratio

Normal operating pressures
spring rates
leveling data

(Continued)

AMA Specifications – Passenger Cars

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED ^(a)3-16-64

MODEL 12-14-16-1800 327 In³ Engines - 250 and 300 HP
409 In³ Engines - 340, 400 and 425 HP

SUSPENSION FRONT (cont.)

Spring	Type	Coil, Right Hand Helix	
	Material	Steel Alloy	
	Size (coil design height & I.D.; bar length x dia.)	<u>327 In³ Engines</u> 10.50 and 3.802; 141.25 x .630	<u>409 In³ Engines</u> 10.50 x 3.802; 141.25 x .630
	Spring rate (lb. per in.)	275	275
	Rate at wheel (lb. per in.)	101.2	101.2
	Design load (lb. @ design height)	1880 @ 10.50	1960 @ 10.50
Stabilizer	Type (link, linkless, frameless)	Link	
	Material & bar diameter	Steel, .6875	

STEERING

Manual (std., opt., NA)		Regular Production	
Power (std., opt., NA)		Optional	
Adjustable steering wheel (tilt, swing, other)	Type and description	Tilt: Tilt achieved by universally-jointing steering shaft at base of steering wheel; five-inch vertical travel range	
	(std., opt., NA)	Optional with power steering except with 3-Speed	
Wheel diameter	Manual	16.5	
	Power	16.5	
Turning diameter	Outside front	Wall to wall (l. & r.)	44.1
		Curb to curb (l. & r.)	40.8
	Inside rear	Wall to wall (l. & r.)	24.2
		Curb to curb (l. & r.)	24.5
Outside wheel angle with inside wheel at 20°		17.87°	

Manual	Gear	Type	Semi-Reversible, Recirculating Ball Nut		
		Make	Saginaw		
		Ratios	Gear	24.0:1	
			Overall	28.0:1	
	No. wheel turns		5.8 (Lock to Lock)		
Power	Type (coaxial, linkage, etc.)		Linkage with Hydraulically operated cylinder		
	Make		Saginaw		
	Gear	Type	Same as Manual		
		Ratios	Gear	20.0:1	
			Overall	24.0:1	
	Pump driven by		Crankshaft Pulley		
	Number wheel turns		5.06 (Lock to Lock)		
Linkage	Type		Relay		
	Location (front or rear of wheels, other)		Front		
	Drag link (trans. or longit.)		None		
	Tie rods (one or two)		2		

(Continued)

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET **MODEL YEAR** 1964 **DATE ISSUED** 9-23-63 **REVISED** (3-16-6

MODEL 12-14-16-1800 327 In³ Engines - 250 and 300 HP
 409 In³ Engines - 340, 400 and 425 HP

STEERING (cont.)

Steering Axis	Inclination of camber (deg.)		6-3/4 to 7-3/4
	Bearings (type)	Upper	Ball stud with non-metallic bearing surfaces
		Lower	Ball stud with non-metallic bearing surfaces
		Thrust	None required
Wheel alignment (range and preferred)	Caster (deg.)		N 1/2 to P 1/2 (Curb)
	Camber (deg.)		O to P 1 (Curb)
	Toe-in (outside tread-inches)		1/32-3/32, per wheel (Curb)
Steering spindle & joint type			Forging with pad for mounting brake cylinder, spherical
Wheel spindle	Diameter	Inner bearing	1.2493-1.2498
		Outer bearing	.7492-.7497
	Thread size		3/4-20 NEF 3 (modified)
	Bearing type		Taper Roller

SUSPENSION—REAR

Type and description		4-Link with 3 control arms and lateral control bar		
Drive and torq. taken through (see page 17)		3 control arms		
Spring	Type		Coil	
	Material		Steel Alloy	
	Size (length x width, coil design height and I.D.; bar length & dia.)		327 In ³ 9.88 & 3.638; 138.27 x .583	409 In ³ 9.88 x 3.638; 126.25 x .630
	Spring rate (lb. per in.)		230	340
	Rate at wheel (lb. per in.)		108.6	158.5
	Design load (lb. at design height)		1520@9.88	1520@9.88
	Mounting insulation type		None	
If leaf	No. of leaves		--	
	Inserts	Type and size	--	
		Material	--	
	Shackle (comp. or tens.)		--	
Stabilizer	Type (link, linkless, frameless)		--	
	Material		--	
Track bar type			Lateral, frame to rear axle	

AMA Specifications – Passenger Car

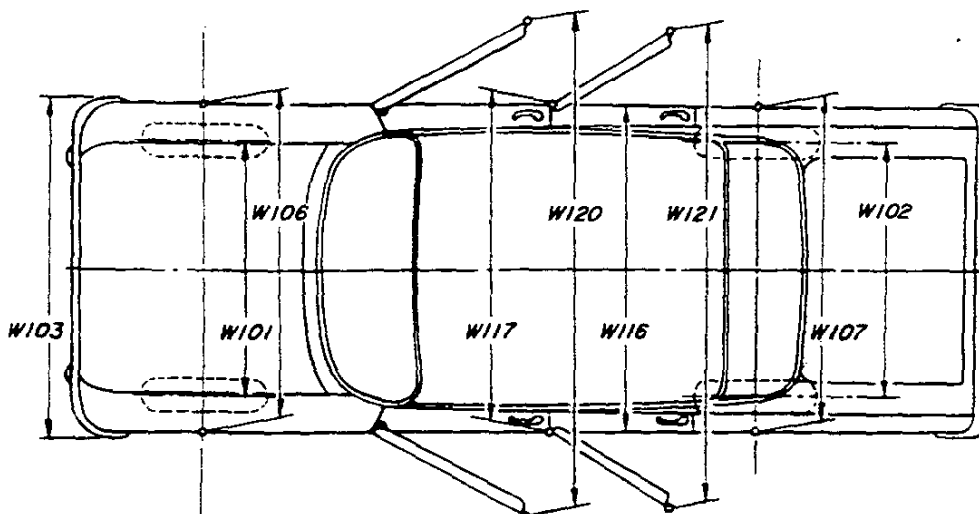
MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)3-16-64

CAR AND BODY DIMENSIONS—GENERAL

Dimensions herein are those adopted by the Society of Automotive Engineers. Brief descriptions of these dimensions are listed on pages 34-36. Complete definitions are listed in section E-1 of the SAE Aeronautical - Automotive Drawing Standards. The dimensions are developed from the following basic points:

1. Body dimensions are for all body styles.
2. All interior dimensions are taken with manikin 15.0 inches outboard of car centerline unless otherwise stated.
3. All interior dimensions are measured with the front seat in the lowest and rearmost position.
4. Unless otherwise specified, all exterior height dimensions are taken with a full design load which consists of 5 passengers, 300 lbs. front, 450 lbs. rear; includes spare wheel, tire and tools, and full complement of gas, oil, water and tires to recommended pressure, etc.
5. The SAE manikin with 90th percentile leg length will be used for recording purposes.
6. The H Point is the pivot center of the manikin's torso and thigh.
7. The D Point is the point of tangency of a horizontal line and the lowest point of the manikin.
8. The Torso Line is a line parallel to the small of manikin's back and extending through the H Point.

EXTERIOR WIDTH DIMENSIONS

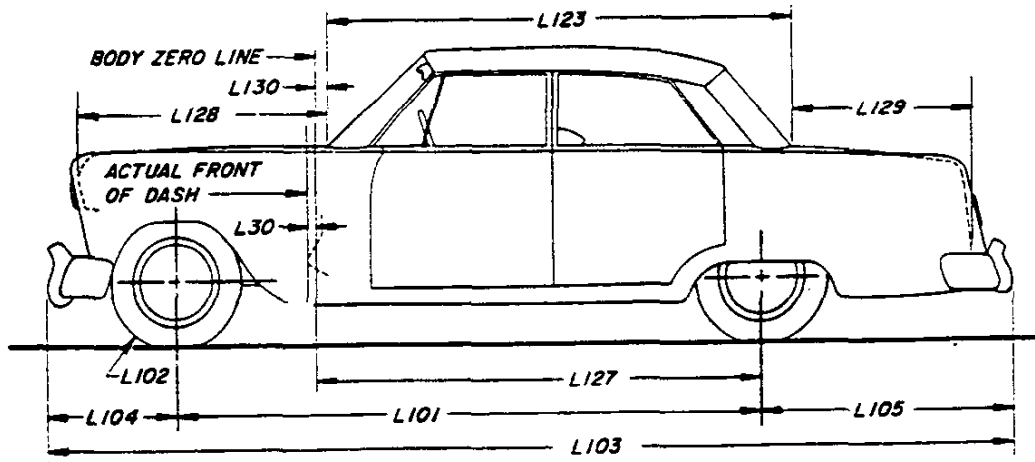


MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGONS
		2-Dr.	4-Dr.				
Tread - front	W101				60.3		61.3
Tread - rear	W102				59.3		60.3
Maximum overall car width	W103				78.1		
Maximum overall body width	W116				77.0		
Maximum body width at f2 pillar	W117	---	76.5			---	76.5
Front fender overall width	W106				76.7		
Rear fender overall width	W107				77.0		
Maximum overall car width - front doors open	W120	156.6	141.6			156.6	141.6
Maximum overall car width - rear doors open	W121	---	138.1	137.1		---	138.1

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 3-16-64

EXTERIOR LENGTH DIMENSIONS

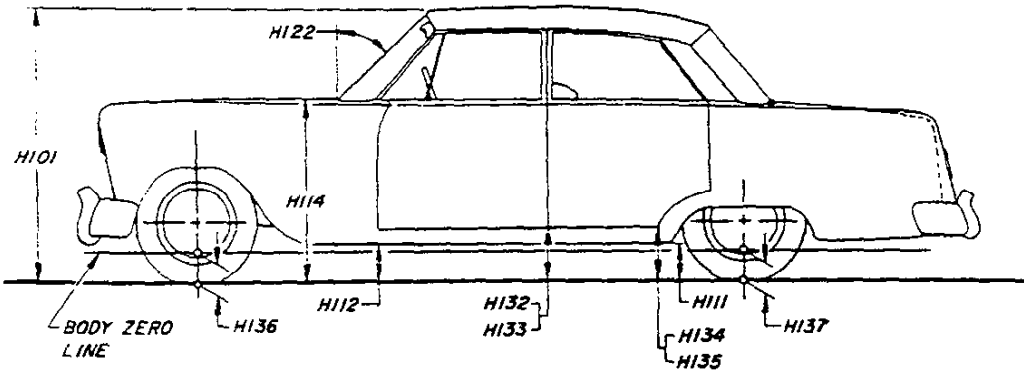


MODEL	Ref. No.	SEDANS		SPORT	SPORT	CONVERTIBLE	STATION WAGONS	
		2-Dr.	4-Dr.	SEDAN	COUPE			
Body zero line to actual front of dash	L30	.5						
Wheelbase	L101	119.0						
Overhang - front	L104	33.3						
Overhang - rear	L105	57.6						58.5
Overall length	L103	209.9						210.8
Hood length at car centerline	L128	51.2						
Body upper structure length at car centerline	L123	102.6		105.3	102.6	105.1	140.6	
Deck length at car centerline	L129	49.2		46.5	49.2	46.8	--	
Body zero line to centerline of rear wheels	L127	100.0						
Body zero line to windshield cowl point	L130	4.8						
Tire size	L102	Refer to Page 18						

AMA Specifications— Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)3-16-64

EXTERIOR HEIGHT DIMENSIONS

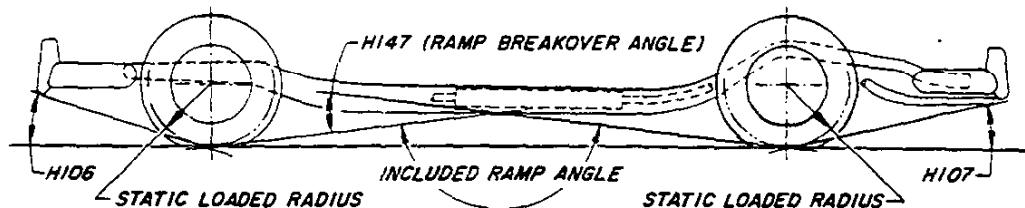
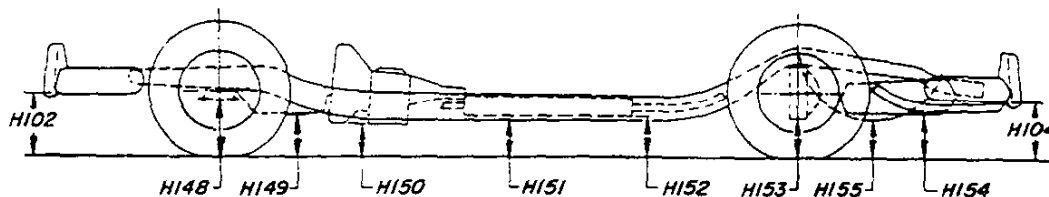


MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGONS
		2-Dr.	4-Dr.				
Overall height	H101	56.2		54.9	55.1	55.8	56.7
Hood at rear to ground	H114	37.7				38.0	38.3
Rocker panel to ground - front	H112	8.9				9.2	9.5
Rocker panel to ground - rear	H111	8.5				8.8	9.1
Bottom of door to ground, open - front	H132	12.8	12.7			12.9	12.7
Bottom of door to ground, closed - front	H133	11.5	11.6			11.5	11.7
Bottom of door to ground, open - rear	H134	--	11.3		--	--	11.5
Bottom of door to ground, closed - rear	H135	--	11.3		--	--	11.5
Windshield slope angle	H122	55.5°					
Body zero to ground - front	H136	5.4					
Body zero to ground - rear	H137	5.4					5.0

AMA Specifications—Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)3-16-64

GROUND CLEARANCE DIMENSIONS

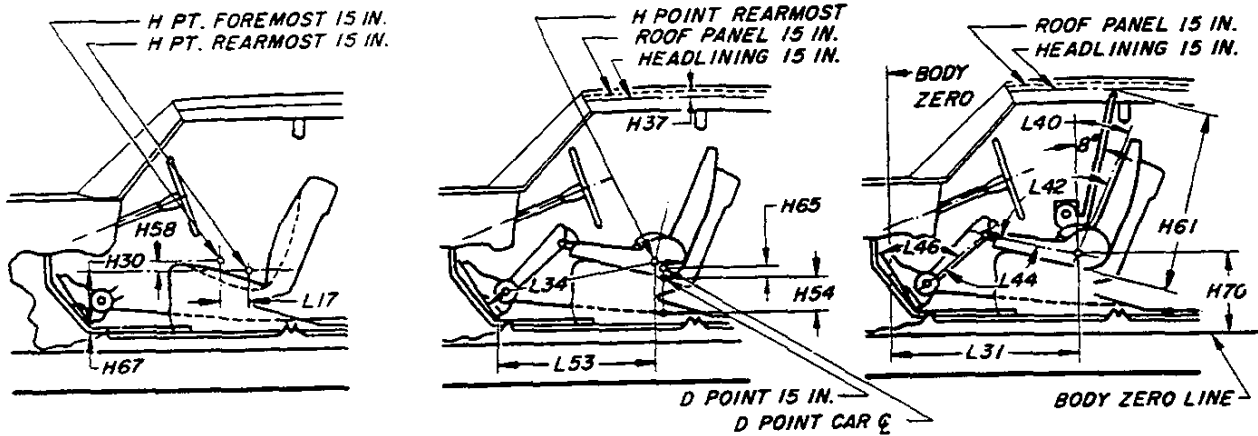


MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGONS
		2-Dr.	4-Dr.				
Front bumper to ground	H102	12.4				12.7	13.0
Rear bumper to ground	H104	12.1				12.4	9.9
Angle of approach	H106	26°				27°	30°
Angle of departure	H107				13°		12°
Ramp breakover angle	H147	10°				13°	
Front suspension to ground	H148	7.1				7.4	7.7
Oil pan to ground	H149	6.6				6.9	7.2
Flywheel housing to ground	H150	6.4				6.7	7.0
Frame structure to ground	H151	7.1				7.4	7.7
Exhaust system to ground	H152	5.5				5.8	6.1
Rear axle differential to ground	H153	7.1				7.4	7.7
Fuel tank to ground	H154	8.0				8.3	9.3
Spare tire well to ground	H155	--				--	8.5
Minimum running ground clearance	H156	5.5				5.8	6.1

AMA Specifications—Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a)3-16-64

FRONT COMPARTMENT DIMENSIONS



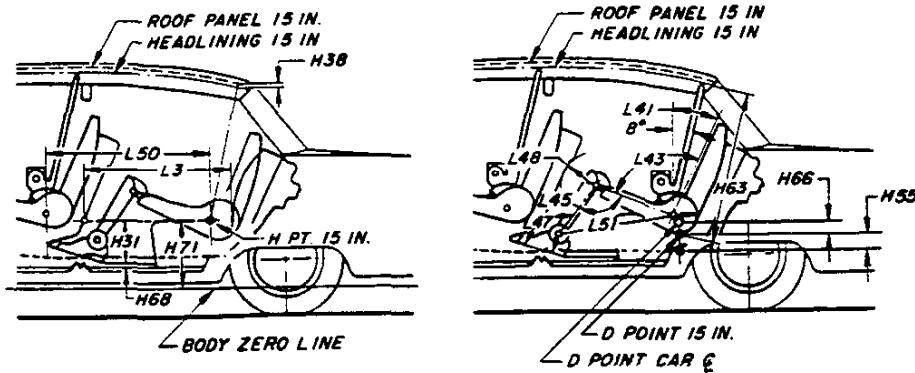
MODEL	Ref. No.	SEDANS		SPORT	SPORT COUPE		CONVERTIBLE		STATION WAGONS
		2-DR.	4-DR.	SEDAN	(a)	(b)	(a)	(b)	
H Point to body zero line	L31	42.5			42.0	41.8	42.0	41.8	42.5
H Point to body zero line - front	H70	NA							
Effective head room	H61	39.2		38.5	38.1	38.3	39.1	39.3	39.2
Headlining to roof height	H37	.5			---		---		.9
Maximum effective leg room - accelerator	L34	41.8			41.4	41.3	41.4	41.3	41.8
H Point to heel point	H30	8.6				8.4	8.6	8.4	8.6
Depressed floor covering thickness	H67	.3				.2	.3		.2
Back angle	L40	24°			26°	26°	23°	26°	25°
Hip angle	L42	96°			97°	95°	94°	95°	96°
Knee angle	L44	128°			125°	124°	125°	124°	128°
Foot angle	L46	87°			86°				88°
D Point differential, side to center	H65	.7			.5	--	.6	--	.7
D Point to tunnel	H54	2.8			2.7	--	2.7	--	2.8
H Point to accelerator floor point	L53	34.0			33.6	33.5	33.6	33.5	34.0
H Point travel	L17	4.8							
H Point rise	H58	.8			.7	.8	.7	.8	.7

(a) Bench seat; (b) Bucket seat

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 3-16-64 €

REAR COMPARTMENT DIMENSIONS



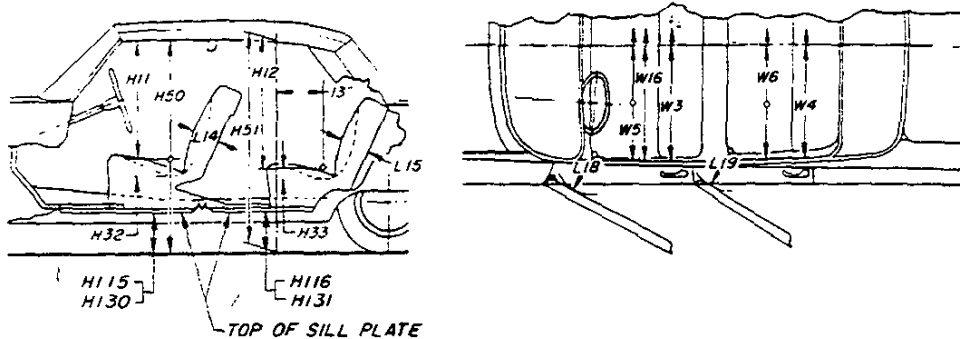
MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE		CONVERTIBLE		STATION WAGON
		2-DR.	4-DR.		(a)	(b)	(a)	(b)	
H Point couple distance	L50	34.8		33.7	33.1	33.2	33.1	33.2	34.9
H Point to body zero line - rear	H71	NA							
Effective head room	H63	38.0		37.2	38.3	38.3	38.1	38.1	39.8
Headlining to roof height	H38	.8		.6	.5	--	--	--	.8
Minimum effective leg room	L51	38.3		36.8	35.0	36.1	35.0	36.1	38.6
H Point to heel point	H51	11.8		12.0	10.5	10.4	10.5	10.4	11.7
Depressed floor covering thickness	H68	.4							
Minimum knee room	L48	4.6		3.6	3.4	3.7	3.4	3.7	4.9
Rear compartment room	L3	27.8		26.8	26.1	26.1	25.7	26.2	28.4
Back angle	L41	25°			19°				23°
Hip angle	L43	92°		90°	77°	79°	77°	79°	91°
Knee angle	L45	103°	106°	99°	90°	96°	90°	96°	108°
Foot angle	L47	114°		110°	110°	109°	110°	109°	114°
D Point differential, side to center	H66	.4		.8	.8	.8	.8	.8	.5
D Point to tunnel	H55	1.7		2.2	.7	.7	.7	.7	1.7

(a) Bench seat; (b) Bucket seat

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED 3-16-64

SEAT AND ENTRANCE DIMENSIONS



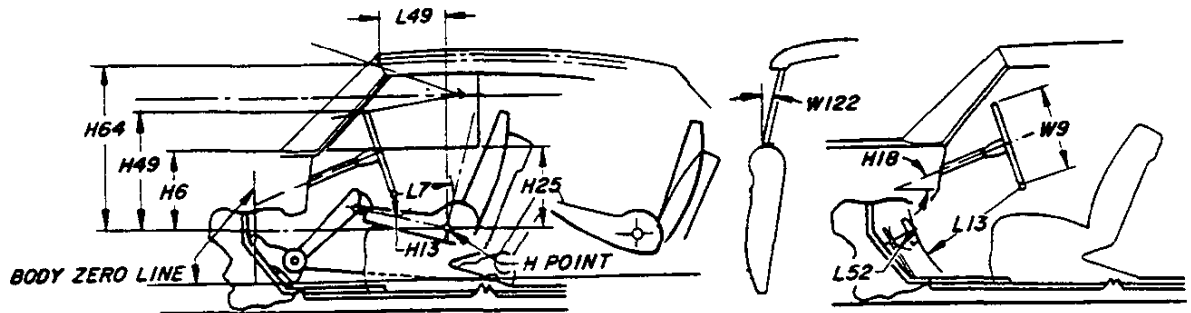
	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE		CONVERTIBLE		STATION WAGONS
		2-DR.	4-DR.		(a)	(b)	(a)	(b)	
Shoulder room - front	W3	58.8							
Hip room - front	W5	63.7		63.5	63.6				
Seat width - front	W16	57.6			27.4	57.6	27.4	57.6	
Upper body opening to ground - front	H50	50.6		50.8	49.5	49.5	49.1	49.1	50.6
Entrance height - front	H11	30.1		30.3	29.1	29.3	28.7	28.8	30.1
Step height - front (design load)	H115	12.7			13.0				13.3
Step height - front (curb load)	H130	14.7			15.0				15.3
Entrance foot clearance - front	L18	14.9			14.3		14.9	14.3	14.9
Seat cushion deflection - front	H32	4.2		4.5	4.7	4.2	4.7	4.2	4.2
Seat back thickness - front	L14	7.1		7.4	7.4	7.4	7.4	6.4	7.4
Shoulder room - rear	W4	57.5		58.2	57.6		51.5		58.0
Hip room - rear	W6	62.6		63.3	55.2		51.7		63.4
Upper body opening to ground - rear	H51	--		50.3	--	--	--		50.5
Entrance height - rear	H12	--	30.5	30.1	--	--	--		30.7
Step height - rear (design load)	H116	--	12.7		--				13.3
Step height - rear (curb load)	H131	--	12.7		--				13.3
Entrance foot clearance - rear	L19	11.6	11.7	11.3	9.0	9.6	9.0	9.6	13.0
Seat cushion deflection - rear	H33	3.8	4.3	5.1	4.3				4.4
Seat back thickness - rear	L15	8.3		9.0	7.4	7.4	7.7	7.7	6.1

(a) Bench seat; (b) Bucket seat

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a)3-16-6

VISION AND CONTROL DIMENSIONS



MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE		CONVERTIBLE		STATION WAGONS
		2-DR.	4-DR.		(a)	(b)	(a)	(b)	
H Point to windshield bottom DLO	H6	19.0			19.2	19.0	19.2	19.0	19.0
H Point to windshield upper DLO	H64	33.1	32.8	31.0	31.8	32.0	31.7	31.9	32.8
H Point to windshield upper DLO	L49	12.0		15.0	13.7	13.5	13.7	13.5	12.0
Belt height - front	H25	16.8			17.0	16.8	17.0	16.8	16.8
Steering wheel center to centerline of car	W7				15.9				
Steering wheel maximum outside diameter	W9				17.0				
Steering column angle - horizontal	H18				16.5°				
H Point to top of steering wheel	H49				23.3°				
Steering wheel torso clearance	L7	11.3		10.9	10.8	10.7	10.8	11.3	
Steering wheel thigh clearance	H13	3.5		3.4				3.5	
Brake pedal knee clearance	L13				24.3				
Brake pedal to accelerator	L52				4.3				
Tumble-home	W122				11.8°				

(a) Bench seat; (b) Bucket seat

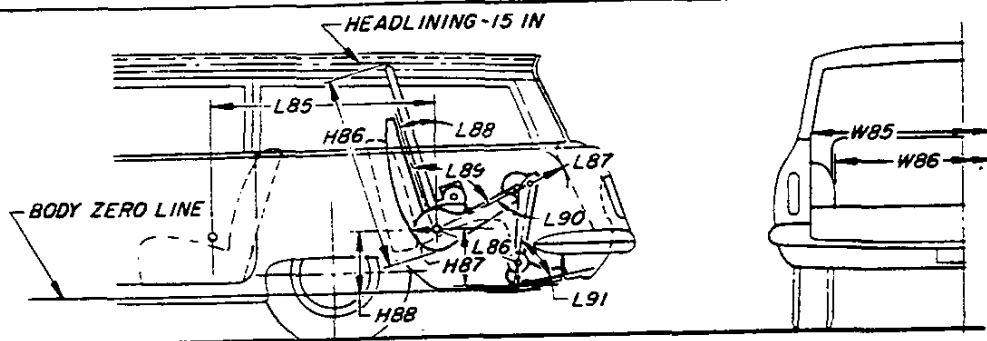
AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 3-16-64 ●

LUGGAGE COMPARTMENT

MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGONS
		2-DR.	4-DR.				
Usable luggage capacity (See instructions)		19.0					--
Liftover height	H195	22.1					--
Position of spare tire storage		Horizontal on trunk forward shelf, left side (b)					(a)
Method of holding lid open		Torsion Bars, Counterbalanced					

THIRD SEAT DIMENSIONS



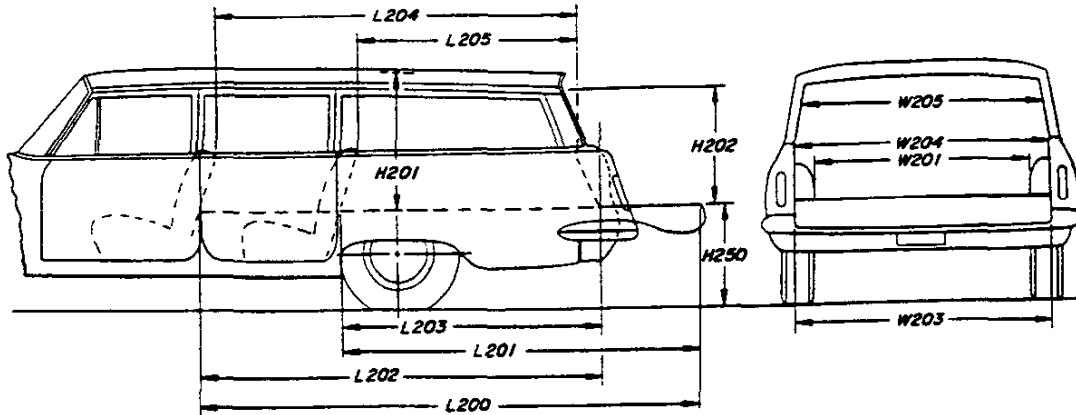
MODEL	Ref. No.	1645-1845
Seat facing direction		Rearward
Shoulder room	W85	52.0
Hip room	W86	46.7
H Point couple distance	L85	40.0
H Point to body zero line - third seat	H88	NA
Effective head room	H86	37.2
Effective leg room	L86	32.5
H Point to heel point	H87	12.3
Knee room	L87	9.5
Back angle	L88	18°
Hip angle	L89	80°
Knee angle	L90	82°
Foot angle	L91	113°

(a) Behind right rear quarter access panel; (b) Horizontal, rear right side. Form Rev. 5-63

AMA Specifications—Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)3-16-64

STATION WAGON—CARGO SPACE DIMENSIONS



MODEL	Ref. No.	6-PASSENGER	9-PASSENGER
Floor length from back of front seat at floor level to end of lowered tail gate or floor	L200		118.7
Floor length from back of second seat at floor level to end of lowered tail gate or floor	L201		84.7
Floor length from back of front seat at floor level to inside of closed tail gate	L202		94.2
Floor length from back of second seat at floor level to inside of closed tail gate	L203		60.2
Minimum horizontal distance from top rear of front seat back to inside of tail gate at belt	L204		82.2
Minimum horizontal distance from top rear of second seat back to inside of tail gate at belt	L205		47.2
Maximum width of cargo space at floor - specify location	W200		62.2
Minimum distance between wheel houses at floor level	W201		46.1
Rear end opening width at floor	W203		56.4
Rear end opening width at belt	W204		54.7
Maximum width of rear opening above belt	W205		54.2
Maximum height - floor covering to headlining at centerline of rear axle	H201		31.5
Maximum height of rear opening - tail and lift gates open	H202		30.5
Platform height from ground to top of tail gate floor covering at rear most edge of tail gate - curb weight	H250		23.3
Rear end closure (e.g., one piece door, hinged left - sliding glass, drop tail gate)		Hinged tailgate with folding link supports and manual retractable rear window (a)	
Cargo volume index (cu. ft.) W4 x L204 x H201			87.0 (b)

(a) Electrically operated window on 9-passenger (optional on 6-passenger)

(b) Plus 10.5 cu. ft. for hidden compartment in 6-passenger, plus 5.7 cu. ft. in 9-passenger.

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)3-16-64 ●

MODEL	SEDANS	SPORT	SPORT	CONVERTIBLE	STATION
	2-DR.	4-DR.	SEDAN	COUPE	WAGONS

BODY—MISCELLANEOUS INFORMATION

Drs. hinged (front, rear)	Front doors	Front
	Rear doors	Front
Type of finish (lacquer, enamel, other)		Acrylic Lacquer
Hood counterbalanced (yes, no)		Yes
Hood release control (internal, external)		External
Vehicle (Serial) No. Location		Left front body hinge pillar
Engine No. Location		On pad, front right hand side of cylinder block
Theft protection - type		Shielded ignition lock terminals, key removable in "Lock" or "On" position
Vent window control method (crank, friction pivot)	Front	Crank
	Rear	None
Seat cushion type	Front	Formed wire and foam pad
	Rear	Formed wire and foam pad ●
	3rd seat	--- F.wire&foam pad ●
Seat back type	Front	Formed wire and cotton
	Rear	Formed wire and cotton
	3rd seat	--- F.wire & cotton ●
Windshield glass type (i.e., single curved - laminated plate)		One piece, single curved, laminated
Backlight glass type (i.e., compound curved - tempered plate, three piece)		Compound curve, solid tempered plate (a)
Side glass type (i.e., curved - tempered plate)		Flat, safety-solid plate
Side glass exposed surface area	1346.3 | 1322.8 | 1360.6 | 1236.2 | 1115.5 | 2669.3	
Windshield glass exposed surface area	1587.5 | 1405.7 | 1461.2 | 1461.2 | 1587.5	
Backlight glass exposed surface area	1257.1 | 1239.9 | 941.9 | 1103.0 | 938.3	
Total glass exposed surface area	4190.9 | 4167.4 | 4006.2 | 3639.3 | 3679.7 | 5200.1	

BODY—CONVENIENCE EQUIPMENT (Indicate whether standard, optional or NA on each series)

Power windows	Side Windows	Optional
	Vent Windows	NA
	Backlight or tailgate	Standard on 9-passenger wagon, optional on 6-passenger
Power seats (specify type as well as availability)		6 way electric, optional
Reclining front seat back		NA
Front seat headrest		NA
Radios (specify type as well as availability)		Push Button, manual, AM-FM optional
Rear seat speaker		Optional
Power Antenna		NA
Clock		Standard on 13-14-17-1800, Optional on 11-12-15-1600
Air Conditioner (specify type and availability)		All weather, deluxe, cool pack optional

(a) Plastic on convertible.

AMA Specifications - Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 12-2-6

WEIGHTS

Model	CURB WEIGHT - POUNDS			% PASS. WEIGHT DISTRIBUTION				SHIPPING * WEIGHT	
	Front	Rear	Total	Pass. In Front		Pass. In Rear			
				Front	Rear	Front	Rear		
		327	409					327	409
Biscayne	1211	3598	3727					3440	3560
	1235	4050	4179					3895	4015
	1269	3663	3792					3505	3625
Bel Air	1611	3603	3732					3445	3565
	1635	4055	4184					3900	4020
	1645	4095	4224					3940	4060
	1669	3673	3802					3515	3635
Impala	1835	4080	4209					3925	4045
	1839	3723	3852					3565	3685
	1845	4125	4254					3970	4090
	1847	3648	3777					3490	3610
	1867	3758	3887					3600	3720
	1869	3693	3822					3535	3655
Impala Super Sport	1447	3683	3812					3525	3645
	1467	3788	3917					3630	3750
Accessories & Equipment Differential Weights		327	409	Remarks					
Air Conditioning, (a)		+113	+102						
Brakes, Power		+ 10	+ 10						
Less Heater		- 22	- 22						
Radio, Manual		+ 7	+ 7						
Radio, Push button		+ 9	+ 9						
Seat, Power		+ 22	+ 22						
Steering, Power		+ 27	+ 22						
Transmission, 4-Speed		+ 9	+ 9						
Powerglide		+ 22	+ 30						
327 V-8		+ 84	-						
409 V-8		-	+230						
Windows, Power		+ 19	+ 19						
Air Conditioning, (b)		+103	+110						
Comfort & Convenience		+ 6	+ 6						
Radio, AM-FM		+ 10	+ 10						

* These are weights that are reported to states for licensing purposes.

(a) Four Season

DIMENSION DEFINITIONS

- W3** SHOULDER ROOM - FRONT. The minimum lateral dimension between the door garnish moldings or nearest interference. Measured at H Point station.
- W4** SHOULDER ROOM - REAR. Measured in the same manner as W3.
- W5** HIP ROOM - FRONT. The lateral dimension through H Point to trimmed surfaces.
- W6** HIP ROOM - REAR. Measured in the same manner as W5.
- W7** STEERING WHEEL CENTER TO CENTERLINE OF CAR. Measured horizontally from steering wheel center to centerline of car. The point at steering wheel center is located in the surface plane of wheel.
- W9** STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.
- W16** SEAT WIDTH - FRONT. The maximum trimmed width of front seat cushion.
- W85** SHOULDER ROOM - THIRD SEAT. Measured in the same manner as W3.
- W86** HIP ROOM - THIRD SEAT. Measured in the same manner as W5.
- W101** TREAD - FRONT. Measured at centerline of tires, with nominal camber, at ground.
- W102** TREAD - REAR. Measured at centerline of tires at ground.
- W103** MAXIMUM OVERALL CAR WIDTH. Include bumpers, moldings, or sheet metal protrusions.
- W106** FRONT FENDER OVERALL WIDTH. Measured at centerline of front wheels, excluding moldings.
- W107** REAR FENDER OVERALL WIDTH. Measured at centerline of rear wheels, excluding moldings.
- W116** MAXIMUM OVERALL BODY WIDTH. Measured across body, excluding hardware and applied moldings, but including fenders when integral with body.
- W117** MAXIMUM BODY WIDTH AT #2 PILLAR. Measured across body at #2 pillar, excluding hardware and applied moldings.
- W120** MAXIMUM OVERALL CAR WIDTH, FRONT DOORS OPEN. Measured with front doors in maximum hold-open position.
- W121** MAXIMUM OVERALL CAR WIDTH, REAR DOORS OPEN. Measured in same manner as W120.
- W122** TUMBLE-HOME. The angle from vertical to the front door glass outer surface or the chord of a curved door glass, measured at the front H Point station.
- L3** REAR COMPARTMENT ROOM. The horizontal dimension from the back of front seat to front of rear seat back at a height tangent to the top of rear seat cushion.
- L7** STEERING WHEEL TORSO CLEARANCE. The minimum distance from the back edge of steering wheel, in straight-ahead position, to the Torso Line.
- L13** BRAKE PEDAL KNEE CLEARANCE. The minimum dimension from the lower edge of the steering wheel to the brake pedal face centerline.
- L14** SEAT BACK THICKNESS - FRONT. The maximum thickness of the seat back, excluding boosters.
- L15** SEAT BACK THICKNESS - REAR. Measured in the same manner as L14.
- L17** H POINT TRAVEL. The horizontal dimension between the H Point in the most forward and rearward seat positions.
- L18** ENTRANCE FOOT CLEARANCE - FRONT. The minimum horizontal dimension between seat and normal line of door or pillar at a height between the sill plate bead and 4.0 inches above the bead. Door should be in the maximum hold-open position.
- L19** ENTRANCE FOOT CLEARANCE - REAR. Measured in the same manner as L18 on four-door models. On two-door styles, the minimum dimension between rear corner of front seat, with front seat back tilted forward, and trimmed lock pillar, built-in quarter armrest panel, or rear seat cushion at a height between the sill plate bead and 4.0 inches above the bead.
- L30** BODY 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.
- L31** H POINT TO BODY ZERO LINE - FRONT. Horizontal dimension.
- L34** MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. Measured with the right foot on accelerator pedal.
- L40** BACK ANGLE - FRONT. The angle between a vertical line through the H Point and the Torso Line.
- L41** BACK ANGLE - REAR. Measured in the same manner as L40.
- L42** HIP ANGLE - FRONT. The angle between Torso Line and a line extending from knee pivot center to H Point.
- L43** HIP ANGLE - REAR. Measured in the same manner as L42.
- L44** KNEE ANGLE - FRONT. The angle between a line from H Point to knee pivot center and a line from the knee pivot center to the ankle pivot center.
- L45** KNEE ANGLE - REAR. Measured in the same manner as L44.
- L46** FOOT ANGLE - FRONT. The angle between a line extended from the knee pivot center through the ankle pivot center and a line tangent to the sole and heel of manikin bare foot.
- L47** FOOT ANGLE - REAR. Measured in the same manner as L46.
- L48** MINIMUM KNEE ROOM - REAR. The minimum dimension from the knee pivot center to the back of front seat back.
- L49** H POINT TO WINDSHIELD UPPER DLO. The horizontal dimension from H Point to the point of tangency of horizontal line of vision (described in dimension H64) with body upper structure.

DIMENSION DEFINITIONS (cont.)

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

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

L52 BRAKE PEDAL TO ACCELERATOR. The minimum dimension from center of brake pedal face to accelerator. Measured in the side view.

L53 H POINT TO ACCELERATOR FLOOR POINT. The horizontal dimension from intersection of accelerator and depressed floor covering to the H Point.

L85 H POINT COUPLE DISTANCE - THIRD SEAT. The horizontal dimension from the second seat H Point to the third seat H Point.

L86 EFFECTIVE LEG ROOM - THIRD SEAT. Measured in the same manner as L51. With rear-facing third seat, foot is positioned in foot well or to nearest interference with rear end or rear closure.

L87 KNEE ROOM - THIRD SEAT. Measured in the same manner as L48. With rear-facing third seat, dimension is measured to rear closure.

L88 BACK ANGLE - THIRD SEAT. Measured in the same manner as L40.

L89 HIP ANGLE - THIRD SEAT. Measured in the same manner as L42.

L90 KNEE ANGLE - THIRD SEAT. Measured in the same manner as L44.

L91 FOOT ANGLE - THIRD SEAT. Measured in the same manner as L46.

L101 WHEELBASE.

L102 TIRE SIZE.

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 theoretical intersection of extended windshield glass plane and normal cowl surface to the theoretical intersection of extended back window glass plane and normal deck surface; or in the case of a Fastback roof or Station Wagon, to back glass-lower reveal molding, or rubber when molding is not used.

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

L128 HOOD LENGTH AT CAR CENTERLINE. The horizontal dimension from the foremost point on sheet metal hood surface, excluding series identification or ornamentation, to the theoretical intersection of extended windshield glass plane and normal cowl surface.

L129 DECK LENGTH AT CAR CENTERLINE. The horizontal dimension from the rearmost point of the body sheet metal (visible above bumper), excluding series identification or ornamentation, to the theoretical intersection of extended back window glass plane and normal deck surface.

L130 BODY ZERO LINE TO WINDSHIELD COWL POINT. The horizontal dimension from body zero line to the theoretical intersection of extended windshield glass plane and normal cowl surface.

H6 H POINT TO WINDSHIELD BOTTOM DLO. Vertical dimension.

H11 ENTRANCE HEIGHT - FRONT. The vertical dimension from H Point to upper trimmed body opening.

H12 ENTRANCE HEIGHT - REAR. The vertical dimension from H Point to the upper trimmed body opening at a section 13.0 inches forward of the H Point.

H13 STEERING WHEEL THIGH CLEARANCE. The minimum dimension from the bottom of steering wheel, in straight-ahead position, to centerline of thigh.

H18 STEERING COLUMN ANGLE - HORIZONTAL. The angle the centerline of steering column makes with the horizontal.

H25 BELT HEIGHT - FRONT. The vertical dimension from H Point to bottom of side window DLO.

H30 H POINT TO HEEL POINT - FRONT. The vertical dimension from the H Point to the manikin accelerator heel point on the depressed floor covering.

H31 H POINT TO HEEL POINT - REAR. The vertical dimension from the H Point to the manikin heel point on the depressed floor covering.

H32 SEAT CUSHION DEFLECTION - FRONT. The vertical dimension from a point on the undepressed seat cushion to the depressed seat cushion. Measured at the H Point station.

H33 SEAT CUSHION DEFLECTION - REAR. Measured in the same manner as H32.

H37 HEADLINING TO ROOF HEIGHT - FRONT. The dimension from the intersection of the headlining and the extended effective hear room line to the roof panel. Measured perpendicularly to the roof panel.

H38 HEADLINING TO ROOF HEIGHT - REAR. Measured in the same manner as H37.

H49 H POINT TO TOP OF STEERING WHEEL. The vertical dimension from the H Point to top of steering wheel, in straight-ahead position.

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.

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.

DIMENSION DEFINITIONS (cont.)

- H54 D POINT TO TUNNEL - FRONT.** The vertical dimension from the D Point, at car centerline, to top of tunnel.
- H55 D POINT TO TUNNEL - REAR.** Measured same manner as H54.
- H58 H POINT RISE.** The vertical dimension between the H Point in the most forward and rearward seat position.
- 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.
- H63 EFFECTIVE HEAD ROOM - REAR.** Measured same as H61.
- H64 H POINT TO WINDSHIELD UPPER DLO.** Vertical dimension from H Point to highest horizontal line of vision through windshield at 15 inch section.
- H65 D POINT DIFFERENTIAL, SIDE TO CENTER - FRONT.** Vertical dimension from side occupant to center occupant D Point.
- H66 D POINT DIFFERENTIAL, SIDE TO CENTER - REAR.** Measured in the same manner as H65.
- H67 DEPRESSED FLOOR COVERING THICKNESS - FRONT.** The vertical dimension from manikin accelerator heel point normally to underbody sheet metal immediately below heel point.
- H68 DEPRESSED FLOOR COVERING THICKNESS - REAR.** Measured same as H67.
- H70 H POINT TO BODY ZERO LINE - FRONT.** Vertical dimension.
- H71 H POINT TO BODY ZERO LINE - REAR.** Vertical dimension.
- H86 EFFECTIVE HEAD ROOM - THIRD SEAT.** Measured in the same manner as H61.
- H87 H POINT TO HEEL POINT - THIRD SEAT.** Measured in the same manner as H31.
- H88 H POINT TO BODY ZERO LINE - THIRD SEAT.** Vertical dimension.
- H101 OVERALL HEIGHT.** Measured with full design load.
- H102 FRONT BUMPER TO GROUND.** Minimum dimension.
- H104 REAR BUMPER TO GROUND.** Minimum dimension.
- H106 ANGLE OF APPROACH.** The angle between the 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 interfering component, excluding license plate.
- H107 ANGLE OF DEPARTURE.** The angle between the 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 interfering component, excluding license plate.
- H111 ROCKER PANEL TO GROUND - REAR.** The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured at front of rear wheel opening.
- H112 ROCKER PANEL TO GROUND - FRONT.** The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured at foremost point of rocker panel.
- H114 HOOD AT REAR TO GROUND.** Measured from hood opening line on shroud, exclusive of moldings.
- H115 STEP HEIGHT $\frac{1}{2}$ FRONT (DESIGN LOAD).** The vertical dimension from top of sill plate bead, at C/L of front door sill plate, to ground.
- H116 STEP HEIGHT - REAR (DESIGN LOAD).** Measured in same manner as dimension H115.
- H122 WINDSHIELD SLOPE ANGLE.** The angle between a vertical 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.
- H130 STEP HEIGHT - FRONT (CURB LOAD).** The vertical dimension from top of sill plate, at C/L of front door sill plate, to ground.
- H131 STEP HEIGHT - REAR (CURB LOAD).** Measured same as H130.
- H132 BOTTOM OF DOOR TO GROUND, OPEN - FRONT.** Measured from bottom outside corner of door with door in maximum hold-open position.
- H133 BOTTOM OF DOOR TO GROUND, -CLOSED - FRONT.** Same point on door as H132 dimension, with door closed.
- H134 BOTTOM OF DOOR TO GROUND, OPEN - REAR.** Measured in same manner as H132.
- H135 BOTTOM OF DOOR TO GROUND, CLOSED - REAR.** Measured in same manner as H133.
- H136 BODY ZERO TO GROUND - FRONT.** A vertical dimension measured at front wheel centerline.
- H137 BODY ZERO TO GROUND - REAR.** A vertical dimension measured at rear wheel centerline.
- H147 RAMP BREAKOVER ANGLE.** 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.
- H148 FRONT SUSPENSION TO GROUND.** Minimum clearance from lower control arm inner shaft or lowest point on the car centerline.
- H149 OIL PAN TO GROUND.** Minimum clearance measured from sheet metal or drain plug.
- H150 FLYWHEEL/CONVERTER HOUSING AND TRANSMISSION ASSEMBLY TO GROUND.** Minimum clearance.
- H151 FRAME STRUCTURE TO GROUND.** Minimum clearance measured approximately midway between front and rear axles. In this measurement, cross bars and X-members shall be considered part of frame.
- H152 EXHAUST SYSTEM TO GROUND.** Minimum clearance. Specify location.
- H153 REAR AXLE DIFFERENTIAL SYSTEM TO GROUND.** Minimum clearance.
- H154 FUEL TANK TO GROUND.** Minimum clearance measured from sheet metal or drain plug, but excluding supports or straps.
- H155 SPARE TIRE WELL TO GROUND.** Minimum clearance.
- H156 MINIMUM RUNNING GROUND CLEARANCE.** Location of measurement on the car is to be clearly recorded.
- H195 LIFTOVER HEIGHT.** Vertical dimension from luggage compartment lower opening to ground.

AMA Specifications – Passenger Car

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GENERAL SPECIFICATIONS

(All dimensions in inches unless otherwise indicated)

MODEL	11-12-13-14- 15-16-17-1800	Additional Information Page No.	Std. 230 Cu. In. L-6 1100-1300-1500-1700	283 Cu. In. V-8 1200-1400-1600-1800	
Wheelbase (L101)		23	119.0		
Tread	Front (W101)	22	60.3, Wagons - 61.3		
	Rear (W102)	22	59.3, Wagons - 60.3		
Maximum Overall Dimensions	Length (L103)	23	209.9 (a)		
	Width (W103)	22	78.1		
	Height (H101)	24	Sedans 56.2	Sp. Sedan 54.9	Sp. Coupe 55.1
Transmission (Specify trade name - opt., not available)	Manual	15	Synchronesh: 3-Speed, Standard		
	Overdrive	16	Optional		
	Automatic	16	Powerglide, Optional		
Axle ratio	Manual	17	Sedans & Coupes - 3.08:1 Convertibles - 3.36:1 Station Wagons - 3.55:1	12 & 1600 Sedans - 3.08:1 Balance - 3.36:1	
	Overdrive	17	3.70:1		
	Automatic	17	Same as Manual		
Tire size		18	Wagons - 8.00 x 14; Convertibles - 7.50 x 14; Others - 7.00 x 14		
Engine	Type, no. cyl., valve arr.	2	In-Line 6 OHV	90° V-8 OHV	
	Fuel system (Carb., other)	8.	Carburetor		
	Bore and stroke	2	3.875 x 3.25	3.875 x 3.00	
	Piston displ., cu.in.	2	230	283	
	Std. compression ratio	2	8.5:1	9.25:1	
	Max. bhp at engine rpm	2	140 @ 4400	195 @ 4800	
	Max. torque at rpm	2	220 @ 1600	285 @ 2400	

(a) 210.8 on station wagon.

AMA Specifications—Passenger Car

MAKE OF CAR	CHEVROLET	MODEL YEAR 1964	DATE ISSUED 9-23-63	REVISED (a)
MODEL	230 Cu. In. I-6 1100-1300-1500-1700	283 Cu. In. V-8 1200-1400-1600-1800		

ENGINE—GENERAL

Type, no. cyls., valve arr.	In-line 6- OHV	90° OHV V-8
Bore and stroke (nominal)	3.875 x 3.25	3.875 x 3.00
Piston displacement, cu. in.	230	283
Bore spacing (C/L to C/L)	4.4	4.4
No. system: (front to rear)	L. Bank	1-2-3-4-5-6 (In-line)
	R. Bank	1-3-5-7 2-4-6-8
Firing order	1-5-3-6-2-4	1-8-4-3-6-5-7-2
Compress. ratio (nominal)	8.5:1	9.25:1
Cylinder Head Material	Cast Alloy Iron	
Cylinder Block Material	Cast Alloy Iron	
Cylinder Sleeve—Wet, dry, none	None	
Number of mounting points	Front	Two
	Rear	One
Engine installation angle	5° 11' - (3-Speed); 5° - (Powerglide & Overdrive)	
Taxable horsepower <small>Diag. 2 x No. Cyl. 2.5</small>	36.0	48.0
Published max. bhp* @ eng. RPM	140 @ 4400	195 @ 4800
Published max. torque* (lb. ft. @ RPM)	220 @ 1600	285 @ 2400
Recommended fuel regular - premium	Regular	
Idle speed (spec. neutral or drive)	Manual	500 in Neutral
	Automatic	475 in Drive

ENGINE—PISTONS

Material	Cast Aluminum Alloy		
Description and finish	Flat, notched head; Slipper skirt		
Weight (piston only) oz.	20.40		20.30
Clearance (limits)	Top land	.035-.044	
	Skirt	Top	.0005-.0011 (a)
		Bottom	
Ring groove depth	No. 1 ring	.2153-.2218	
	No. 2 ring	.2153-.2218	
	No. 3 ring	.2093-.2158	
	No. 4 ring	None	

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

(a) - Measured at 2.44 from top of piston.

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a)

POWER TEAMS

(Indicate whether standard or optional)

MODEL AVAILABILITY	ENGINE					TRANSMISSION	AXLE RATIO # (Std. first)		
	Displ. cu. in.	Carburetor	Compr. Ratio	BHP @ RPM	Torque @ RPM		"A"	"B"	"C"
1100-1300 1500-1700	230	1-Bbl. Down-draft	8.5:1	140 @ 4400	220 @ 1600	<u>3-Speed</u>			
						Coupes & Sedans	3.08:1	3.55:1	3.36:1
						Convertibles	3.36:1	3.55:1	--
						Station Wagons	3.55:1	--	--
						<u>Powerglide*</u>			
						Coupes & Sedans	3.08:1	3.55:1	3.36:1
						Convertibles	3.36:1	3.55:1	--
						Station Wagons	3.55:1	--	--
						<u>Overdrive*</u>			
						All models	3.70:1	--	--
1200-1600 (excluding Station Wagons)	283	2-Bbl. Down-draft	9.25:1	195 @ 4800	285 @ 2400	<u>3-Speed</u>	3.08:1	3.55:1	3.36:1
						<u>Powerglide*</u>	3.08:1	3.55:1	3.36:1
						<u>Overdrive*</u>	3.70:1	--	--
1400-1800 (and all Station Wagons)	283	2-Bbl. Down-draft	9.25:1	195 @ 4800	285 @ 2400	<u>3-Speed</u>	3.36:1	3.55:1	
						<u>Powerglide*</u>	3.36:1	3.55:1	--
						<u>Overdrive*</u>	3.70:1	--	--
<p>* - Optional</p> <p>"A" - General Purpose (Standard)</p> <p>"B" - Special Purpose or Mountain (Optional)</p> <p>"C" - Performance (Optional)</p> <p># - Positraction Axle Ratios available in combinations as shown.</p>									

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MAKE OF CAR CHEVROLET	MODEL YEAR 1964	DATE ISSUED 9-23-63 REVISED (a)
MODEL	230 Cu. In. L-6	283 Cu. In. V-8
	1100-1300-1500-1700	1200-1400-1600-1800

ENGINE—RINGS

Function (top to bottom)	No. 1, oil or comp.	Compression
	No. 2, oil or comp.	Compression
	No. 3, oil or comp.	Oil
	No. 4, oil or comp.	None
Compression	Description - material, type, coating, etc.	Cast alloy iron, inside bevel Upper - Flash chrome plate Lower - Wear resistant coating
	Width	.0775-.0780 Upper; .0770-.0780 Lower
	Gap	.010-.020
Oil	Description - material, type, coating, etc.	Multi-piece (2 rails and one spacer expander) Spacer expander - Steel Rails - Stainless steel, chrome plated O. D.
	Width	.1840 - .1880 (assembled)
	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	None
		In rod or piston
	Material	-
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.)		20.80	20.00
Length (center to center)		5,699 - 5,701	
Bearing	Material & Type	Steel backed babbitt or Copper lead alloy	
	Overall length	.807	
	Clearance (limits)	.0007-.0027	
	End play	.009 - .013	

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MAKE OF CAR	CHEVROLET	MODEL YEAR	1964	DATE ISSUED	9-23-63	REVISED	(*)12-2
MODEL	230 Cu. In. L-6				283 Cu. In. V-8		
	1100-1300-1500-1700				1200-1400-1600-1800		

ENGINE—CRANKSHAFT

Material	Cast nodular iron	Cast nodular iron or forged steel	
Vibration damper type	Rubber mounted inertia	None	
End thrust taken by bearing (No.)	7	5	
Crankshaft end play	.002 - .006		
Main bearing	Material & type		
	Steel-backed babbitt or Copper lead alloy		
	Clearance		
	.0003-.0029		
	Journal dia. and bearing overall length	No. 1	2.3004-.752
		No. 2	2.3004-.752
		No. 3	2.3004-.752
		No. 4	2.3004-.752
No. 5		2.3004-.752	2.3004 x 1.177
No. 6		2.3004-.752	None
No. 7		2.3004-.760	None
Dir. & amt. cyl. offset	None		
Crankpin journal diameter	1.999-2.000		

ENGINE—CAMSHAFT

Location	Above & to right of crankshaft	In block above crankshaft	
Material	Cast alloy iron		
Bearings	Material		
	Steel - backed babbitt		
	Number	4	5
	Gear or chain	Gear	Chain
	Crankshaft gear or sprocket material	Steel	Steel sprocket
Type of Drive	Camshaft gear or sprocket material		
	Bakelite and fabric composition with steel hub		
	Cast alloy iron		
	Timing chain	No. of links	None	46
Width		None	.875
Pitch		None	.500

ENGINE—VALVE SYSTEM

Hydraulic lifters (Std, opt, NA)	Standard	
Valve rotator, type (intake, exhaust)	None	
Rocker ratio	1.75:1	1.5:1
Operating tappet clearance (indicate hot or cold)	Intake	Zero
	Exhaust	Zero
Timing marks on flywheel, damper, other	Harmonic Balancer	Crankshaft Pulley Hub

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MAKE OF CAR **CHEVROLET** MODEL YEAR **1964** DATE ISSUED **9-23-63** REVISED ^(*)

	230 Cu. In. L-6	283 Cu. In. V-8
MODEL	1100-1300-1500-1700	1200-1400-1600-1800

ENGINE—VALVE SYSTEM (cont.)

Timing *	Intake	Opens (°BTC)	34°	32° 30'
		Closes (°ABC)	86°	87° 30'
		Duration - deg.	300°	300°
	Exhaust	Opens (°BBC)	68°	74° 30'
		Closes (°ATC)	52°	45° 30'
		Duration - deg.	300°	300°
	Valve opening overlap		86°	78°
Intake	Material		Carbon Steel	
	Overall length		4.902 - 4.922	
	Actual overall head dia.		1.715 - 1.725	
	Angle of seat & face		46° (seat) - 45° (face)	
	Seat insert material		None	
	Stem diameter		.3404 - .3417	
	Stem to guide clearance		.0010 - .0033	
	Lift (@ zero lash)		.3350	.3987
	Outer spring press. and length	Valve closed (lb. @ in.)	84-92 @ 1.66	78-86 @ 1.66
		Valve open (lb. @ in.)	166-176 @ 1.33	170-180 @ 1.26
	Inner spring press. and length	Valve closed (lb. @ in.)	None	Spring Damper
		Valve open (lb. @ in.)	None	Spring Damper
	Exhaust	Material		High Alloy Steel
Overall length		4.913 - 4.933		
Actual overall head dia.		1.495 - 1.505		
Angle of seat & face		46° (seat) - 45° (face)		
Seat insert material		None		
Stem diameter		.3410 - .3417		
Stem to guide clearance		.0010 - .0027		
Lift (@ zero lash)		.3350	.3987	
Outer spring press. and length		Valve closed (lb. @ in.)	84-92 @ 1.66	78-86 @ 1.66
		Valve open (lb. @ in.)	166-176 @ 1.33	170-180 @ 1.26
Inner spring press. and length		Valve closed (lb. @ in.)	None	Spring Damper
		Valve open (lb. @ in.)	None	Spring Damper

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	Nozzle
	Cylinder walls	Conn. Rod Bearing Throw Off Pressure, Jet Cross Sprayed

* - Including Ramps

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AMA Specifications – Passenger Car

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MAKE OF CAR	CHEVROLET	MODEL YEAR	1964	DATE ISSUED	9-23-63	REVISED (e)
MODEL	230 Cu. In. L-6			283 Cu. In. V-8		
	1100-1300-1500-1700			1200-1400-1600-1800		

ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Gear	
Normal oil pressure (lb. @ engine rpm)	30-45 PSI @ 1500 RPM	
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)	Complete	Element
Capacity of crankcase, less filter-refill (qt.)	4.0	
Oil grade recommended (SAE viscosity and temperature range)	32° F and above -----	SAE 20W, SAE 20, SAE 10W
	0° F and above -----	SAE 10W, SAE 10W-30
	Below 0° F -----	SAE 5W, SAE 5W-20
Engine Service Requirement (AMA, MAS, etc.)	MS or DG	

ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)	Single	Single with crossover
Muffler No. & type (reverse flow, straight thru, separate resonator)	One; Reverse Flow	
Exhaust pipe dia. (O.D. & wall thickness)	Branch	2.00 x .067 - .083
	Main	2.00 x .057 - .069
Tail pipe diameter (O.D. & wall thickness)	1.875 x .062 - .076	

ENGINE—CRANKCASE VENTILATION SYSTEM

Type (ventilates to atmos., induction system, other)	Standard	Ventilates to Induction System	
	Optional		
Control unit	Make and model		
	Location	Top rear of rocker cover	At rear of carburetor
	Energy source (manifold vacuum, carburetor air stream, other)	Manifold Vacuum	
Complete system	Control method (variable orifice, fixed orifice, other)	Variable	
	Discharges (to intake manifold, carb. air intake, air cleaner intake, other)	Intake Manifold	
	Air inlet (breather cap, carburetor air stream, other)	Breather Cap	
		Check ...	

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 12-2-63

MODEL	230 Cu. In. L-6 1100-1300-1500-1700	283 Cu. In. V-8 1200-1400-1600-1800
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ENGINE—FUEL SYSTEM

(See Supplement to Page 8 for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.		Carburetor	
Fuel Tank	Capacity (gals.)	20 (19 on Station Wagons)	
	Filler location	Left rear quarter panel	
Fuel Pump	Type (elec. or mech.)	Mechanical	
	Locations	Lower right front of engine	
	Pressure range	5.00 - 6.50 PSI	5.25 - 6.50 PSI
Vacuum booster (std., optional, none)		None	
Fuel Filter	Type	Fine mesh plastic strainer in gasoline tank & sintered bronze filter in carburetor	
	Locations		
Carburetor	Choke type	Automatic	
	Intake manifold heat control (exhaust or water)	Exhaust	
	Air chr. type	Standard Oil wetted polyurethane	Paper element
	Optional	Oil Bath Type	—

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors		No. Used and Type	Barrel Size
			Make	Model		
1100-1300 1500-1700	230	Synchronesh Powerglide	Rochester	7023003	One; Single Barrel, Down- draft	1.56
			Rochester	7023000		
1200-1400 1600-1800	283	Synchronesh Powerglide	Rochester	7024101	One; Two Barrel Down- draft	1.44
			Rochester	7024106 ●		

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (e)

	230 Cu. In. L-6	283 Cu. In. V-8
MODEL	1100-1300-1500-1700	1200-1400-1600-1800

ENGINE—COOLING SYSTEM

Type system (pressure, pressure vented, atmospheric, other)		Pressure	
Radiator cap relief valve pressure		13 PSI ± 1	
Circulation thermostat	Type (choke, bypass)	Choke	
	Starts to open at (°F)	177° - 183° F	
Water pump	Type (centrifugal, other)	Centrifugal	
	GPM @ 1000 pump rpm	60 GPM @ 4400 RPM*	53 GPM @ 4200 RPM*
	Number of pumps	One	
	Drive (V-belt, other)	V-Belt	
	Bearing type	Permanently lubricated double roll ball	
By-pass recirculation type (Internal, external)		Internal	
Radiator core type (cellular, tube and fin, other)		Tube on center	
Cooling system capacity	With heater (qt.)	12	17
	Without heater (qt.)	11	16
	Opt. equipment—specify (qt.)	12	18
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	- - -
Fan	Number of blades & Spacing		4, Staggered
	Diameter		17.62
	Ratio—fan to crankshaft rev.		.949:1
	Fan cutout type	None	5-blade 18" fan used with air/cc
	Bearing type		Double Row Ball
*Drive belts (Indicate belt used by letter)	Fan	A	D
	Generator	A	D
	Water Pump	A	D
	Power Steering	B	E
	Air Conditioning	C	F

* Drive Belt Dimensions	A	B	C	D	E	F
Angle of V	38° - 42°					
Nominal length (SAE)	39.00	49.50	54.75	53.25	41.50	57.50
Width	.380 ± .005					

* - Actual flow through the engine.

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MAKE OF CAR: CHEVROLET	MODEL YEAR: 1964	DATE ISSUED: 9-23-63	REVISED: (*)
MODEL:	230 Cu. In. L-6	283 Cu. In. V-8	
	1100-1300-1500-1700	1200-1400-1600-1800	

ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model	Delco #1983504		
	Voltage Rtg. & Total Plates	12 Volt, 54 Plate		
	SAE Designation & Amp Hr. Rtg	44 Amp/Hr. @ 20 Hr. Rate		
	Location	Right front engine compartment		
	Terminal grounded	Negative		
Generator	Make	Delco-Remy		
	Model	#1100668		
	Type	Diode rectified		
	Ratio—Gen. to Cr/s rev.	2.46:1		
	Gen. cut-in (hot)—engine rpm			
Regulator	Make	Delco-Remy		
	Model	#1119515		
	Type	Vibrator		
	Cutout relay	Closing voltage @ generator rpm	None	
		Reverse current to open		
	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	#1107259	#1107247	
	Rotation (drive end view)	Clockwise		
	Engine cranking speed			
	Test conditions	Engine at Operating Temperature		
	Lock test	Amps		
		Volts		
		Torque (lb. ft.)		
No load test	Amps	49-76		
	Volts	10.6		
	RPM (min.)	6200-9400		
	Switch (solenoid, manual)	Solenoid		
Motor control	Starting procedure	<p>SYNCHROMESH - Place gearshift in neutral and depress clutch to floor.</p> <p>POWERGLIDE - Place control lever in N or P position.</p> <p>INITIAL START - Press accelerator pedal to floor once to set automatic choke, then release. Turn ignitor to START & release as soon as engine starts</p>		

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AMA Specifications – Passenger Car

Page

MAKE OF CAR CHEVROLET **MODEL YEAR** 1964 **DATE ISSUED** 9-23-63 **REVISED** (*)12-2

	230 Cu. In. L-6	283 Cu. In. V-8
MODEL	1100-1300-1500-1700	1200-1400-1600-1800

ELECTRICAL—STARTING SYSTEM (cont.)

Motor Drive	Engagement type	Positive Shift Solenoid		
	Pinion meshes (front, rear)	Rear		
	Number of teeth	Pinion	9	
		Flywheel	153	
	Flywheel tooth face width	.4070		

ELECTRICAL—IGNITION SYSTEM

Coil	Make	Delco-Remy		
	Model	#1115184	#1115115	
	Amps	Engine stopped	4.0	
Engine idling		1.8		
Distributor	Make	Delco-Remy		
	Model	#1110280	#1111015	
	Cent'fgal adv. in crankshaft degrees @ engine rpm (nominal)	Start (rpm)	800	
		Intermediate points deg. @ rpm		
		Max deg. @ rpm	30° @ 3000	30° @ 4000
	Vacuum adv. in crankshaft degrees @ in. Hg. (nominal)	Start (in Hg)	6	8
		Intermediate points, deg @ in Hg		
		Max. deg. in. Hg.	● 21 @ 14.5	15 @ 15.5
		Breaker gap (in.)	.019	
		Cam angle (deg.)	31° - 34°	28° - 32°
	Breaker arm tension (oz.)	19 - 23 oz.		
Timing	Crankshaft deg. @ rpm.	4° ± BTC @ 450-500	3° - 5° BTC @ 550	
	Mark location	Harmonic Balancer	Crankshaft Pulley Hub	
	Cylinder numbering system (see page 2)	Front to Rear	1-2-3-4-5-6	Left Bank 1-3-5-7 Right Bank 2-4-6-8
		Firing order (see page 2)	1-5-3-6-2-4	1-8-4-3-6-5-7-2
Spark Plug	Make and model	AC 46N (Long reach)		
	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	Neoprene		

ELECTRICAL—SUPPRESSION

Locations & type	Non-metallic high tension ignition cables
------------------	---

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 12-2-63 ●

MODEL 11-1800
 230 In.³ L-6
 283 In.³ V-8

ELECTRICAL—INSTRUMENTS AND SWITCHES

Speed-ometer	Make	AC
	Trip odometer (yes, no)	NO
Charge indicator—type		Tell-tale lamp
Temperature indicator—type		Tell - tale lamps (cold, green; hot, red)
Oil pressure indicator—type		Tell-tale lamp
Fuel Indicator—type		Electric, gauge
Other		Parking brake flasher (a)
Ignition switch	Identify positions in order and circuits controlled	2nd position CCW from vertical - ACC (accessories) 1st position CCW from vertical - LOCK (off, locked) Vertical - OFF (Unlocked) 1st position CW from vertical - ON (ignition, batt., access.) 2nd position CW from vertical - START (ignition, batt., accessories, starter: spring return to ON)
	Provision for Illumination	1445 Lamp
	Location	Instru. panel to right of steering column
Main light- ing switch	Identify positions and lamps controlled	Fully depressed - off 1st notch - Instru. panel, parking, tail and license lamps 2nd notch - Instru. panel, head, tail and license lamps CW rotation of knob - dim and turn off instru. panel lamps CCW rotation of knob - turn on and brighten instru. panel lamps; Full CCW rotation - turn on dome lamp and/or courtesy lamps ●
Other light switches	Locations and lamps controlled	Toe panel - Head lamp dimmer Glove compartment - Glove comp. lamp (b) Front door hinge pillar - Dome and courtesy lamps (c) Steering column - Turn signal lamps Under instru. panel - Stop lamps Steering mast jacket - Back-up lamps (a) Console compartment - Console compartment light (d)
Other switches	Locations and devices controlled	Accelerator linkage - Overdrive kick-down (e) Instru. panel to right of steering column - Heater blower Doors or qtr. trim panels - Power windows (e) Instru. panel, center - Radio (e) Instru. panel, left of steering column - W/S wiper Instru. panel, left of steering column - Tailgate window (h) Steering column - Trans. Neu. Saf. Sw. (e) Front seat lower panel, L.H. side - Power seat (j) Under instru. panel to left of steering column - Power top (k) ● Instru. panel, left of strng column - CRUISE CONTROL
Windshield wiper	Make	Delco
	Type	Electric, Single-speed (f)
	Vacuum booster provision	None
	Washer provision	None (g)
Horn	Type	Vibrator
	Number used	2
	Amp draw (each)	8.00-11.0 @ 12.5 V

- (j) Std. on 13, 14, 17 and 1800 (g) Optional dealer installed access.
 (b) Std. on 13, 14, 15, 16, 17 and 1800 (h) Standard on 15, 16, 17 and 1845
 (c) Std. on 13 thru 1800 except instru. panel courtesy, opt. except convertibles; door jam switches std. except 11 and 1200. (i) Standard on 15, 16, 17 and 1845
 (d) Std on 13 and 1400 (j) Optional on 13, 14, 15, 16, 17 and 1800
 (e) Optional equipment (k) Standard on 13, 14, 17 and 1867
 (f) Optional electric two-speed including washer

AMA Specifications – Passenger Car

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MAKE OF CAR CHEVROLET **MODEL YEAR** 1964 **DATE ISSUED** 9-23-63 **REVISED** ^(*)

MODEL 11-1800 **L-6 230 IN.³ ENGINE**

V-8 283 IN.³ ENGINE

ELECTRICAL—LAMP BULBS

Give quantity used and trade number, e.g., Headlamp 2-5400 S, dual headlight 2-4001, 2-4002.

Headlamps & arrangement		Dual, Horizontal: Outer, 2-4002; Inner, 2-4001
Headlamp beam indicator		1-1895
Parking		2-1157
Tail		Except Wagons, 2 or 4-1157 (a); Wagons, 2-1157
Stop		Except Wagons, 2 or 4-1157 (b); Wagons, 2-1157
Direction signal	Front	2-1157
	Rear	Except Wagons, 2 or 4-1157; Wagons, 2-1157
	Indicator	2-1445
License Plate		1-1155
Oil pressure indicator		1-1895
Charge indicator		1-1895
Instrument		4-1895
Clock		(Instrument)
Radio		1-1893 Optional

Indicate also whether the following lamp assemblies are standard equipment, optional, or NA.

Ignition lock	1-1445	Reg. Prod
Back up	2-1156	(c)
Dome	Roof Center, 1-211; Rear Qtr., 2-90; Side Rail 2-90;	Reg. Prod
Glove compartment	Instr. Panel, 1-1895 (d); Seat Separator, 1-1816	Reg. Prod
Priory. brake signal	1-257	(c)
Luggage compartment	(Except Wagons) 1-1003 Except when DIA 1-93	(c)
Underhood	1-93	
Courtesy	Instru. Panel, 2-631 (e); Rear Qtr., 1-90 Reg. Prod; Seat Sep., 1-211 R	
Ash Tray	1-1445	Opt. (P)
Spot Lamps	Inside Operated, 1-4405; Portable, 1-4416	Optional
Traffic Hazard Indicator	1-1445	Optional
Compass	1-53	Optional
Tachometer	1-53	Optional

- (a) Two "tail only" on 15-1600 (inboard lamps); trade No. 1155.
- (b) Two on 11-1200, and 15-1600; four on 13-1400, and 17-1800.
- (c) Optional for 11-1200, and 15-1600.
- (d) Optional for 11-1200.
- (e) Optional except convertible.

Regular Production Items Continued

Heater Controls	1-1895
Fuel Gage	1-1895
Temp. Indicators	2-1895
Auto. Trans. Dial Indicator	1-1445

AMA Specifications - Passenger Car

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MODEL 11-1800 230 in.³ L-6
283 in.³ V-8

ELECTRICAL—FUSE & CIRCUIT BREAKER DATA

Fuses in Fuse Panel unless otherwise indicated

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 lamp SFE-10 (a), Direction indicator same as (a).

Headlamp	15 C.B. (a)	Courtesy Lamps	-
Headlamp beam indicator	(a)	Instr. Panel	(b)
Parking lamp	(a)	Seat Separator	(b)
Tail lamp	AGC 15 (b)	Rear Qtr.	(b)
Stop lamp	(b)	Additional Dome Lamps	-
Direction indicator	AGC 3 (c)	Rear Qtr.	(b)
License plate lamp	(b)	Side Rail	(b)
Instrument lamp	(c)	Heater	AGC 10; IF A. C., AGC 30 (f)
Ignition lamp	(c)	Spotlamp	
Back up lamp	AGC 10 (d)	Inside Operated	AGC 15 (in line)
Dome lamp	(b)	Portable	(b)
Clock	(b)	Underhood Lamp	SAE 4 (in line)
Clock lamp	(Instrument lamp)	Traffic Hazard Indicator	(b)
Radio	AGC 2.5 (g)	Compass Lamp	(c)
Glove compartment lamp	(b)	Air Conditioning	
Lugg. Compt. Lamp	(b)	Blower Motor	AGC 30 (in line)
Park. Brake Alarm	(d)	Circuit	AGC 30 (f)
Heater Controls Lamp	(c)	Defogging Unit	AGC 5 (d)
Fuel Gage Lamp	(c)	W/S Wiper (Two-Speed)	14 C.B. (switch)
W/S Wiper (Single Speed)	SAE 20 (e)		(e)
Fuel Gage	(d)	Tachometer	
Cig. Lighter	(b)	Lamp	(c)
Oil, Temp. & Gen. Indicators	(d)	Circuit	(d)
Auto. Trans. Ind. Dial	(c)	Cruise Control	(d)
Ash Tray Lamp	(c)		

ELECTRICAL—LOCATION OF OUTSIDE LAMPS

		Sedans	Coupes	Convertible	Wagon	
Height above ground to center of bulb	Tail	Lowest	23.4	23.7	22.7	
		Highest	23.4	23.7	22.7	
	Stop		23.4	23.7	22.7	
		Backup	23.4	23.7	22.7	
	License, rear		19.3	19.6	17.1	
	Directional	Front	16.9	17.2	17.5	
		Rear	23.4	23.7	22.7	
	Headlamp	Inside	27.6	27.6	27.9	
		Outside*	27.6	27.6	27.9	
	Distance from C/L of car to center of bulb	Tail	Inside		17.3 Impala, 23.9 Biscayne, Bel Air	
Outside			30.6		32.1	
Stop				17.3 Impala, 23.9 Biscayne, Bel Air		
Backup				23.9		
License, rear				On Centerline		
Directional		Front			27.4	
		Rear			17.3 Impala, 23.9 Biscayne, Bel Air	
Headlamp		Inside			23.5	
		Outside*			63.2	

* If single headlamps are used enter here.

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SUPPLEMENTARY INFORMATION

MODEL 230 Cu. In. L-6, 1100-1300-1500-1700; 283 Cu. In. V-8, 1200-1400-1600-1

Power Seats - - - - - 40 C. B.
Power Windows - - - - - 40 C. B.
Folding Top Motor - - - - - 40 C. B.
Tailgate Motor - - - - - 40 C. B.
Overdrive Solenoid AGC 15 - - In Line

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MODEL 11-1800 L-6 230 In.³ Engine V-8 283 In.³ Engine

DRIVE UNITS—CLUTCH (Manual Transmission)

Make & type		Chevrolet, Single Dry Disk	
Type pressure plate springs		Diaphragm	
Effective plate pressure (lb.)		Reg. Prod. -15-1800; HD-19-2200	1700-1950 •
No. of clutch driven discs		One with two friction surfaces	
Clutch facing	Material	Woven asbestos except HD clutch-front woven, rear molded	
	Outside & inside dia.	Reg. Prod. -9.12, 6.12; HD 10.0, 6.0	10.0, 6.5
	Total eff. area (sq.in.)	Reg. Prod. -71.8; HD-100.5	90.7
	Thickness	.135 ea., unloaded	
	Engagement cushioning method	Flat spring steel between facings	
Release bearing	Type & method of lubrication	Single row ball, packed and sealed	
Torsional damping	Methods: springs, friction material	Coil Springs	

DRIVE UNITS—TRANSMISSIONS

Manual (std. or opt.)	3-Speed Standard
Manual with overdrive (std. or opt.)	Optional
Automatic (std. or opt.)	Optional

DRIVE UNITS—MANUAL TRANSMISSION

Number of forward speeds		3		
Transmission ratios	In first	2.94		
	In second	1.68		
	In third	1.0		
	In fourth	--		
	In reverse	2.94		
Synchronous meshing, specify gears		2nd and 3rd		
Shift lever location		Steering Column		
Lubricant	Capacity (pt.)	3		
	Type recommended	Meeting Military Specification Mil-L-2105-B		
	SAE viscosity number	Summer	SAE 80	
		Winter	SAE 80	
Extreme cold		SAE 80		

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MODEL 11-1800 L-6 230 IN.³ ENGINE V-8 283 IN.³ ENGINE

DRIVE UNITS—MANUAL TRANSMISSION WITH OVERDRIVE

For transmission data see manual transmission section

Overdrive	Type (planetary or other)		Planetary	
	Manual lockout (yes, no)		Yes	
	Downshift accelerator control (yes, no)		Yes	
	Minimum cut-in speed		Output Shaft RPM: Acceleration, 1440; Deceleration, 110	
Gear ratio		0.7:1		
Lubricant	Capacity (pt.) (Overdrive only)		1	
	Separate filler (yes, no)		No	
	Type recommended		Meeting Military Specification Mil-L-2105-B	
	SAE viscosity number	Summer	SAE 80	
		Winter	SAE 80	
Ext. cold		SAE 80		

DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name		Powerglide	
Type describe		Torque Converter with Planetary Gears	
Method of Selection (Lever, Push Button or other)		Lever—(Floor mounted on 13-1400 models, steering column mounted for all others)	
Selector Pattern		P-R-N-D-L	
List gear ratios Selector Pattern and indicate which are used in each selector position		D- 1.82:1 and 1:1 L- 1.82:1 R- 1.82:1	
Max. upshift speeds—drive range		54	59
Max. kickdown speeds—drive range		51	56
Torque converter	Number of elements		3
	Max. ratio at stall		2.10
	Type of cooling (air, water)		None	Water
Lubricant	Capacity—refill (pt.)		3
	Type recommended		Type A, Suffix A
Special transmission features			

DRIVE UNITS—PROPELLER SHAFT

Number used		2	
Type (exposed, torque tube)		Tubular, Exposed	
Outer diameter x length* x wall thickness	Manual transmission	Front	2 x 30.1 x .10
		Rear	2 x 35.0 x .10
	Overdrive transmission	Front	2 x 25.0 x .10
		Rear	2 x 35.0 x .10
	Automatic transmission	Front	2 x 27.2 x .10
		Rear	2 x 35.0 x .10

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

(Continued)

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MODEL 11-1800 L-6 230 IN.³ ENGINE V-8 283 IN.³ ENGINE

DRIVE UNITS—PROPELLER SHAFT (cont.)

Inter-mediate bearing	Type (plain, anti-friction)	Single Row Ball, Sealed
	Lubrication (fitting, prepack)	Prepack
Universal joints	Make	Chevrolet
	Number used	3
	Type (ball and trunion, cross, other)	Cross
	Bearing	Type (plain, anti-friction)	Anti-Friction
Lubric. (fitting, prepack)		Prepack
Drive taken through (torque tube or arms, springs)		Control arms
Torque taken through (torque tube or arms, springs)		Control arms

DRIVE UNITS—REAR AXLE

Description (see instructions)	Reg. Production - Semi-Floating, Overhung Pinion Gear		
Limited Slip differential, type	Reg. Production with Dual Disk Clutches		
Drive Pinion Offset	1.5		
No. of differential pinions	Reg. Production - 2; Limited Slip - 4		
Gear ratios (Std. equip.)	Manual transmission	Sedans and Coupes - 3.08:1 1200 and 1600 Sedans - 3.08:1 Convertibles - 3.36:1 Balance - 3.36:1 Sta. Wgn. - 3.55:1	
	Overdrive transmission	3.70:1	
	Automatic transmission	Same as Manual	
Ring gear O.D. (std. ratio)	8.375		
Pinion adjustment (shim, other)	Shim		
Pinion bearing adj. (shim, other)	None		
Wheel bearing type	Single Row Ball, Sealed		
Lubricant	Capacity (pt.)	4	
	Type recommended	Military Specification Mil-L-2105 B	
	SAE viscosity number	Summer	SAE 80
		Winter	SAE 80
		Extreme cold	SAE 80

REAR AXLE RATIO TOOTH COMBINATIONS

(See page 3 for axle ratio usage)

Axle ratio		3.08:1	3.36:1	3.55:1	3.70:1
No. of teeth	Pinion	12	11	9	10
	Ring gear	37		32	37

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MODEL 11-1800 L-6 230 IN.³ ENGINE
V-8 283 IN.³ ENGINE

DRIVE UNITS—WHEELS

Type & material		Short Spoke Disk, Steel
Rim (size and flange type)	Std.	14 x 5J Except Wagons 14 x 6 JK
	Opt.	14 x 6JK; 15 x 5K
Attachment	Type (bolt or stud)	Stud
	Circle diameter	4.75
	Number and size	5 Hex Nuts, 7/16 - 20 UNF 2B

DRIVE UNITS—TIRES - Tubeless Unless Otherwise Indicated

Standard (List option below)	Size & ply	7.00 x 14-4PR Except Conv., 7.50 x 14-4PR and Wagons 8.00 x 14-4PR
	Type - Nylon, etc.	Blackwall, Rayon
Rev/mile at 50 mph.		7.00 x 14-817; 7.50 x 14-800; 8.00 x 14-785
Inflation press.(cold)	Front	24
	Rear	24 Except Wagons 28
Optional tires - size and ply		6.70 x 15-4PR (*), Hyway, Nylon, Blackwall, Tube or Tubeless.
		6.70 x 15-4PR (*), Hyway, Rayon, Blackwall, Tube or Tubeless.
		6.70 x 15-6PR (**), Hyway, Rayon, Blackwall.
		6.70 x 15-4PR (*), On-Off, Nylon, Blackwall, Tube. See foot note

BRAKES—SERVICE

		Regular Production	Metallic
Type (duo-servo, disc, balanced, etc.)		Duo-Servo, 4 Wheel Hydraulic, Reverse Self-Adjusting	
Self adjusting (std., opt., N.A.)		Regular Production	
Hydraulic system type (single, dual, etc.)		Single	
Power brake make & type (remote, integral, etc.)		Bendix or Delco Moraine Vacuum Power Unit Assisting Master Cylinder; Integral	
Effective area (sq. in.)*		186.2	145.2
Gross lining area (sq. in.)**		200.4	145.2
Swept drum area (sq. in.)***		328.0	
Percent brake effectiveness—front		58.5	
Drum	Front	11.0	
	Rear	11.0	
Type and material		Composite; Rim-Cast Iron; Web-Steel	
Wheel cylinder bore	Front	1.1875	
	Rear	1.00	
Master cylinder bore		1.00	.875
Available pedal travel		6.38	
Line pressure at 100 lb. pedal load		750	980
Shoe clearance adjustment		Self-Adjusting	

(Continued)

* Excludes rivet holes, grooves, chamfers, etc.

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

*** Total swept areas for four brakes

Widest lining contact width for each brake x its drum circumference.

- (a) 7.00 x 14-4PR, Hyway, Rayon, Whitewall.
 7.10 x 15-4PR (*), Hyway, Rayon, Blackwall; 7.10 x 15-4PR (*), Hyway, Nylon, Blackwall
 7.50 x 14-4PR (*), Hyway, Nylon, Blackwall; 7.50 x 14-4PR(*), Hyway, Nylon, Whitewall
 7.50 x 14-4PR, Hyway, Rayon, Whitewall; 7.50 x 14-6PR (**), Hyway, Rayon, Blackwall
 7.50 x 14-4PR, Hyway, Rayon, Blackwall;
 8.00 x 14-4PR, Hyway, Rayon, Blackwall; 8.00 x 14-4PR, Hyway, Rayon, Whitewall;
 8.00 x 14-4PR (*), Hyway, Nylon, Blackwall.

* - Items with "*" 4 ply construction.

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MODEL 11-1800

L-6 230 IN.³ ENGINE

V-8 283 IN.³ ENGINE

BRAKES—SERVICE (cont.)			Regular Production	Metallic Welded	
Bonded or riveted			Bonded		
Brake Lining	Front Shoe	Material	Molded Asbestos		
		Size (length x width x thickness)	Front wheel	9.34 x 2.75 x .168	1.64 x 1.37 x .175
			Rear wheel	9.34 x 2.00 x .168	2.00 x 1.00 x .175
	Segments per shoe		1	6	
	Rear Shoe	Material	Molded Asbestos		Sintered Iron
		Size (length x width x thickness)	Front wheel	11.75 x 2.75 x .168	1.64 x 1.37 x .295
Rear wheel			11.75 x 2.00 x .168	2.00 x 1.00 x .295	
Segments per shoe		1	Front - 12; Rear - 10		

BRAKES—PARKING

Type of control	Foot pedal for apply, "T" handled release	
Location of control	Left of Steering Column	
Operates on	Rear Service Brakes	
If sepa- rate from service brakes	Type (internal or external)	--
	Drum diameter	--
	Lining size (length x width x thickness)	--

FRAME or UNITIZED CONSTRUCTION

Type and description All welded "X" frame with box girder side rails, box section front suspension crossmember, channel section rear crossmember and reinforced box girder center beam. Special crossmember for mounting rear suspension upper control arms.

SUSPENSION—GENERAL (See Supplemental page 19 for details on Air Suspension)*

Provision for car leveling	Front Stabilizer Bar	
Provision for brake dip control	Mounting Angle of Front Upper Control Arms	
Provision for acc. squat control	Geometry of Rear Suspension Control Arms	
Special provisions for car jacking	None	
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 type with coil spring and concentric shock absorber, and spherically-jointed steering knuckle for each wheel.

* Air Suspension:
Air spring type
Compressor data
type
make
drive ratio

Normal operating pressures
spring rates
leveling data

(Continued)

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MODEL 11-1800 L-6 230 IN.³ ENGINE V-8 283 IN.³ ENGINE

SUSPENSION FRONT (cont.)

Spring	Type	Coil, Right Hand Helix	
	Material	Steel Alloy	
	Size (coil design height & I.D.; bar length x dia.)	10.50 and 3.802 141.25 x .630	10.50 and 3.802 141.25 x .630
	Spring rate (lb. per in.)	275	275
	Rate at wheel (lb. per in.)	101.2	101.2
	Design load (lb. @ design height)	1790 @ 10.50	1880 @ 10.50
Stabilizer	Type (link, linkless, frameless)	Link	
	Material & bar diameter	Steel, .6875	

STEERING

Manual (std., opt., NA)		Regular Production	
Power (std., opt., NA)		Optional	
Adjustable steering wheel (tilt, swing, other)	Type and description	Tilt: Tilt achieved by.. universally-jointing steering shaft at base of steering wheel; five-inch vertical travel range	
	(std., opt., NA)	Optional with power steering except with 3-Speed	
Wheel diameter	Manual	16.5	
	Power	16.5	
Turning diameter	Outside front	Wall to wall (l. & r.)	44.1
		Curb to curb (l. & r.)	40.8
	Inside rear	Wall to wall (l. & r.)	24.2
		Curb to curb (l. & r.)	24.5
Outside wheel angle with inside wheel at 20°		17.87°	

Manual	Gear	Type	Semi-Reversible, Recirculating Ball Nut		
		Make	Saginaw		
		Ratios	Gear	24.0:1	
			Overall	28.0:1	
No. wheel turns		5.8 (Lock to Lock)			
Power	Type (coaxial, linkage, etc.)		Linkage with Hydraulically operated cylinder		
	Make		Saginaw		
	Gear	Type	Same as Manual		
		Ratios	Gear	20.0:1	
			Overall	24.0:1	
	Pump driven by		Crankshaft Pulley		
	Number wheel turns		5.06 (Lock to Lock)		
Linkage	Type		Relay		
	Location (front or rear of wheels, other)		Front		
	Drag link (trans. or longit.)		None		
	Tie rods (one or two)		2		

(Continued)

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MODEL 11-1800 L-6 230 IN.³ ENGINE V-8 283 IN.³ ENGINE

STEERING (cont.)

Steering Axis	Inclination at camber (deg.)		6 3/4 to 7 3/4
	Bearings (type)	Upper	Ball stud with non-metallic bearing surfaces
		Lower	Ball stud with non-metallic bearing surfaces
	Thrust		None required
Wheel alignment (range and preferred)	Caster (deg.)		N 1/2 to P 1/2 (Curb)
	Camber (deg.)		0 to P 1 (Curb)
	Toe-in (outside tread-inches)		1/32 - 3/32, per wheel (Curb)
Steering spindle & joint type			Forging with pad for mounting brake cylinder, spherical
Wheel spindle	Diameter	Inner bearing	1.2493 - 1.2498
		Outer bearing	.7492 - .7497
	Thread size		3/4-20 NEF 3 (modified)
	Bearing type		Taper Roller

SUSPENSION—REAR

Type and description		4-Link; 3 Control Arms and Lateral Control Bar		
Drive and torque taken through (see page 17)		Control Arms		
Spring	Type	Coil, Right Hand Helix		
	Material	Steel Alloy		
	Size (length x width, coil design height and I.D., bar length & dia.)	9.88 and 3.638; 138.27 x .583	9.88 x 3.638; 138.27 x .583	
	Spring rate (lb. per in.)	230	230	
	Rate at wheel (lb. per in.)	108.6	108.6	
	Design load (lb. at design height)	1520 @ 9.88	1520 @ 9.88	
	Mounting insulation type		None	
	If leaf	No. of leaves	--	
		Inserts	Type and size	--
			Material	--
Shackle (comp. or tens.)		--		
Stabilizer	Type (link, linkless, frameless)	--		
	Material	--		
Track bar type			Lateral frame to rear axle	

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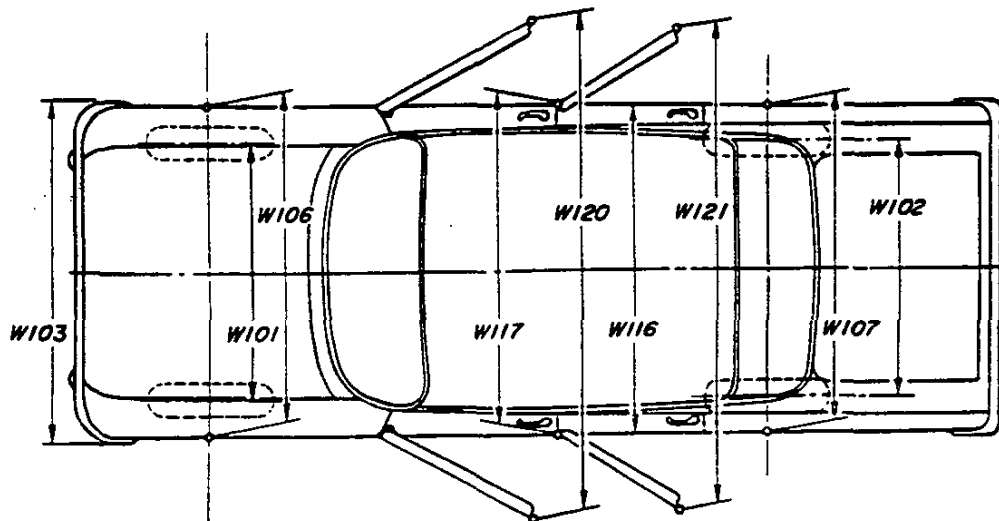
MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISION (*)

CAR AND BODY DIMENSIONS—GENERAL

Dimensions herein are those adopted by the Society of Automotive Engineers. Brief descriptions of these dimensions are listed on pages 34-36. Complete definitions are listed in section E-1 of the SAE Aeronautical - Automotive Drawing Standards. The dimensions are developed from the following basic points:

1. Body dimensions are for all body styles.
2. All interior dimensions are taken with manikin 15.0 inches outboard of car centerline unless otherwise stated.
3. All interior dimensions are measured with the front seat in the lowest and rearmost position.
4. Unless otherwise specified, all exterior height dimensions are taken with a full design load which consists of 5 passengers, 300 lbs. front, 450 lbs. rear; includes spare wheel, tire and tools, and full complement of gas, oil, water and tires to recommended pressure, etc.
5. The SAE manikin with 90th percentile leg length will be used for recording purposes.
6. The H Point is the pivot center of the manikin's torso and thigh.
7. The D Point is the point of tangency of a horizontal line and the lowest point of the manikin.
8. The Torso Line is a line parallel to the small of manikin's back and extending through the H Point.

EXTERIOR WIDTH DIMENSIONS

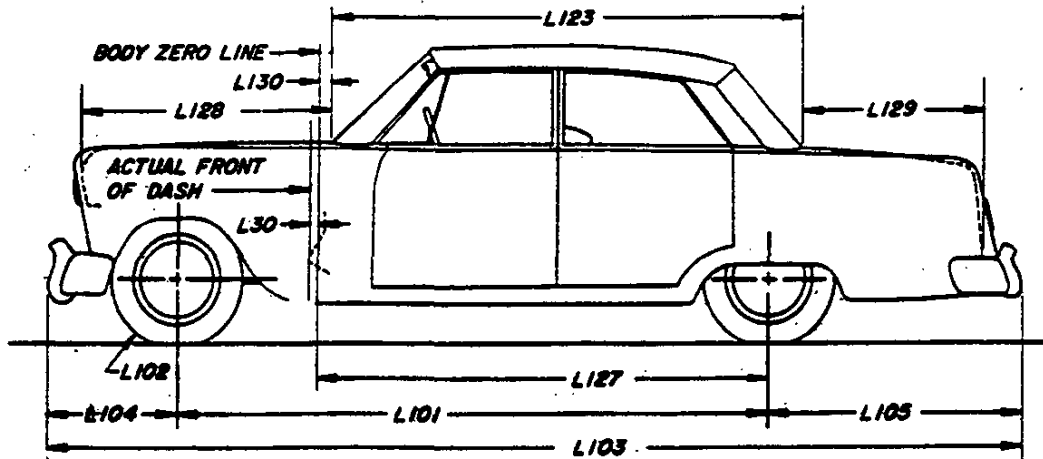


MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGONS
		2-Dr.	4-Dr.				
Tread - front	W101				60.3		61.3
Tread - rear	W102				59.3		60.3
Maximum overall car width	W103				78.1		
Maximum overall body width	W116				77.0		
Maximum body width at #2 pillar	W117	---		76.5		---	76.5
Front fender overall width	W106				76.7		
Rear fender overall width	W107				77.0		
Maximum overall car width - front doors open	W120	156.6		141.6		156.6	141.6
Maximum overall car width - rear doors open	W121	---	138.1	137.1		---	138.1

AMA Specifications – Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED(0)

EXTERIOR LENGTH DIMENSIONS

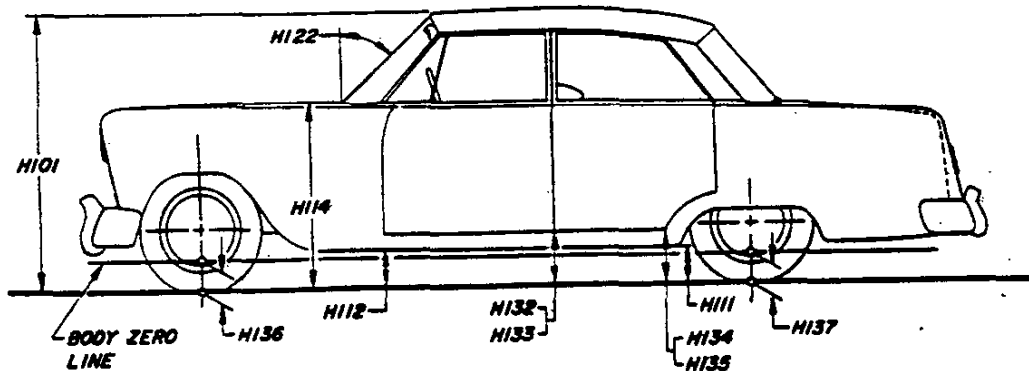


MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATIC WAGO	
		2-DR.	4-DR.					
Body zero line to actual front of dash	L30				.5			
Wheelbase	L101				119.0			
Overhang - front	L104				33.3			
Overhang - rear	L105				57.6		58.	
Overall length	L103				209.9		210.	
Hood length at car centerline	L128				51.2			
Body upper structure length at car centerline	L123	102.6		105.3	102.6	105.1	140.	
Deck length at car centerline	L129	49.2		46.5	49.2	46.8	--	
Body zero line to centerline of rear wheels	L127				100.0			
Body zero line to windshield cowl point	L130				4.8			
Tire size	L102	Refer to Page 18						

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-6 REVISED (a)

EXTERIOR HEIGHT DIMENSIONS



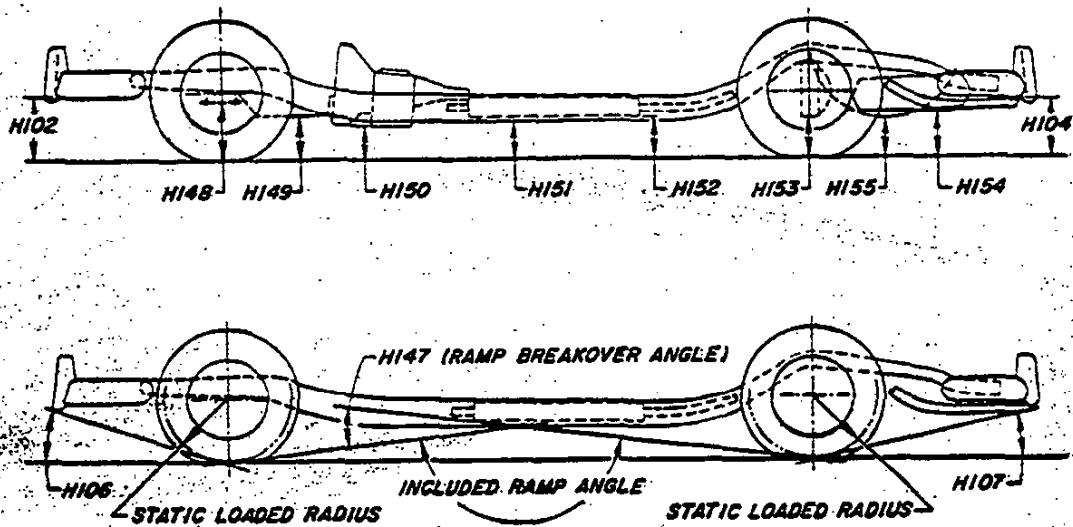
MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGON
		2-DR.	4-DR.				
Overall height	H101	56.2		54.9	55.1	55.8	56.7
Hood at rear to ground	H114	37.7				38.0	38.3
Rocker panel to ground - front	H112	8.9				9.2	9.5
Rocker panel to ground - rear	H111	8.5				8.8	9.1
Bottom of door to ground, open - front	H132	12.8	12.7			12.9	12.7
Bottom of door to ground, closed - front	H133	11.5	11.6			11.5	11.7
Bottom of door to ground, open - rear	H134	--	11.3		--	--	11.5
Bottom of door to ground, closed - rear	H135	--	11.3		--	--	11.5
Windshield slope angle	H122				55.5°		
Body zero to ground - front	H136				5.4		
Body zero to ground - rear	H137			5.4			5.0

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GROUND CLEARANCE DIMENSIONS



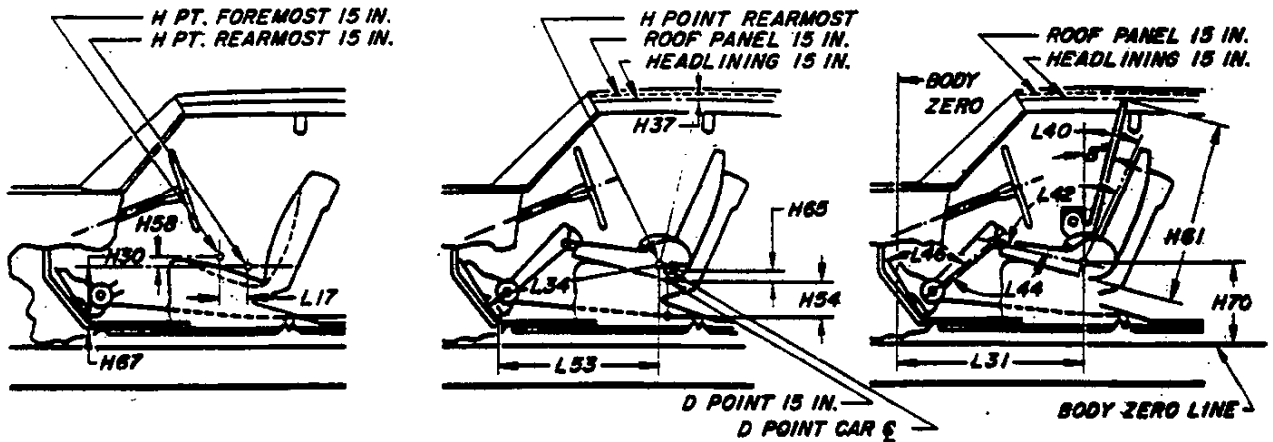
MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGON
		2-DR.	4-DR.				
Front bumper to ground	H102			12.4		12.7	13.0
Rear bumper to ground	H104			12.1		12.4	9.9
Angle of approach	H106			26°		27°	30°
Angle of departure	H107				13°		12°
Ramp breakover angle	H147			10°		13°	
Front suspension to ground	H148			7.1		7.4	7.7
Oil pan to ground	H149			6.6		6.9	7.2
Flywheel housing to ground	H150			6.4		6.7	7.0
Frame structure to ground	H151			7.1		7.4	7.7
Exhaust system to ground	H152			5.5		5.8	6.1
Rear axle differential to ground	H153			7.1		7.4	7.7
Fuel tank to ground	H154			8.0		8.3	9.3
Spare tire well to ground	H155			--		--	8.5
Minimum running ground clearance	H156			5.5		5.8	6.1

AMA Specifications—Passenger Car

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FRONT COMPARTMENT DIMENSIONS



MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE		CONVERTIBLE		STATION WAGON
		2-DR.	4-DR.		(a)	(b)	(a)	(b)	
H Point to body zero line	L31	42.5			42.0	41.8	42.0	41.8	42.5
H Point to body zero line - front	H70	NA							
Effective head room	H61	39.2		38.5	38.1	38.3	39.1	39.3	39.2
Headlining to roof height	H37			.5			—		.9
Maximum effective leg room - accelerator	L34	41.8			41.4	41.3	41.4	41.3	41.8
H Point to heel point	H30	8.6			8.4		8.6	8.4	8.6
Depressed floor covering thickness	H67	.3			.2		.3		.2
Back angle	L40	24°			26°	26°	23°	26°	25°
Hip angle	L42	96°			97°	95°	94°	95°	96°
Knee angle	L44	128°			125°	124°	125°	124°	128°
Foot angle	L46	87°			86°				88°
D Point differential, side to center	H65	.7			.5	--	.6	--	.7
D Point to tunnel	H54	2.8			2.7	--	2.7	--	2.8
H Point to accelerator floor point	L53	34.0			33.6	33.5	33.6	33.5	34.0
H Point travel	L17	4.8							
H Point rise	H58	.8			.7	.8	.7	.8	.7

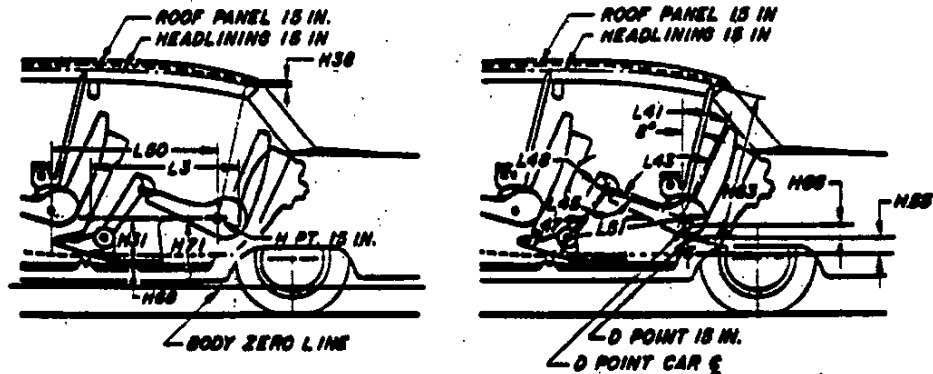
(a) Bench seat; (b) Bucket seat

AMA Specifications – Passenger Car

Page 1

MAKE OF CAR: CHEVROLET MODEL YEAR: 1964 DATE ISSUED: 9-23-63 REVISED: (a) 12-2-

REAR COMPARTMENT DIMENSIONS



MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE		CONVERTIBLE		STATION WAGON
		2-DR.	4-DR.		(a)	(b)	(a)	(b)	
H Point couple distance	L50	34.8		33.7	33.1	33.2	33.1	33.2	34.9
H Point to body zero line - rear	H71	NA							
Effective head room	H63	38.0		37.2	38.3	38.3	38.1	38.1	39.8
Headlining to roof height	H38	.8		.6	.5	--	--	--	.8
Minimum effective leg room	L51	38.3		36.8	35.0	36.1	35.0	36.1	38.6
H Point to heel point	H31	11.8		12.0	10.5	10.4	10.5	10.4	11.7
Depressed floor covering thickness	H68	.4							
Minimum knee room	L49	4.6		3.6	3.4	3.7	3.4	3.7	4.9
Rear compartment room	L3	27.8		26.8	26.1	26.1	25.7	26.2	28.4
Back angle	L41	25°			19°				23°
Hip angle	L43	92°		90°	77°	79°	77°	79°	91°
Knee angle	L45	103°	106°	99°	90°	96°	90°	96°	108°
Foot angle	L47	114°		110°	110°	109°	110°	109°	114°
D Point differential, side to center	H66	.4		.8	.8	.8	.8	.8	.5
D Point to tunnel	H55	1.7		2.2	.7	.7	.7	.7	1.7

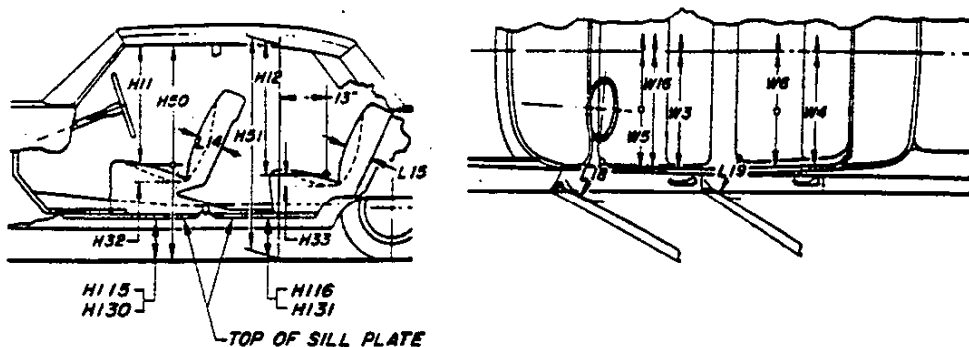
(a) Bench seat; (b) Bucket seat

Form rev. 5-

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED(a) 12-2-63

SEAT AND ENTRANCE DIMENSIONS



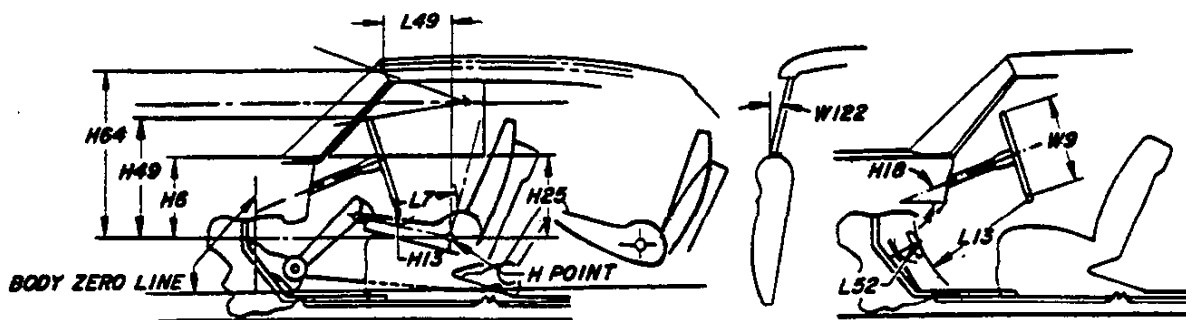
MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE		CONVERTIBLE		STATION WAGON	
		2-DR.	4-DR.		(a)	(b)	(a)	(b)		
Shoulder room - front	W3	58.8								
Hip room - front	W5	63.7		63.5	63.6					
Seat width - front	W16	57.6			27.4	57.6	27.4	57.6		
Upper body opening to ground - front	H50	50.6		50.8	49.5	49.5	49.1	49.1	50.6	
Entrance height - front	H11	30.1		30.3	29.1	29.3	28.7	28.8	30.1	
Step height - front (design load)	H115	12.7			13.0				13.3	
Step height - front (curb load)	H130	14.7			15.0				15.3	
Entrance foot clearance - front	L18	14.9			14.3	14.9	14.3	14.9		
Seat cushion deflection - front	H32	4.2		4.5	4.7	4.2	4.7	4.2	4.2	
Seat back thickness - front	L14	7.1		7.4	7.4	7.4	7.4	6.4	7.4	
Shoulder room - rear	W4	57.5		58.2	57.6		51.5		58.0	
Hip room - rear	W6	62.6		63.3	55.2		51.7		63.4	
Upper body opening to ground - rear	H51	--		50.3	--	--	--		50.5	
Entrance height - rear	H12	--	30.5	30.1	--	--	--		30.7	
Step height - rear (design load)	H116	--	12.7			---				13.3
Step height - rear (curb load)	H131	--	12.7			---				13.3
Entrance foot clearance - rear	L19	11.6	11.7	11.3	9.0	9.6	9.0	9.6	13.0	
Seat cushion deflection - rear	H33	3.8	4.3	5.1	4.3				4.4	
Seat back thickness - rear	L15	8.3		9.0	7.4	7.4	7.7	7.7	6.1	

(a) Bench seat; (b) Bucket seat

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (e)

VISION AND CONTROL DIMENSIONS



MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE		CONVERTIBLE		STATION WAGON
		2-DR.	4-DR.		(a)	(b)	(a)	(b)	
H Point to windshield bottom DLO	H6	19.0			19.2	19.0	19.2	19.0	
H Point to windshield upper DLO	H64	33.1	32.8	31.0	31.8	32.0	31.7	31.9	32.8
H Point to windshield upper DLO	L49	12.0		15.0	13.7	13.5	13.7	13.5	12.0
Belt height - front	H25	16.8			17.0	16.8	17.0	16.8	
Steering wheel center to centerline of car	W7				15.9				
Steering wheel maximum outside diameter	W9				17.0				
Steering column angle - horizontal	H18				16.5°				
H Point to top of steering wheel	H49				23.3°				
Steering wheel torso clearance	L7	11.3		10.9	10.8	10.7	10.8	11.3	
Steering wheel thigh clearance	H13	3.5		3.4		3.5			
Brake pedal knee clearance	L13				24.3				
Brake pedal to accelerator	L52				4.3				
Tumble-home	W122				11.8°				

(a) Bench seat; (b) Bucket seat

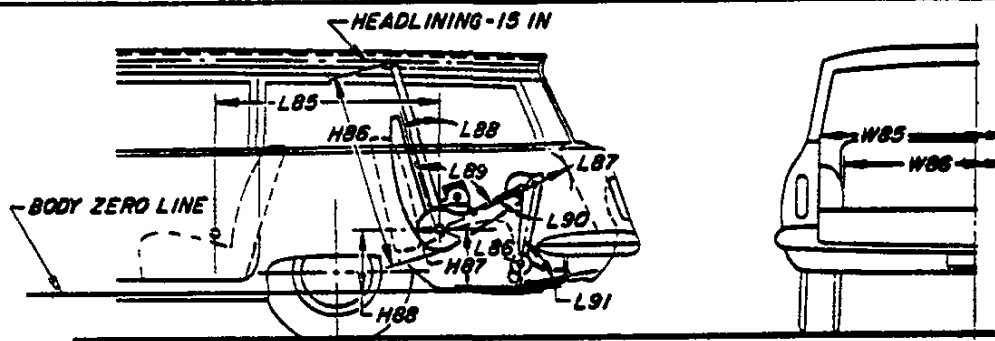
AMA Specifications - Passenger Car

MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (o)

LUGGAGE COMPARTMENT

MODEL	Ref. No.	SEDANS		SPORT SEDAN	SPORT COUPE	CONVERTIBLE	STATION WAGON	
		2-DR.	4-DR.					
Usable luggage capacity (See instructions)					19.0		--	
Liftover height	H195				22.1		--	
Position of spare tire storage		Horizontal on trunk forward shelf, left side (b)						(a)
Method of holding lid open		Torsion Bars, Counterbalanced						

THIRD SEAT DIMENSIONS



MODEL	Ref. No.	1645-1845
Seat facing direction		Rearward
Shoulder room	W85	52.0
Hip room	W86	46.7
H Point couple distance	L85	40.0
H Point to body zero line - third seat	H88	NA
Effective head room	H86	37.2
Effective leg room	L86	32.5
H Point to heel point	H87	12.3
Knee room	L87	9.5
Back angle	L88	18°
Hip angle	L89	80°
Knee angle	L90	82°
Foot angle	L91	113°

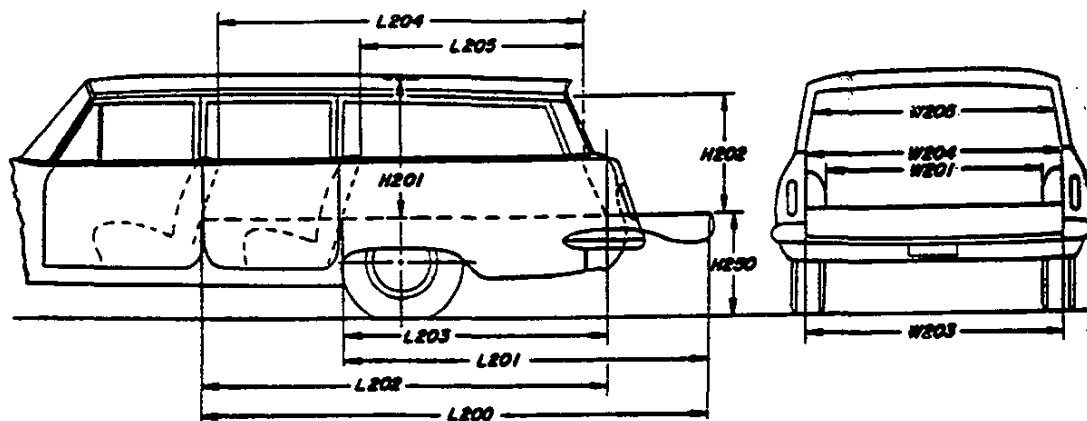
(a) Behind right rear quarter access panel; (b) Horizontal, rear right side.

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 12-2-6

STATION WAGON—CARGO SPACE DIMENSIONS



MODEL	Ref. No.	6-PASSENGER	9-PASSENGER
Floor length from back of front seat at floor level to end of lowered tail gate or floor	L200		118.7
Floor length from back of second seat at floor level to end of lowered tail gate or floor	L201		84.7
Floor length from back of front seat at floor level to inside of closed tail gate	L202		94.2
Floor length from back of second seat at floor level to inside of closed tail gate	L203		60.2
Minimum horizontal distance from top rear of front seat back to inside of tail gate at belt	L204		82.2
Minimum horizontal distance from top rear of second seat back to inside of tail gate at belt	L205		47.2
Maximum width of cargo space at floor - specify location	W200		62.2
Minimum distance between wheel houses at floor level	W201		46.1
Rear end opening width at floor	W203		56.4
Rear end opening width at belt	W204		54.7
Maximum width of rear opening above belt	W205		54.2
Maximum height - floor covering to headlining at centerline of rear axle	H201		31.5
Maximum height of rear opening - tail and lift gates open	H202		30.5
Platform height from ground to top of tail gate floor covering at rear most edge of tail gate - curb weight	H250		23.3
Rear end closure (e.g., one piece door, hinged left - sliding glass, drop tail gate)		Hinged tailgate with folding link supports and manual retractable rear window (a)	
Cargo volume index (cu. ft.) W4 x L204 x H201 1728		87.0 (b)	

(a) Electrically operated window on 9-passenger (optional on 6-passenger)

(b) Plus 10.5 cu. ft. for hidden compartment in 6-passenger, plus 5.7 cu. ft. in 9-passenger. Form Rev. 5-6

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (*)12-2-63

MODEL _____	SEDANS	SPORT	SPORT	CONVERTIBLE	STATION WAGON
	2-DR. 4-DR.	SEDAN	COUPE		

BODY - MISCELLANEOUS INFORMATION

Drs. hinged (front, rear)	Front doors	Front
	Rear doors	Front
Type of finish (lacquer, enamel, other)		Acrylic Lacquer
Hood counterbalanced (yes, no)		Yes
Hood release control (Internal, external)		External
Vehicle (Serial) No. Location		Left front body hinge pillar
Engine No. Location		On pad, front right hand side of cylinder block
Theft protection - type		Shielded ignition lock terminals, key removable in "Lock" or "On" position
Vent window control method (crank, friction pivot)	Front	Crank
	Rear	None
Seat cushion type	Front	Formed wire and foam pad
	Rear	Formed wire and foam pad
	3rd seat	F.wire & foam pad
Seat back type	Front	Formed wire and cotton
	Rear	Formed wire and cotton
	3rd seat	Formed wire & cot
Windshield glass type (i.e., curved - laminated plate)		One piece, single curved, laminated
Backlight glass type (i.e., compound curved - tempered plate, three pieces)		Compound curve, solid tempered plate (a)
Side glass type (i.e., curved - tempered plate)		Flat, safety-solid plate
Side glass exposed surface area		1346.3 | 1322.8 | 1360.6 | 1236.2 | 1115.5 | 2669.3
Windshield glass exposed surface area		1587.5 | 1405.7 | 1461.2 | 1461.2 | 1587.5
Backlight glass exposed surface area		1257.1 | 1239.9 | 941.9 | 1103.0 | 938.3
Total glass exposed surface area		4190.9 | 4167.4 | 4006.2 | 3639.3 | 3679.7 | 5200.1

BODY - CONVENIENCE EQUIPMENT (Indicate whether standard, optional or NA on each series)

Power windows	Side Windows	Optional
	Vent Windows	NA
	Backlight or tailgate	Standard on 9-passenger wagon, optional on 6-passenger
Power seats (specify type as well as availability)		6 way electric, optional
Reclining front seat back		NA
Front seat headrest		NA
Radios (specify type as well as availability)		Push Button, manual, AM-FM optional
Rear seat speaker		Optional
Power Antenna		NA
Clock		Standard on 13-14-17-1800, Optional on 11-12-15-1600
A/C Conditioner (specify type as well as availability)		All weather, deluxe, cool pack optional

(a) Plastic on convertible.

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MAKE OF CAR CHEVROLET MODEL YEAR 1964 DATE ISSUED 9-23-63 REVISED (a) 12-2-63

WEIGHTS

Model	CURB WEIGHT - POUNDS			% PASS. WEIGHT DISTRIBUTION				SHIPPING * WEIGHT	
	Front	Rear	Total	Pass. in Front		Pass. in Rear		Front	Rear
				Front	Rear	Front	Rear		
		<u>230</u>	<u>283</u>						<u>230</u> <u>283</u>
Biscayne									
1111 1211		3375	3520	30	70				3230 3365
1135 1235		3840	3975	30	70				3700 3820
1169 1269		3445	3590	30	70				3300 3430
Bel Air									
1511 1611		3380	3525	30	70				3235 3370
1535 1635		3845	3980	30	70				3705 3825
1545 1645		3885	4020	22	78				3745 3865
1569 1669		3450	3595	30	70				3305 3440
Impala									
1735 1835		3870	4000	30	70				3725 3850
1739 1839		3515	3645	30	70				3370 3490
1745 1845		3915	4045	22	78				3770 3895
1747 1847		3440	3570	37	63				3295 3415
1767 1867		3545	3680	37	63				3400 3525
1769 1869		3485	3615	30	70				3340 3460
Impala Super Sport									
1347 1447		3470	3605	37	63				3325 3450
1367 1467		3580	3710	37	63				3435 3555
Accessories & Equipment Differential Weights		<u>230</u>	<u>283</u>						Remarks
Air Conditioning, Deluxe		+122	+125						
Brakes, Power		+ 10	+ 10						
Less Heater		- 22	- 22						
Radio, Manual		+ 7	+ 7						
Radio, Push Button		+ 9	+ 9						
Seat, Power		+ 22	+ 22						
Steering, Power		+ 30	+ 30						
Transmission, Overdrive		+ 35	+ 35						
Transmission, Powerglide		+ 18	+ 18						
Windows, Power		+ 19	+ 19						
Air Conditioning, Custom		+106	+112						
Comfort & Convenience		+ 6	+ 6						
Radio, AM-FM		+ 10	+ 10						

* These are weights that are reported to states for licensing purposes.

DIMENSION DEFINITIONS

- W3** SHOULDER ROOM - FRONT. The minimum lateral dimension between the door garnish moldings or nearest interference. Measured at H Point station.
- W4** SHOULDER ROOM - REAR. Measured in the same manner as W3.
- W5** HIP ROOM - FRONT. The lateral dimension through H Point to trimmed surfaces.
- W6** HIP ROOM - REAR. Measured in the same manner as W5.
- W7** STEERING WHEEL CENTER TO CENTERLINE OF CAR. Measured horizontally from steering wheel center to centerline of car. The point at steering wheel center is located in the surface plane of wheel.
- W9** STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.
- W16** SEAT WIDTH - FRONT. The maximum trimmed width of front seat cushion.
- W85** SHOULDER ROOM - THIRD SEAT. Measured in the same manner as W3.
- W86** HIP ROOM - THIRD SEAT. Measured in the same manner as W5.
- W101** TREAD - FRONT. Measured at centerline of tires, with nominal camber, at ground.
- W102** TREAD - REAR. Measured at centerline of tires at ground.
- W103** MAXIMUM OVERALL CAR WIDTH. Include bumpers, moldings, or sheet metal protrusions.
- W106** FRONT FENDER OVERALL WIDTH. Measured at centerline of front wheels, excluding moldings.
- W107** REAR FENDER OVERALL WIDTH. Measured at centerline of rear wheels, excluding moldings.
- W116** MAXIMUM OVERALL BODY WIDTH. Measured across body, excluding hardware and applied moldings, but including fenders when integral with body.
- W117** MAXIMUM BODY WIDTH AT #2 PILLAR. Measured across body at #2 pillar, excluding hardware and applied moldings.
- W120** MAXIMUM OVERALL CAR WIDTH, FRONT DOORS OPEN. Measured with front doors in maximum hold-open position.
- W121** MAXIMUM OVERALL CAR WIDTH, REAR DOORS OPEN. Measured in same manner as W120.
- W122** TUMBLE-HOME. The angle from vertical to the front door glass outer surface or the chord of a curved door glass, measured at the front H Point station.
- L3** REAR COMPARTMENT ROOM. The horizontal dimension from the back of front seat to front of rear seat back at a height tangent to the top of rear seat cushion.
- L7** STEERING WHEEL TORSO CLEARANCE. The minimum distance from the back edge of steering wheel, in straight-ahead position, to the Torso Line.
- L13** BRAKE PEDAL KNEE CLEARANCE. The minimum dimension from the lower edge of the steering wheel to the brake pedal face centerline.
- L14** SEAT BACK THICKNESS - FRONT. The maximum thickness of the seat back, excluding bolsters.
- L15** SEAT BACK THICKNESS - REAR. Measured in the same manner as L14.
- L17** H POINT TRAVEL. The horizontal dimension between the H Point in the most forward and rearward seat positions.
- L18** ENTRANCE FOOT CLEARANCE - FRONT. The minimum horizontal dimension between seat and normal line of door or pillar at a height between the sill plate bead and 4.0 inches above the bead. Door should be in the maximum hold-open position.
- L19** ENTRANCE FOOT CLEARANCE - REAR. Measured in the same manner as L18 on four-door models. On two-door styles, the minimum dimension between rear corner of front seat, with front seat back tilted forward, and trimmed lock pillar, built-in quarter armrest panel, or rear seat cushion at a height between the sill plate bead and 4.0 inches above the bead.
- L30** BODY 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.
- L31** H POINT TO BODY ZERO LINE - FRONT. Horizontal dimension.
- L34** MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. Measured with the right foot on accelerator pedal.
- L40** BACK ANGLE - FRONT. The angle between a vertical line through the H Point and the Torso Line.
- L41** BACK ANGLE - REAR. Measured in the same manner as L40.
- L42** HIP ANGLE - FRONT. The angle between Torso Line and a line extending from knee pivot center to H Point.
- L43** HIP ANGLE - REAR. Measured in the same manner as L42.
- L44** KNEE ANGLE - FRONT. The angle between a line from H Point to knee pivot center and a line from the knee pivot center to the ankle pivot center.
- L45** KNEE ANGLE - REAR. Measured in the same manner as L44.
- L46** FOOT ANGLE - FRONT. The angle between a line extended from the knee pivot center through the ankle pivot center and a line tangent to the sole and heel of manikin bare foot.
- L47** FOOT ANGLE - REAR. Measured in the same manner as L46.
- L48** MINIMUM KNEE ROOM - REAR. The minimum dimension from the knee pivot center to the back of front seat back.
- L49** H POINT TO WINDSHIELD UPPER DLO. The horizontal dimension from H Point to the point of tangency of horizontal line of vision (described in dimension H64) with body upper structure.

DIMENSION DEFINITIONS (cont.)

- L50 H POINT COUPLE DISTANCE. The horizontal dimension from the front seat H Point to the rear seat H Point.
- L51 MINIMUM EFFECTIVE LEG ROOM - REAR. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. Measured with the foot positioned to nearest interference between seat structure and toe, instep or lower leg.
- L52 BRAKE PEDAL TO ACCELERATOR. The minimum dimension from center of brake pedal face to accelerator. Measured in the side view.
- L53 H POINT TO ACCELERATOR FLOOR POINT. The horizontal dimension from intersection of accelerator and depressed floor covering to the H Point.
- L85 H POINT COUPLE DISTANCE - THIRD SEAT. The horizontal dimension from the second seat H Point to the third seat H Point.
- L86 EFFECTIVE LEG ROOM - THIRD SEAT. Measured in the same manner as L51. With rear-facing third seat, foot is positioned in foot well or to nearest interference with rear end or rear closure.
- L87 KNEE ROOM - THIRD SEAT. Measured in the same manner as L48. With rear-facing third seat, dimension is measured to rear closure.
- L88 BACK ANGLE - THIRD SEAT. Measured in the same manner as L40.
- L89 HIP ANGLE - THIRD SEAT. Measured in the same manner as L42.
- L90 KNEE ANGLE - THIRD SEAT. Measured in the same manner as L44.
- L91 FOOT ANGLE - THIRD SEAT. Measured in the same manner as L46.
- L101 WHEELBASE.
- L102 TIRE SIZE.
- 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 theoretical intersection of extended windshield glass plane and normal cowl surface to the theoretical intersection of extended back window glass plane and normal deck surface; or in the case of a Fastback roof or Station Wagon, to back glass lower reveal molding, or rubber when molding is not used.
- L127 BODY ZERO LINE TO CENTERLINE OF REAR WHEELS. A horizontal dimension.
- L128 HOOD LENGTH AT CAR CENTERLINE. The horizontal dimension from the foremost point on sheet metal hood surface, excluding series identification or ornamentation, to the theoretical intersection of extended windshield glass plane and normal cowl surface.
- L129 DECK LENGTH AT CAR CENTERLINE. The horizontal dimension from the rearmost point of the body sheet metal (visible above-bumper), excluding series identification or ornamentation, to the theoretical intersection of extended back window glass plane and normal deck surface.
- L130 BODY ZERO LINE TO WINDSHIELD COWL POINT. The horizontal dimension from body zero line to the theoretical intersection of extended windshield glass plane and normal cowl surface.
- H6 H POINT TO WINDSHIELD BOTTOM DLO. Vertical dimension.
- H11 ENTRANCE HEIGHT - FRONT. The vertical dimension from H Point to upper trimmed body opening.
- H12 ENTRANCE HEIGHT - REAR. The vertical dimension from H Point to the upper trimmed body opening at a section 13.0 inches forward of the H Point.
- H13 STEERING WHEEL THIGH CLEARANCE. The minimum dimension from the bottom of steering wheel, in straight-ahead position, to centerline of thigh.
- H18 STEERING COLUMN ANGLE - HORIZONTAL. The angle the centerline of steering column makes with the horizontal.
- H25 BELT HEIGHT - FRONT. The vertical dimension from H Point to bottom of side window DLO.
- H30 H POINT TO HEEL POINT - FRONT. The vertical dimension from the H Point to the manikin accelerator heel point on the depressed floor covering.
- H31 H POINT TO HEEL POINT - REAR. The vertical dimension from the H Point to the manikin heel point on the depressed floor covering.
- H32 SEAT CUSHION DEFLECTION - FRONT. The vertical dimension from a point on the undepressed seat cushion to the depressed seat cushion. Measured at the H Point station.
- H33 SEAT CUSHION DEFLECTION - REAR. Measured in the same manner as H32.
- H37 HEADLINING TO ROOF HEIGHT - FRONT. The dimension from the intersection of the headlining and the extended effective head room line to the roof panel. Measured perpendicularly to the roof panel.
- H38 HEADLINING TO ROOF HEIGHT - REAR. Measured in the same manner as H37.
- H49 H POINT TO TOP OF STEERING WHEEL. The vertical dimension from the H Point to top of steering wheel, in straight-ahead position.
- 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.
- 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.

DIMENSION DEFINITIONS (cont.)

- H54 D POINT TO TUNNEL - FRONT. The vertical dimension from the D Point, at car centerline, to top of tunnel.
- H55 D POINT TO TUNNEL - REAR. Measured same manner as H54.
- H58 H POINT RISE. The vertical dimension between the H Point in the most forward and rearward seat position.
- 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.
- H63 EFFECTIVE HEAD ROOM - REAR. Measured same as H61.
- H64 H POINT TO WINDSHIELD UPPER DLO. Vertical dimension from H Point to highest horizontal line of vision through windshield at 15 inch section.
- H65 D POINT DIFFERENTIAL, SIDE TO CENTER - FRONT. Vertical dimension from side occupant to center occupant D Point.
- H66 D POINT DIFFERENTIAL, SIDE TO CENTER - REAR. Measured in the same manner as H65.
- H67 DEPRESSED FLOOR COVERING THICKNESS - FRONT. The vertical dimension from manikin accelerator heel point normally to underbody sheet metal immediately below heel point.
- H68 DEPRESSED FLOOR COVERING THICKNESS - REAR. Measured same as H67.
- H70 H POINT TO BODY ZERO LINE - FRONT. Vertical dimension.
- H71 H POINT TO BODY ZERO LINE - REAR. Vertical dimension.
- H86 EFFECTIVE HEAD ROOM - THIRD SEAT. Measured in the same manner as H61.
- H87 H POINT TO HEEL POINT - THIRD SEAT. Measured in the same manner as H31.
- H88 H POINT TO BODY ZERO LINE - THIRD SEAT. Vertical dimension.
- H101 OVERALL HEIGHT. Measured with full design load.
- H102 FRONT BUMPER TO GROUND. Minimum dimension.
- H104 REAR BUMPER TO GROUND. Minimum dimension.
- H106 ANGLE OF APPROACH. The angle between the 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 interfering component, excluding license plate.
- H107 ANGLE OF DEPARTURE. The angle between the 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 interfering component, excluding license plate.
- H111 ROCKER PANEL TO GROUND - REAR. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured at front of rear wheel opening.
- H112 ROCKER PANEL TO GROUND - FRONT. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured at foremost point of rocker panel.
- H114 HOOD AT REAR TO GROUND. Measured from hood opening line on shroud, exclusive of moldings.
- H115 STEP HEIGHT - FRONT (DESIGN LOAD). The vertical dimension from top of sill plate bead, at C/L of front door sill plate, to ground.
- H116 STEP HEIGHT - REAR (DESIGN LOAD). Measured in same manner as dimension H115.
- H122 WINDSHIELD SLOPE ANGLE. The angle between a vertical 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.
- H130 STEP HEIGHT - FRONT (CURB LOAD). The vertical dimension from top of sill plate, at C/L of front door sill plate, to ground.
- H131 STEP HEIGHT - REAR (CURB LOAD). Measured same as H130.
- H132 BOTTOM OF DOOR TO GROUND, OPEN - FRONT. Measured from bottom outside corner of door with door in maximum hold-open position.
- H133 BOTTOM OF DOOR TO GROUND, CLOSED - FRONT. Same point on door as H132 dimension, with door closed.
- H134 BOTTOM OF DOOR TO GROUND, OPEN - REAR. Measured in same manner as H132.
- H135 BOTTOM OF DOOR TO GROUND, CLOSED - REAR. Measured in same manner as H133.
- H136 BODY ZERO TO GROUND - FRONT. A vertical dimension measured at front wheel centerline.
- H137 BODY ZERO TO GROUND - REAR. A vertical dimension measured at rear wheel centerline.
- H147 RAMP BREAKOVER ANGLE. 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.
- H148 FRONT SUSPENSION TO GROUND. Minimum clearance from lower control arm inner shaft or lowest point on the car centerline.
- H149 OIL PAN TO GROUND. Minimum clearance measured from sheet metal or drain plug.
- H150 FLYWHEEL/CONVERTER HOUSING AND TRANSMISSION ASSEMBLY TO GROUND. Minimum clearance.
- H151 FRAME STRUCTURE TO GROUND. Minimum clearance measured approximately midway between front and rear axles. In this measurement, cross bars and X-members shall be considered part of frame.
- H152 EXHAUST SYSTEM TO GROUND. Minimum clearance. Specify location.
- H153 REAR AXLE DIFFERENTIAL SYSTEM TO GROUND. Minimum clearance.
- H154 FUEL TANK TO GROUND. Minimum clearance measured from sheet metal or drain plug, but excluding supports or straps.
- H155 SPARE TIRE WELL TO GROUND. Minimum clearance.
- H156 MINIMUM RUNNING GROUND CLEARANCE. Location of measurement on the car is to be clearly recorded.
- H195 LIFTOVER HEIGHT. Vertical dimension from luggage compartment lower opening to ground.

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