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CHEVROLET PASSENGER CAR
SPECIFICATIONS

CHEVROLET ENGINEERING CENTER

ENGINEERING PRODUCT INFORMATION DEPARTMENT
WARREN MICHIGAN • OCTOBER 1968

INTRODUCTION

In the automobile industry, a specification is defined as any item in a detailed description of a mechanism. Usually the description is composed of separate specifications in tabular question and answer form.

Specifications of this nature, however, are not required in the manufacture of an automobile. All the information necessary for this process is given by the Engineering Department to the manufacturing and assembling plants in the forms of drawings and parts lists. But drawings and parts lists usually are not made available to other people who require information of the vehicle, since these records must be interpreted. Moreover, they and other engineering records are much too numerous or voluminous for convenient reference. Therefore, a special interpretation is made by the Engineering Department in the form of a specifications list or book, the contents of which are determined by the nature of questions people ask the Engineering Department concerning the vehicle.

As has been the experience of most manufacturers, originally the questions asked were few in number and were answered individually at the time they were asked. Through the years, however, many questions were asked quite frequently and, for convenience, the answers were recorded in the form of specifications. Others, which arose because of heightened interest and because of advancements in design, were added from time to time. As the automobile grew into a necessary means of transportation --- as its component units were advanced in design and as new ones were added --- and as manufacturers were forced to make more detailed comparisons of their vehicles with those of their competitors to satisfy an increasingly technically minded public --- more and more questions concerning the various characteristics of vehicles were answered in the form of specifications.

The Chevrolet Engineering Department has always been willing to answer questions of a technical nature concerning Chevrolet products and for the past thirty years has endeavored to anticipate such questions by preparing a specifications book each new model year.

This current book has been prepared to answer all the questions concerning the Chevrolet 1961 products that we believe may be asked.

It is intended primarily as a convenient and authoritative source of information for all Chevrolet executives, engineers, sales and service representatives, plant managers, and other personnel who must be in a position to answer such questions, and also as a common source of those Chevrolet specifications that are needed in advertisements, vehicle comparisons, trade publications, license applications and in correspondence with governments, firms, educational institutions, and individuals throughout the world who require a wide variety of information about Chevrolet products for diverse purposes.



W.R. Mackenzie
Director - Engineering
Product Information

ORGANIZATION OF BOOK

Every effort has been made to facilitate the finding of information. The sequence followed in presenting the information is that of the G. M. Uniform Parts Classification major groupings, modified to facilitate usage by the reading majority, who are unacquainted with this classification. The title page for each section lists the subjects in the order in which they occur in that section. The title for each section, such as CHASSIS, is printed at the bottom of each page beside the page number. A detailed index is located at the back of the book.

Tabs are provided for conveniently locating basic sections such as BODY, CHASSIS, and POWER TRAINS.

VEHICLES AND EQUIPMENT SPECIFIED

The specifications are those of all standard left drive passenger and delivery cars which have been designed to be manufactured for the domestic (U.S.A.) open market. Included also are the specifications of the RPO (Regular Production Option) units which are intended for use with these vehicles. All data are for vehicles with regular equipment, except where noted as RPO.

No information is furnished concerning right drive vehicles or equipment manufactured for export, nor any vehicles or equipment built on COPO's (Central Office Production Orders) or any other special orders. Accessories released through the Parts and Accessories Department, however, are listed although specifications are not included. This publication covers all passenger cars, including the Corvair and Corvette. Also covered is the Corvair Greenbrier Station Wagon.

Except where noted, all information was derived directly from official Chevrolet Engineering Department drawings, parts lists, and test reports, or was calculated from these records.

ABBREVIATIONS

The data are presented in a condensed tabular form which necessitates the use of abbreviations or symbols in some cases. See page IV.

LOCATION OR POSITION OF PARTS

When referring to the location or position of any engine part or vehicle unit, the practice throughout the automotive industry is that such reference is made from the driver seat position. Any views shown or references made, which are contrary to the above rule, are clearly labelled or explained in the text of the specifications.

DIMENSIONS

The dimensions shown are of three types:

Type #1. Those dimensions where very accurate fits are essential in the parts concerned, such as bearing surfaces and splines, and where dimensions usually are expressed on drawings in decimals with very close limits.

Type #2. Those dimensions where accuracy of fit is of less importance, as in structural members such as frame parts, I-beam axles, or in fuel tanks; also, dimensions for the purpose of identification, such as cylinder bore, or diameter of the wheel cylinder piston, where dimensions are expressed in fractions or integers with fractions and to which fairly large tolerances ($\pm 1/64$, $\pm 1/16$) are applied.

Type #3. Those dimensions, such as wheelbases, ground clearances, body size dimensions, and turning diameters, which are subject to large manufacturing variations.

In this book, the dimensions of type #1 are quoted with limits exactly as on the drawings while the dimensions of type #2 and #3 are quoted without manufacturing tolerances.

Unless specified otherwise all dimensions are in inches.

REVISIONS

Specification changes and the dates on which they occur are indicated on revised pages. A dot symbol is used in the proximity of the revised specification. The date appears at the bottom of the page. Subsequent revisions on a revised page are indicated in the same manner. To emphasize and clarify the later changes, however, symbols pertaining to previous revisions are removed.

ADDRESS INQUIRIES TO

ENGINEERING PRODUCT INFORMATION DEPARTMENT

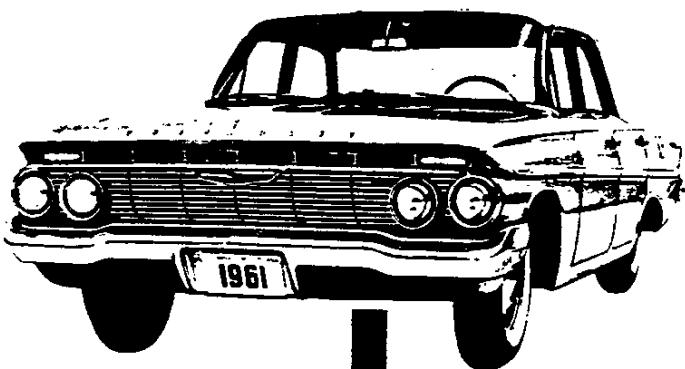
Room 3-312, Chevrolet
Engineering Center
Box 246 North End Station
Detroit 2, Michigan
Or Call
Jefferson 9-5000, Extension 3005 or 3006

ABBREVIATIONS AND SYMBOLS

ABBREVIATIONS

A		O	
AC Spark Plug Division -----	AC	Outside Diameter & Overdrive -----	OD
After Bottom Center -----	ABC		
After Top Center -----	ATC		
B		P	
Barrel -----	bbl	Pitch Diameter -----	PD
Before Bottom Center -----	BBC	Ply Rating -----	PR
Before Top Center -----	BTC	Pounds Per Square Inch -----	psi or PSI
Before Top Dead Center -----	BTDC	Powerglide -----	PG
Bolt Circle -----	BC		
Brake Horsepower -----	BHP		
C		R	
Candle Power -----	CP	Regular Production Option -----	RPO
Cast Iron -----	CI	Revolutions Per Mile -----	rev/mi
Commercial -----	Comm	Revolutions Per Minute -----	rpm
Connecting -----	conn		
Central Office Production Order -----	COPO		
Cubic Inches -----	Cu. In.		
D		S	
Daylight Opening -----	DLO	Safety Solid Plate -----	SSP
Decalcomania -----	decal	Saginaw -----	Sag
Double Row -----	DR	Single Row -----	SR
F		T	
Factory Optional Accessory -----	FOA	Thread -----	thd
G		W	
Gallons Per Minute -----	GPM	Windshield -----	W/S
General Motors -----	GM		
H		SYMBOLS	
Heavy Duty -----	HD	And -----	&
Horsepower -----	HP	At -----	@
Hot Rolled -----	HR	By, Times -----	x
I		Center Line -----	C
Inside Diameter -----	ID	Degrees -----	o
L		Divided By -----	+
Laminated Safety Plate -----	LSP	Inches or Seconds -----	"
Left Hand -----	LH	Minus -----	-
Limited Production Option -----	LPO	Minutes -----	:
N		Number or Pounds -----	#
Not Available -----	NA	Per -----	/
New Departure -----	ND	Per Cent -----	%
		Plus -----	+
		To (Range) -----	-
		To (Ratio) -----	:

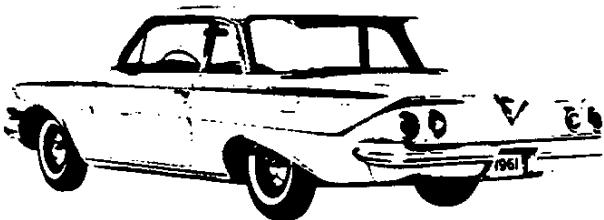
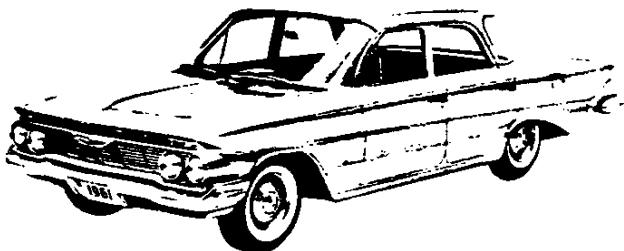
GENERAL



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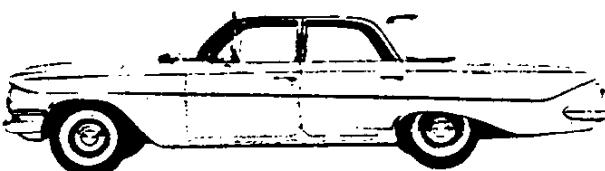
MODEL IDENTIFICATION

BISCAYNE SERIES



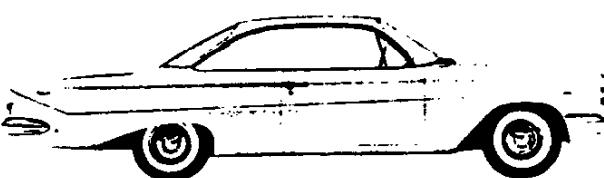
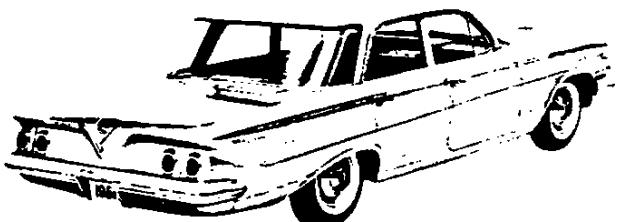
MODEL 11-1211 2-DOOR SEDAN, 6-PASSENGER
MODEL 11-1221 2-DOOR UTILITY SEDAN, 3-PASSENGER
MODEL 11-1269 4-DOOR SEDAN, 6-PASSENGER

BISCAYNE FLEETMASTER SERIES



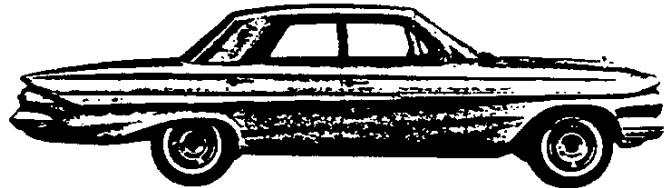
MODEL 13-1411 2-DOOR SEDAN, 6-PASSENGER
MODEL 13-1469 4-DOOR SEDAN, 6-PASSENGER

BEL AIR SERIES



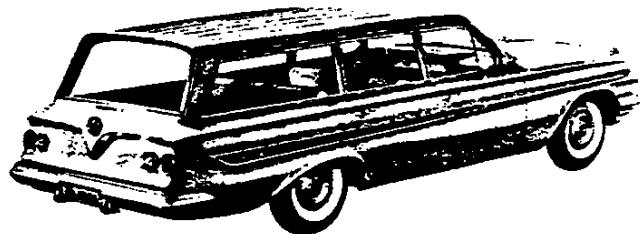
MODEL 15-1611 2-DOOR SEDAN, 6-PASSENGER
MODEL 15-1637 2-DOOR SPORT COUPE, 5-PASSENGER
MODEL 15-1639 4-DOOR SPORT SEDAN, 6-PASSENGER
MODEL 15-1669 4-DOOR SEDAN, 6-PASSENGER

IMPALA SERIES



MODEL 17-1811 2-DOOR SEDAN, 6-PASSENGER
MODEL 17-1837 2-DOOR SPORT COUPE, 5-PASSENGER
MODEL 17-1839 4-DOOR SPORT SEDAN, 6-PASSENGER
MODEL 17-1867 2-DOOR CONVERTIBLE, 5-PASSENGER
MODEL 17-1869 4-DOOR SEDAN, 6-PASSENGER

STATION WAGON SERIES



MODEL 11-1235 4-DOOR STATION WAGON, 6-PASSENGER
MODEL 11-1245 4-DOOR STATION WAGON, 9-PASSENGER
MODEL 15-1635 4-DOOR STATION WAGON, 6-PASSENGER
MODEL 15-1645 4-DOOR STATION WAGON, 9-PASSENGER
MODEL 17-1835 4-DOOR STATION WAGON, 6-PASSENGER
MODEL 17-1845 4-DOOR STATION WAGON, 9-PASSENGER

SERIAL NUMBERS AND IDENTIFICATION

• VEHICLE SERIAL NUMBER

6-Cylinder Example:

Model Year	Assembly Plant	Unit Number
(1961)	Model	(Tarrytown)
1	1169	T 100025

Thus: The 25th model 1169 built at Tarrytown would be serial number 11269F100026

8-Cylinder Example:

Model Year	Assembly Plant	Unit Number
(1961)	Model	(Flint)
1	1269	F 100026

Thus: The 26th model 1269 built at Flint would be serial number 11169T100025

Assembly Plants

A - Atlanta

B - Baltimore

F - Flint

G - Framingham

J - Janesville

K - Kansas City

L - Los Angeles

N - Norwood

O - Oakland

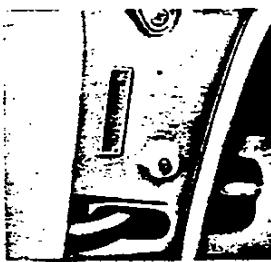
S - St. Louis

T - Tarrytown

Starting Unit Number ----- 100001

and up at each assembly plant regardless of series.

Location ----- Stamped
on plate attached to left front body hinge pillar.



TRANSMISSION IDENTIFICATION

Example: B701D

Plant and Type	Production
Designation	Month & Date *
B	701D*

Prefix Plant

M Muncie ----- 3-speed & O.D.

S Saginaw ----- 3-speed & O.D.

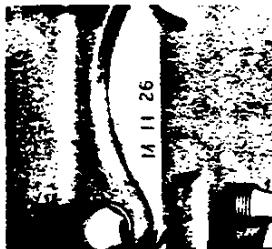
C Cleveland ----- Powerglide

B Toledo ----- Turboglide

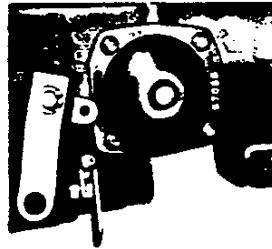
Location, 3-Speed ----- Stamped on rear face of case on upper right corner.

Powerglide ----- Stamped on rear flange of governor cover.

Turboglide ----- Stamped on boss on lower right rear of case.



3SPEED



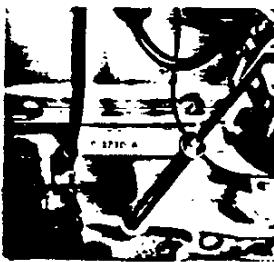
POWERGLIDE



TURBOGLIDE

* - Month: 7 denotes July; 01 denotes 1st day

* - The letter "D" or "N" following the date numerals — indicate day or night shift



6-CYLINDER



8-CYLINDER

• REAR AXLE IDENTIFICATION

Example: AA 0212

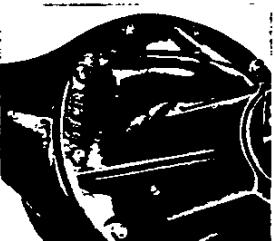
Plant and Type Designation	Production Month & Date ▼
AA	0212

Gear & Axle Buffalo

AA -----	BA ----- 3-speed transmission
AB -----	BB ----- Automatic transmission
AD -----	BD --- Taxi Cab, 3.36:1 ratio w/PG
AG -----	BG ----- Taxi cab, 3.55:1 ratio
AK -----	BK ----- Limited slip 3.55:1 ratio
AZ -----	BZ -- Taxi cab, Powerglide (8-cyl.)
AM -----	BM ----- Limited slip 3.36:1 ratio
AW -----	BW ----- W-engine, 3.08:1 ratio
AX -----	BX ----- Limited slip 3.08:1 ratio
FE -----	BE ----- Overdrive transmission
FH -----	BH ----- Limited slip 3.70:1 ratio
GF -----	Metallic brakes (3.55:1 ratio)
GH -----	Metallic brakes (3.70:1 ratio)
GJ -----	Metallic brakes (3.36:1 ratio)
GK -----	Metallic brakes (3.08:1 ratio)
GM -----	Metallic brakes (3.55:1 L.S.)
GN -----	Metallic brakes (3.70:1 L.S.)
GP -----	Metallic brakes (3.36:1 L.S.)
GQ -----	Metallic brakes (3.08:1 L.S.)

Location ----- Stamped front right side differential carrier.

* - Month: 02 denotes Feb. etc; 12 denotes 12th day



• ENGINE IDENTIFICATION

Example: F 0212 CD
 Source Production Type
 Designation Month & Date ▼ Designation
 F 0212 CD(283 O.D.)

Assembly Plant: F-Flint T-Tonawanda

6-Cylinder: (235)

- A - Regular Production engine with 3-speed or overdrive.*
- AE - Regular with heavy duty clutch. (RPO 330)**
- AF - Regular with 3-speed & air conditioning.
- AG - Regular with 3-speed, heavy duty clutch & air conditioning.
- AJ - Regular with 3-speed power steering, air cond. & H.D. clutch.
- AK - Regular with 3-speed & power steering. ***
- AM - Regular w/3-spd, power strg. & HD clutch Ø
- AZ - Regular with 3-speed, power steering, & A/C
- B - Regular with Powerglide
- BE - Regular with power steering & Powerglide.
- BG - Regular with A/C & P.G.
- BH - Regular with power strg, P.G., & A/C

8-Cylinder (283)

- C - Regular production engine.
- CD - Regular with overdrive
- CF - Regular with 4-barrel carburetor equipment.
- CG - Regular with 4-barrel carburetor & O.D.
- D - Regular with Powerglide.
- DB - Regular with 4-barrel carb, & Powerglide.
- DK - Regular with air conditioning & Powerglide.
- DM - Regular with air cond, PG & 4-bbl carb.
- E - Regular with Turboglide.
- EB - Regular with 4-barrel carb & Turboglide.
- EG - Regular with air cond. & Turboglide.
- EJ - Regular with air cond, TG & 4-bbl carb.
- CL - Regular with 3-speed & A/C
- CM - Regular with 3-speed, A/C, & 4-bbl carb.

8-Cylinder: (348) (RPO 576)

- F - Optional with 3 or 4-speed transmission.
- FA - Optional with triple 2-bbl carb equipment.
- FH - Optional with triple 2-bbl carb & Hi-lift cam
- FJ - Optional with 4-bbl carb & Hi-lift cam.
- FL - Optional with 4-bbl carb high perf. spec.
- GD - Optional with 4-bbl carb Hi-lift cam & PG.
- GE - Optional with 4-bbl carb high perf. spec. & PG
- H - Optional with Turboglide.
- HA - Optional with triple 2-bbl carb & Turboglide.

8-cylinder: (409) (RPO 580)

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.

* - AP on 1300 Series

** - AR on 1300 Series

*** - AS on 1300 Series

Ø - AT on 1300 Series

▼ - Month: 02 denotes Feb. ;

12 denotes 12th day.

REGULAR EQUIPMENT-EXTERIOR

		ITEM	MODELS
Stainless Steel	Bright Metal Trims	Windshield lower reveal	13-1400
		Windshield reveal	11-12-15-16-17-1800
		Ventipane reveal	15-1637, 39; 17-1837, 39, 67
		Roof drip gutter	15-16-17-1800 except 17-1867
		Roof rear peak	17-1811, 69
		Roof tail reveal	17-1837, 39
		Belt reveal	17-1800
		Door upper frame	17-1811, 69, 35, 45
		Windshield pillar gutter	15-16-17-1800 except 15-1637, 39; 17-1837, 39, 67
		Roof rear drip gutter	15-1635; 17-1835, 17-1845
Anodized Aluminum	Chrome-plated Metal	Quarter window reveal	15-1637; 17-1811, 37
		Rear window upper reveal	15-1637, 39; 17-1837, 39
		Rear window lower reveal	11-12-15-16-17-1800 exc. 15-1635, 45; 11-1245, 17-1845
		Rear window side reveal	15-1637, 39; 17-1811, 69, 37, 39
		Tailgate window lower reveal	11-1235; 11-1245; 15-1635, 45; 17-1835; 17-1845
		Hub caps	All
		Rocker sill	11-1200
		Body side, deck lid, and tailgate	15-16-17-1800
		Headlight, parking, tail light frames	All
		Radiator grille and ornament frame	17-1800
Chrome-plated Metal	Chrome-plated Metal	Series ornaments	11-12-13-14-15-1600
		Chevrolet nameplate on hood	All
		Front and rear bumpers	
		Door handles and key locks	
		Series nameplates	
		Ventipane channel	
		Side window glass moldings	15-16-17-1837, 39; 17-1867
		Front fender ornaments	17-1800
		Simulated exhaust port	17-1800 except 17-1835, 45; 17-1867
		Rear license lamp	Dual on sta. wgn., single all others
Grille Emblems	Grille Emblems	Deck lid or tailgate emblems	All
		Dual windshield wipers, electric, single-speed	
		Dual horns	
		Gasoline filler in left rear quarter panel	
		Bonderized body and sheet metal	
		Electric rear window regulator	11-1245; 15-1645; 17-1845
		Manual rear window regulator	All wagons except 15-1645; 17-1845; 11-1245
		Chevrolet crest (6-cylinder identification)	11-13-15-1700
		Crest and "V" (283 V-8 identification)	12-14-16-1800
		"V" and crossed flags (348 V-8 identification)	

REGULAR EQUIPMENT-INTERIOR

ITEM		MODELS
Instrument Panel	Anodized aluminum trim molding	11-12-13-14-15-1600
	Anodized aluminum trim molding and plate	17-1800
	Chevrolet crest	15-1600
	Crossed flags emblem	17-1800
	Chrome capped control knobs	All
	Glove compartment	Light Lock
	Chrome vent control knobs	All
	Cigarette lighter	All except 13-1400
	Ash tray	All
	S-Position ignition lock and starter switch	All
Steering Wheel	Electric clock	
	Parking brake alarm	17-1800
	Deep hub, perforated spokes, Dual horn buttons	15-1600
Interior Lights	Deep hub, dual solid spokes, Dual horn buttons	11-12-13-1400
	Deep hub, dual solid spokes, horn button	All except 17-1867
	Coat hooks	All
Crank-type front ventipanes		All
Door locking knobs		All
Dual sunshades		All except 13-1400
Inside rear view mirror		All
Manual interior light switch integral with headlight switch (main switch)		All
Left hand sunshade		13-1400
Automatic interior light switch, front doors only		15-1600, 17-1800
Bright Metal Moldings	Single dome, center	All except 17-1837, 17-1839, 17-1867
	Dual side rail	17-1837, 17-1839
	Dual in dash	17-1867
Third seat, courtesy		11-1245; 15-1645; 17-1845
Rear window control switch on instrument panel		17-1837, 17-1867
Convertible top switch		17-1867
Aluminum seat end panels		17-1800
Door remote control handle, paddle-type		All except 17-1800
Door remote control handle, conventional-type		11-1200
Armrests, front door		15-16-17-1800
Armrests, front and rear doors or quarter panels		Ash tray, rear door or quarter panels
Floor Covering	Windshield, upper and side	
	Rear window, upper and side	17-1837, 17-1839
	Side roof rails	
	Front door, rear door or rear quarter trim	15-1637-39-35-45
	Carpet	17-1800
	Color keyed rubber	11-12-13-1400
	Vinyl-type cargo floor and covered wheelhouses	Station Wagons
	Vinyl coated rubber with carpet on tunnel	15-1600

REGULAR PRODUCTION OPTIONS AND FACTORY OPTIONAL ACCESSORIES

GROUP	ITEM	NUMBER	MODELS
Engine	Air cleaner, oil bath	216	11-13-15-1700
	283 cubic inch, 230 horsepower	410	
	348 cubic inch, 250 horsepower	576	
	348 cubic inch, 280 horsepower	573A	12-14-16-1800
	348 cubic inch, 305 horsepower	572	
	Clutch, heavy-duty	227	11-13-15-1700
	348 cubic inch, 340 horsepower	590	
	348 cubic inch, 350 horsepower	573B	12-14-16-1800
	409 cubic inch, 360 horsepower	580	
	Carburetor, economy	581	11-1300
	Exhaust, dual	220	
	Fan, thermostatically controlled (for use with 283 V-8)	121	12-14-16-1800
	Filter, oil	237	11-13-15-1700
	Heavy-Duty radiator	257	
Transmission	Generators	35-ampere	338
		40-ampere	326
		50-ampere (low cut-in)	378
	Ventilation, crankcase (for State of California)	242	
Chassis	Four-speed	685	12-14-16-1800
	Overdrive	315	All
	Powerglide	313	
	Turboglide	302	12-14-16-1800
Body	Axle, rear (limited-slip)	675	
	Battery, heavy-duty (11-plate, 70 ampere - hours)	345	
	Brakes, power	412	
	Disks, wheel	117	All
	Springs, rear (heavy-duty)	593	
	Steering, power	324	
	Shock absorbers, front and rear	200	All exc. station wagons
	Springs, front (heavy-duty)	253	
	Brakes, metallic	686	All
	Tires	8.00 x 14-4 ply thin line whitewall	691
		7.50 x 14-4 ply (whitewall)	465
		8.00 x 14-4 ply (blackwall)	283
		8.00 x 14-4 ply (whitewall)	588
	Air conditioning	Deluxe	110
		Cool-Pack	111
	Cushion, foam rubber front seat	335	11-12-13-1400
	Deluxe body equipment	347	13-1400
	Deluxe steering wheel	348	11-1200
	Glass, tinted	398	
	Heater and defroster	Mixed air	101
		Recirculating	116
	Lock, hidden compartment	139	Station Wagons
	Pad, instrument panel	427	
	Radio and antenna	Manual	103
		Push-button	104
	Seats	Split second	259
		6-Way power	380
	Toxicab equipment	330	11-12-13-1469
	Top, folding (colors)	470	17-1867
	Wipers, 2-speed electric (includes washers)	333	All
	Window (s)	Power tailgate	424
		Power	426
	Outside mirror, inside prismatic mirror, grille guards, and bumper guards	140	All
	Clock, back-up lamps, and door edge guards	145	11-12-15-1600
	Speed and cruise control	146	All
	Tachometer	331	12-14-16-1800
	Super sport equipment	240	1800 (exc. wagons)

DEALER INSTALLED ACCESSORIES

ITEM			MODELS
Air Conditioner	Fresh air (all weather)		All
	Recirculating (cool pack)		
Alarm	Parking brake		11-12-13-14-15-1600
Antenna (radio)	Dummy	Left rear	
	Manual	Right rear Right front	All except Station Wagons
Belt	Seat		All
Brake	Vacuum power		All
Cap	Gasoline tank filler locking		
Carrier	Luggage (roof top-type)		All except 17-1867
Clock	Electric		11-12-13-14-15-1600
Container	Litter		
Compass	Illuminated		
Cover	Accelerator pedal		All
	Front seat cushion - plastic		
	Luggage carrier		
	Wheel (disk-type)		All except 17-1867
Control	Headlight automatic beam		
	Cruise		All
Deflectors	Rain		All except 17-1837, 39, 67; 15-1637-39
Dispenser	Tissue		All
Defogging Unit	Back window		All exc. convt. & sta. wagrs.
Extension	Front door vent window		All
Fan	Thermostatically-controlled (for use with 283 V-8)		12-14-16-1800
Guard	Door edge		
	Front end rear bumper		
	Gas tank filler door		All
Heater and Defroster	Mixed air		
	Recirculating		
Lid	Vacuum operated rear deck		All except Station Wagons
Lighter	Cigarette		11-12-13-1400
Light(s)	Backing		11-12-13-14-15-1600
	Courtesy		All except 17-1867
	Engine compartment		All
	Glove compartment		11-12-13-1400
	Luggage compartment		All except Station Wagons
	Spot	Inside-operated Portable	All
Lock	Door safety unit - rear		All 4-door models
Mat	Hidden compartment		All Station Wagons
	Floor (front or rear)		
Mirror	Floor (full-width - front compartment only)		All
	Rear view	Inside (prismatic) Outside (door-mount)	
	Visor vanity		
	Remote control		All
Moldings	Body sill		All except 11-1200
Ornaments	Front fender		All except 17-1800
	Front bumper radiator grille guard		
Pad	Ventilated seat		All
	Rear floor		All Station Wagons
Radio	Manual	Includes fr. or rr. antenna for sedan &	
	Push-button	sport models, fr. only for wagons	
Screen(s)	Radiator insect		
	Window	Tailgate, all wagons; rr. side dr. windows, 4-dr. wagons only	
Shield	Door handle		
	Windshield glare (plastic)		
	Rear window glare (plastic)		15-16-17-1837
Speaker	Rear: radio		All
Tool Kit			
			All
Washer	Windshield	Push-button Foot-operated	

TAXI-CAB EQUIPMENT-RPO 330 •

MODEL APPLICATION:

4-Door Sedan - 1169-1269-1369-1469

BODY EQUIPMENT

INTERIOR TRIM

Biscayne
Standard ----- Cloth/vinyl, gray
Optional ----- All vinyl, gray
Biscayne Fleetmaster ----- Vinyl, gray
(Includes vinyl headlining)

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.

DOORS, FRONT AND REAR

Jamb switches (dome lamp) ----- Furnished on all four doors.
Armrests ----- L.H. & R.H. rear doors

INSTRUMENT PANEL

Warning lamp
Location ----- Bright metal bracket under instrument panel, left of steering column.
Switch ----- All door jams

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 propeller shaft.

• REAR AXLE

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

POWER TRAIN EQUIPMENT

SIX-CYLINDER MODELS

Spark Plugs ----- AC 46

Distributor ----- Positive ground via wire to coil bracket

Clutch ----- 11" heavy-duty

Carburetor

Model
3-speed ----- 7013955

Powerglide ----- 7013956

Transmission 3-Speed ----- Heavy-duty; incorporates heavy-duty dutch gear and mainshaft bearings

Pulley (water pump and fan) ----- Heavy duty

POWERGLIDE ----- Same as production except lower shift points for increased clutch durability.

CHASSIS EQUIPMENT

FRAME

Type ----- Heavy duty with reinforced front cross member, rear spring brackets, rear shock absorber and front upper control arm brackets

SUSPENSION

Coil Springs & Shock Absorbers, Front and Rear
Type ----- Heavy-duty

POLICE CAR EQUIPMENT

MODEL APPLICATION:

2-Door Sedan - 1111-1211-1311-1411
4-Door Sedan - 1169-1269-1369-1469
4-Door Station Wagon - 1135-1235

BODY EQUIPMENT (LPO 1105)

INTERIOR TRIM •

Biscayne Fleetmaster ----- All vinyl, gray
Biscayne
 Standard ----- Cloth/vinyl, gray
 Optional ----- All vinyl, gray
 Brookwood ----- All vinyl, gray

FLOORS

Covering
 Front and Rear ----- Waterproof asphalt im-
 regnated paper felt, .125 minimum thickness.
 (Front only on station wagon)

Mats
 Front and Rear ----- Black rubber (no spatter
 design) .125 minimum thickness.
 (Front only on station wagon)

SEAT CUSHIONS AND BACKRESTS

Front, all models ----- Heavy duty
 "S" wire springs, reinforced.
Rear, sedans only ----- Same as front
Sunshade ----- R.H. on 13-1411; 13-1469

CHASSIS EQUIPMENT (LPO 1108)

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, Rear Sus-
 pension

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

Front Stabilizer Bar

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

WHEELS AND TIRES

Wheel Size ----- 15 x 5K
Tire type and size ----- Blackwall tubeless rayon,
 6.70 x 15-4 on sedans, 6.70 x 15-6 on wagons.

METALLIC BRAKES •

Material ----- Sintered Iron
Segments Per Shoe:
 Primary - Front and Rear ----- Six
 Secondary ----- Front, 12; Rear, 10
Lining Size:
 Front:
 Primary ----- 1.64 x 1.37 x .210
 Secondary ----- 1.64 x 1.37 x .330
 Rear:
 Primary ----- 2.0 x 1.00 x .210
 Secondary ----- 2.0 x 1.00 x .330
Wheel Cylinder Bore:
 Front ----- 1.1875
 Rear ----- 1.00
Method of Attachment ----- Welded
Gross Lining Area (sq in) ----- 145.0
Effective Area (sq in) ----- 145.0
Brake Effectiveness (front) ----- 58.5%

TRANSMISSION

Type ----- Heavy duty, incorporates heavy duty clutch
 gear and mainshaft bearings. (6-cylinder only)

AIR CONDITIONING EQUIPMENT-FOA 110

COMPRESSOR

Make ----- Frigidaire
 Type ----- 5 cylinder reciprocating
 Clutch Coil, Ohms (@80°F) ----- 4.18-4.28
 Amperes (@ 80 F) ----- 2.86@ 12 volts
 Oil, Type ----- Frigidaire 525 viscosity
 Capacity (Oz) ----- 13
 Pulley Diameter (nominal) ----- 5.31
 Ratio (compressor to engine) ----- 1.25:1
 Drive ----- Rotating socket plate

REFRIGERANT

Type ----- Freon 12
 Capacity (lb) ----- 4.5

CONDENSER

Type ----- Tube and fin
 Material ----- Steel brazed with cadmium
 or zinc plate
 Location ----- Mounted in front of radiator
 to radiator support

RECEIVER-DEHYDRATOR

Material ----- Heavy gage drawn steel tube
 Location ----- Right side of condenser
 Function:
 Receiver ----- Reservoir for storage
 of high pressure liquid.
 Dehydrator ----- Accumulate moisture and
 trap foreign material.

EVAPORATOR

Location ----- Right cowl plenum chamber
 Core Size (Sq. In) ----- 125.0
 Cooling and Heating Coil Material ----- Copper
 tubes and button fins

TEMPERATURE REGULATOR

Type ----- Hot gas by-pass valve
 Location ----- On right fender skirt

PRESSURE RELIEF VALVE

Opens (approx) ----- 440-450 psi
 Closes (approx) ----- 300 psi

BLOWER MOTOR

Current Draw (cold) ----- Low speed, 10 amp. (max)
 ----- High speed, 15.5 amp. (max)
 Speed (cold) ----- Low-3150±150 rpm; High-3600±100 rpm

ENGINE IDLE SETTING

Auto Trans in Drive ----- 450 rpm
 Std Trans in Neutral ----- 450 rpm
 Fast Idle "Full On", Compressor Engaged and Trans-
 mission in Neutral ----- 900 rpm

FRONT SPRINGS

For detailed information see Page 3, Chassis Section

SHOCK ABSORBERS, FRONT

Model Number ----- N 5176 84A
 Piston Diameter and Travel ----- 1.00.4.9375

CRANKSHAFT PULLEY

Type ----- Dual groove

WATER PUMP AND FAN PULLEY

Type ----- Dual groove

FAN

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

FAN BLADE CLUTCH (V-8 only)

Type ----- Temperature modulated viscous drive
 Fan speed limited at ----- 3100 rpm

COMPRESSOR BELT

Pitch Line Length, 283 Cu In V-8 ----- 58.50
 348 Cu In V-8 ----- 60.00
 235 Cu In 6-cyl ----- 59.00

GENERATOR

Model ----- 1102174
 Amperes ----- 35

VOLTAGE AND CURRENT REGULATOR

Model, 283 Cu In V-8 ----- 1119002
 348 Cu In V-8 ----- 1119235

IMPALA SUPER SPORT SUPPLEMENT

Model Application:

All 1800 Series except Nomad Station Wagon

SPECIFICATIONS OTHER THAN SHOWN ARE REGULAR PRODUCTION



IMPALA SUPER SPORT EQUIPMENT - RPO-240

EXTERIOR

"SS" emblem with crossed flags on deck lid and rear quarter panel
Full wheel disks with 3-lug simulated knock-off hubs
Black wheels on all body colors

INTERIOR

Instrument panel assist bar (chrome with padded vinyl insert and "Impala SS" script)
4-speed transmission floor shift lever anodized aluminum trim plate in chrome
housing with a figure and flags ornament

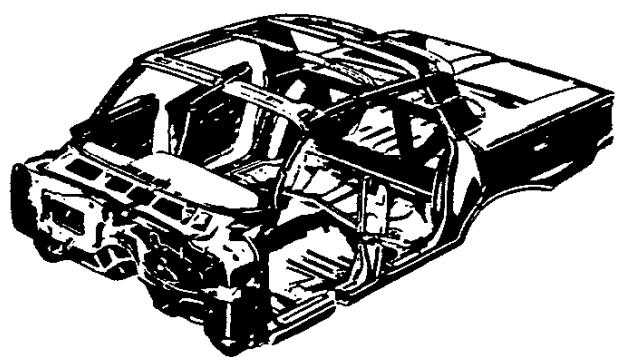
MANDATORY OPTIONAL EQUIPMENT

- | | |
|----------|---|
| RPO 200 | Shock Absorber, front and rear |
| RPO 253 | Heavy Duty front springs |
| RPO 313 | Powerglide transmission (see power train section page 39) |
| or | |
| RPO 685 | Four Speed Transmission (see power train section page 37) |
| RPO 324 | Hydraulic steering (see chassis section page 3) |
| RPO 331 | Tachometer (redlined at 5000-5500 RPM for 305 HP V-8
6000-6500 RPM for 340, 350, & 360 HP V-8) |
| RPO 427 | Instrument panel pad (color keyed to interior trim) |
| RPO 412 | Vacuum Power Brake (see chassis section page 8) |
| RPO 593 | Heavy Duty rear coil spring (see chassis section page 6) |
| RPO 686 | Metallic Brakes (see Corvette section page 8) |
| RPO 691 | 8.00-14-4 ply thinline rayon whitewall tires |
| RPO 572 | 348 cu. in. V-8, 305 HP high performance engine (see power train section page 22) |
| or | |
| RPO 573B | 348 cu. in. V-8, 350 HP special high performance engine (see power train section page 22) |
| or | |
| RPO 580 | 409 cu. in. V-8, 360 HP engine (see power train section page 36) |
| or | |
| RPO 590 | 348 cu. in. V-8, 340 HP special high performance engine (see power train section page 22) |

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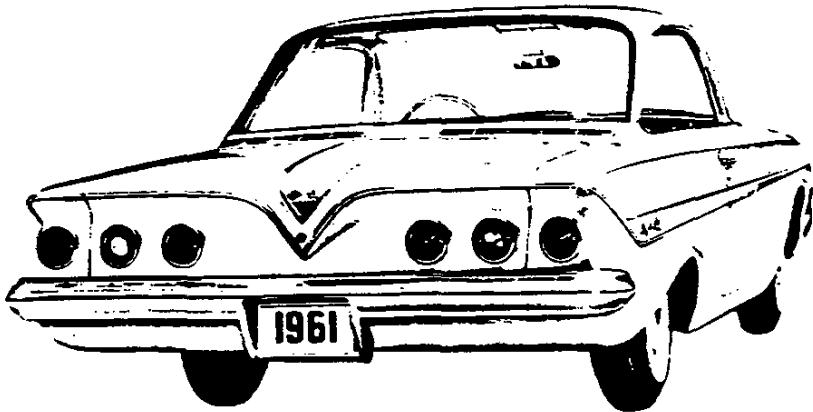
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BODY



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EXTERIOR - INTERIOR COLOR COMBINATIONS . .	3
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EXTERIOR PAINT



NINE STEP FINISHING PROCESS

1. Rustproofing . . . The bare steel is thoroughly treated with chemicals that clean the metal and give it a corrosion-resisting surface. This chemical treatment also etches the metal which improves paint adhesion.
2. Sheet Metal Primer . . . 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°F for 30 minutes. After baking, a coat of sealer is applied to all surfaces requiring a subsequent coat of lacquer.
3. Body Primer . . . Specially formulated corrosion resistant primers are used for all areas 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.
4. Primer-Surfacer Coat . . . A primer-surfacer coat is applied to all outside surfaces of the body requiring lacquer and then oven baked a minimum of 45 minutes at 285°F.
5. Sanding . . . Power wet-sanding followed by hand sanding is done on all surfaces requiring lacquer. After sanding, surface is inspected and additional spot sanding is done to assure an absolutely smooth surface as a base for the lacquer.
6. Lacquering . . . Many coats of acrylic lacquer are now sprayed on the surfaces to build up a finish of the required thickness for each color.
7. Final Baking . . . To assure a durable, hard, high luster finish the lacquer is now baked 30 minutes at 235°F.
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.
- 9a. Polishing . . . Machine buffing with special pastes to provide both a high luster and a glassy smooth surface.
- 9b. Paint Repair . . . Any slight mars, nicks, or scratches that might occur during final assembly are factory-repaired and corrected before shipping.

**EXTERIOR - INTERIOR
COLOR COMBINATIONS**

BISCAYNE SERIES AND BISCAYNE FLEETMASTER SERIES, AND BROOKWOOD STATION WAGONS

EXTERIOR		INTERIOR	
SOLID COLORS AND WHEELS AND LOWER BODY COLOR OF TWO-TONE MODELS	ROOF OF TWO-TONE MODELS	FABRICS **	PAINT **
Tuxedo Black	Ermine White	Gray	Dark Gray
Ermine White			Dark Green *
Roman Red			Dark Blue *
Sateen Silver	Ermine White	Gray	Dark Gray
Jewel Blue		Blue *	Dark Blue *
Midnight Blue	Jewel Blue	Blue *	Dark Blue *
Seamist Turquoise	—		Dark Gray
Twilight Turquoise	Ermine White		
Seafoam Green	Ermine White	Green *	Dark Green *
Arbor Green	Seafoam Green		
Almond Beige	—	Gray	Dark Gray
Fawn Beige	Almond Beige		
Coronado Cream	—		
Shadow Gray	—		
Honduras Maroon			

* - Gray fabric, dark gray paint for Biscayne Utility Sedan.

** - Gray fabric, black paint for Biscayne Fleetmaster series.

**EXTERIOR - INTERIOR
COLOR COMBINATIONS - Cont'd.**
BEL AIR SERIES AND PARKWOOD STATION WAGONS

EXTERIOR		INTERIOR		
SOLID COLORS, WHEELS AND LOWER BODY COLOR OF TWO-TONE MODELS **	ROOF OF TWO-TONE MODELS	FABRICS	PAINT	
Tuxedo Black	Ermine White	Gray	Dark Gray	
		Red*	Red	
Ermine White		Gray	Dark Gray	
		Green	Dark Green	
		Blue	Dark Blue	
		Turquoise	Dark Turquoise	
		Fawn	Medium Dark Fawn	
		Red*	Red	
Roman Red	Ermine White	Gray	Dark Gray	
		Red*	Red	
Satin Silver		Gray	Dark Gray	
		Red*	Red	
Jewel Blue	Jewel Blue	Blue	Dark Blue	
Midnight Blue				
Seamist Turquoise	—	Turquoise	Dark Turquoise	
Twilight Turquoise	Ermine White			
	Seamist Turquoise			
Seaford Green	Ermine White	Green	Dark Green	
Arbor Green	Seaford Green			
Almond Beige	—	Fawn	Medium Dark Fawn	
Fawn Beige	Almond Beige			
Corona Cream	—			
Shadow Gray	—	Red*	Red	
Honduras Maroon		Gray	Dark Gray	

* - Not available for 2 and 4-door sedan models.

** - Body side insert area is Ermine White for all solid and two-tone combinations.

**EXTERIOR-INTERIOR COLOR COMBINATIONS
IMPALA SERIES AND NOMAD STATION WAGONS**

EXTERIOR			INTERIOR	
SOLID COLORS, WHEELS AND LOWER BODY COLOR OF TWO-TONE MODELS	BODY SIDE INSERT AREA**	ROOF OF TWO-TONE MODELS	FABRICS	PAINT*
Tuxedo Black	Ermine White	Ermine White	Gray	Dark Gray
			Red	Red
Ermine White	Tuxedo Black		Gray	Dark Gray
	Seafom Green		Green	Dark Green
	Jewel Blue		Blue	Dark Blue
	Seamist Turquoise		Turquoise	Dark Turquoise
	Fawn Beige		Fawn	Medium Dark Fawn
	Roman Red		Red	Red
Roman Red	Ermine White	Ermine White	Gray	Dark Gray
			Red	Red
Sateen Silver	Roman Red		Gray	Dark Gray
			Red	Red
Jewel Blue	Ermine White	Jewel Blue	Blue	Dark Blue
Midnight Blue				
Seamist Turquoise		—	Turquoise	Dark Turquoise
Twilight Turquoise	Seamist Turquoise	Ermine White		
		Seamist Turquoise		
Seafom Green	Ermine White	Ermine White	Green	Dark Green
Arbor Green	Seafom Green	Seafom Green		
Almond Beige	Ermine White	—	Fawn	Medium Dark Fawn
Fawn Beige		Almond Beige		
Corona Cream		—		
Shadow Gray		—	Red	Red
Honduras Maroon		—	Gray	Dark Gray

* - Steering wheel is two-tone.

** - Roof color is used in this area for all two-tone combinations.

*** - Solid colors only. Roof color is used in this area for all two-tone combinations.

EXTERIOR - INTERIOR COLOR COMBINATIONS - Cont'd.

IMPALA CONVERTIBLE

IMPALA CONVERTIBLE TOP COLORS

EXTERIOR COLORS	TOP COLORS		
	WHITE	BLACK	BLUE
Tuxedo Black	✓	✓	
Ermine White	✓	✓	
Roman Red	✓	✓	
Sateen Silver	✓	✓	
Jewel Blue	✓	✓	✓
Midnight Blue	✓	✓	✓
Seamist Turquoise	✓	✓	
Twilight Turquoise	✓	✓	
Seafom Green	✓	✓	
Arbor Green	✓	✓	
Almond Beige	✓	✓	
Fawn Beige	✓	✓	
Corona Cream	✓	✓	
Shadow Gray	✓	✓	
Honduras Maroon	✓	✓	

**INTERIOR TRIM
DISTRIBUTION**

BISCAYNE SERIES AND BROOKWOOD STATION WAGONS

AREA		MATERIAL	TRIM COMBINATIONS				
			GRAY	GREEN ♦	BLUE ♦		
Seats	Cushion and Backrest	Pattern Cloth * Pattern Vinyl ** Leather Grain Vinyl	Light, Medium and Dark Gray	Light, Medium and Dark Green	Light, Medium and Dark Blue		
			Medium Gray	Medium Green	Medium Blue		
	Backrest Bolster		White	Light Green	Light Blue		
	Cushion and Backrest Facing		Light Gray	Medium Green	Medium Blue		
	Front Seat	Upper	White	Light Green	Light Blue		
	Back	Lower	Light Gray	Medium Green	Medium Blue		
	Upper		White	Light Green	Light Blue		
	Lower		Medium Green	Medium Blue			
	Lower - Rear §§		-----	-----			
	Rear Division Board §§		-----	-----			
Sidewalls	Rear Wheelhouses §§		Panel Board	Light Gray			
	Upper		Paint	-----			
	Lower		-----	-----			
Armrests	Lower - Rear §§		Composition Board	Medium Green	Medium Blue		
	Rear Division Board §§		Panel Board	-----			
	Rear Wheelhouses §§		Paint	-----			
Headlining	Upper		L. Grain Vinyl	Medium Green	Medium Blue		
	Lower		Plastic	-----			
Sunshade	Cloth *		Cloth *	Light Green	Light Blue		
	Vinyl **		White	-----			
	Composition Board		Light Gray *	-----			
	White **		White **	-----			
Sunshade Binding	Composition Board		Light Gray *	Medium Green	Medium Blue		
	Leather Grain Vinyl		White **	-----			
	Composition Board		-----	-----			
Floor Covering	Passenger Area		Rubber	Medium Gray	Medium Blue		
	Lead Shelf §§		Rubber	Black	-----		
	Lead Floor, Gate **		Textured Metal W/Vinyl Spray	Medium Gray	Medium Green		
Rear Wheelhouses & Extensions **			Textured Metal W/Vinyl Spray	Light Gray	Medium Blue		
Cowl Side Kick Panels			Composition Board	Dark Gray	Dark Green		
					Dark Blue		

* - Not available for 11-1221 Utility Sedan

* - Sedans only

** - Station Wagons only

§§ - Model 11-1221 Utility Sedan only

INTERIOR TRIM

DISTRIBUTION - Cont'd.

BISCAYNE FLEETMASTER SERIES AND BEL AIR 2-DOOR AND 4-DOOR SEDANS

BISCAYNE FLEETMASTER SERIES

AREA		MATERIAL	TRIM COMBINATION	
			GRAY	
Seats	Cushion and Backrest	Leather Grain Vinyl	Light Gray	
	Backrest Bolster		Black	
	Cushion and Backrest Facing		Medium Gray	
	Front Seat Upper		Black	
	Back Lower		Medium Gray	
	Upper		Black	
Sidewalls	Lower	Composition Board	Medium Gray	
	Headlining	Cloth	Light Gray	
Sunshade		Composition Board		
Sunshade Binding		Leather Grain Vinyl		
Floor Covering		Rubber	Black	
Cowl Side Kick Panels		Composition Board		

BEL AIR 2-DOOR AND 4-DOOR SEDANS

AREA		MATERIAL	TRIM COMBINATIONS				
			GRAY	GREEN	BLUE	TUR- QUOISE	FAWN
Seats	Cushion and backrest	Pattern cloth Leather grain vinyl	Med. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn
	Backrest bolster		White	Dk. Green	Dk. Blue	Dk. Turq.	Dk. Fawn
	Cushion and backrest facing		Dk. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn
	Front Upper		White	Dk. Green	Dk. Blue	Dk. Turq.	Dk. Fawn
	Seat Lower		Dk. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn
	Back Lower cross bar		Lt. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn
Sidewalls	Upper		White	Dk. Green	Dk. Blue	Dk. Turq.	Dk. Fawn
	Lower		Dk. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn
	Insert area		Lt. Gray	Lt. Green	Lt. Blue	Lt. Turq.	Lt. Fawn
	Accent stripes		White				
Armrests	Upper	Plastic	Dk. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn
	Base		Lt. Gray	Lt. Green	Lt. Blue	Lt. Turq.	
Headlining		Cloth	Lt. Gray	Lt. Green	Lt. Blue	Lt. Turq.	
Sunshades			Med. Gray	Med. Green	Med. Blue	Med. Turq.	
Sunshade binding		Light grain vinyl	Med. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Dk. Fawn
Floor covering		Vinyl coated rubber, carpet insert	Dk. Gray	Dk. Green	Dk. Blue	Dk. Turq.	
Cowl side kick panels		Composition board	Dk. Gray	Dk. Green	Dk. Blue	Dk. Turq.	

BEL AIR SPORT MODELS AND PARKWOOD STATION WAGONS

AREA		MATERIAL	TRIM COMBINATIONS												
			GRAY	GREEN	BLUE	TUR-QUOISE	FAWN	RED*							
Seats	Cushion and backrest	Pattern cloth Leather grain vinyl	Med. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn	Red							
	Cushion and backrest bolster		Lt. Gray												
	Bolster accent stripes (from outside)		Black	Turquoise			Dk. Fawn	White							
	Cushion and backrest facing		Red	Chartreuse			Copper	Black							
	Front Seat Back		White	Blue			Lt. Fawn	Silver							
	Upper		Dk. Gray	Dk. Green	Dk. Blue	Dk. Turq.	Dk. Fawn	Red							
	Lower		Lt. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn								
	Lower cross bar		Dk. Gray	Dk. Green	Dk. Blue	Dk. Turq.	Dk. Fawn								
	Sidewall *		Lt. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn								
Sidewalls	Sidewall accent stripes (from top)		White	Turquoise			Lt. Fawn	White							
	Insert Area **		Red	Chartreuse			Copper	Black							
	Insert molding	Metal	Black	Blue			Dk. Fawn	Silver							
	Insert ornament	Vinyl	Dk. Gray	Dk. Green	Dk. Blue	Dk. Turq.		Red							
	Upper	Lt. grain vinyl	Dk. Gray	Dk. Green	Dk. Blue	Dk. Turq.	Dk. Fawn	Red							
Armrests	Base	Plastic	Bright												
	Headlining	Pattern vinyl	White	Lt. Green	Lt. Blue	Lt. Turq.	Lt. Fawn								
Sunshades															
Sunshade binding															
Floor Covering	Passenger area	Vinyl coated rubber, carpet insert	Med. Gray	Med. Green	Med. Blue	Med. Turq.	Med. Fawn	Red							
	Third seat footwell x	Rubber													
	Load floor, tailgate xx	Texture metal with vinyl spray													
Rear wheelhouses and extensions xx		Lt. grain vinyl	Dk. Gray	Dk. Green	Dk. Blue	Dk. Turq.	Dk. Fawn	Red							
Cowl side kick panels		Composition board		Dk. Green	Dk. Blue	Dk. Turq.	Med. Dk. Fawn								

* - Upper and lower for rear door or quarter

** - Center for rear door or quarter

x - 9-Passenger Station Wagon only

xx - Station Wagon only

INTERIOR TRIM DISTRIBUTION - Cont'd.

IMPALA SERIES AND NOMAD STATION WAGONS

AREA		MATERIAL	TRIM COMBINATIONS					
			GRAY	GREEN	BLUE	TURQ- QUOISE	FAWN	RED
Seats	Cushion and Backrest	Pattern Cloth	Light Gray	Medium Green	Medium Blue	Medium Turq	Medium Fawn	Red
	Cushion and Backrest Facing	Pattern Vinyl *						
	Cushion and Backrest Bolster	Leather Grain Vinyl	White	Light Green	Light Blue	Light Turq	Light Fawn	White
	Front Seat Upper		Lt Gray	Med Green	Med Blue	Med Turq	Med Fawn	Red
	Back Lower							
	Front End Panels	Aluminum				Bright		
Sidewalls	Upper	Leather Grain Vinyl	Light Gray	Medium Green	Medium Blue	Medium Turq	Medium Fawn	Red
	Center	Brush Texture Vinyl				Silver		
	Lower	Pattern Vinyl	Light Gray	Medium Green	Medium Blue	Medium Turq	Medium Fawn	Red
	Accent Stripes	Vinyl				Bright		
Armrests		Leather Grain Vinyl	Light Gray	Medium Green	Medium Blue	Medium Turq	Medium Fawn	Red
Headlining and Sunshades		Cloth **	Light Gray	Light Green	Light Blue	Light Turq	Medium Fawn	Light Gray
		Pattern Vinyl	White				Light Fawn	White
Sunshade Binding		Leather Grain Vinyl	Light Gray **				Medium Fawn **	Light Gray **
			White				Light Fawn	White
Floor Covering	Passenger Area	Carpet	Light Gray	Medium Green	Medium Blue	Medium Turq	Medium Fawn	Red
	Third Seat Foot Well ¶	Rubber	Medium Gray					
	Load Floor, Tail Gate ¶	Vinyl-Type Linoleum	Light Gray					
Rear Wheelhouses and Extensions ¶		Leather Grain Vinyl	Light Gray					
Cowl Side Kick Panels		Composition Board	Dark Gray	Dark Green	Dark Blue	Dark Turq	Med Dk Fawn	

* - Convertible only

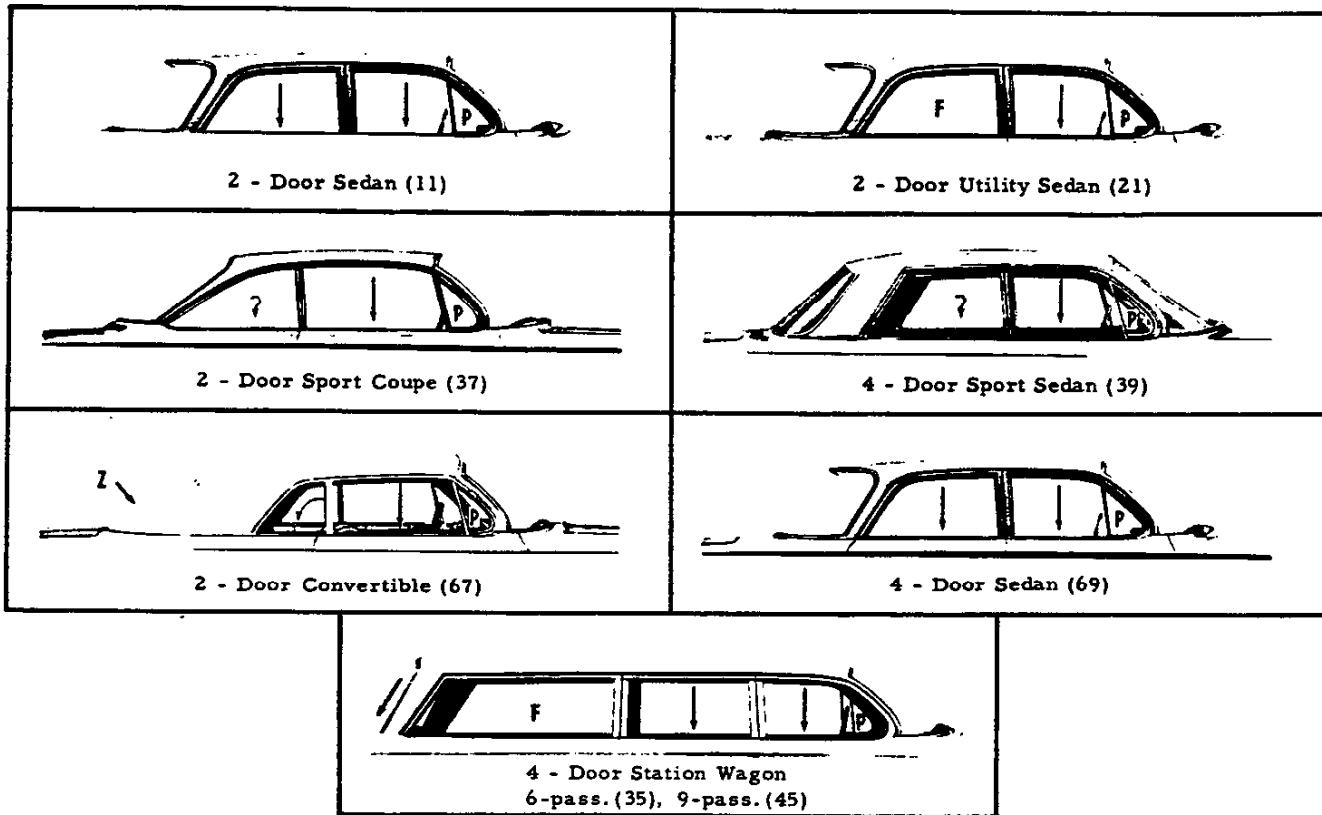
** - 2 and 4-Door Sedan only

¶ - Station Wagons only

¶¶ - 9-Passenger Station Wagon only

BODY GLASS

WINDOW ACTION



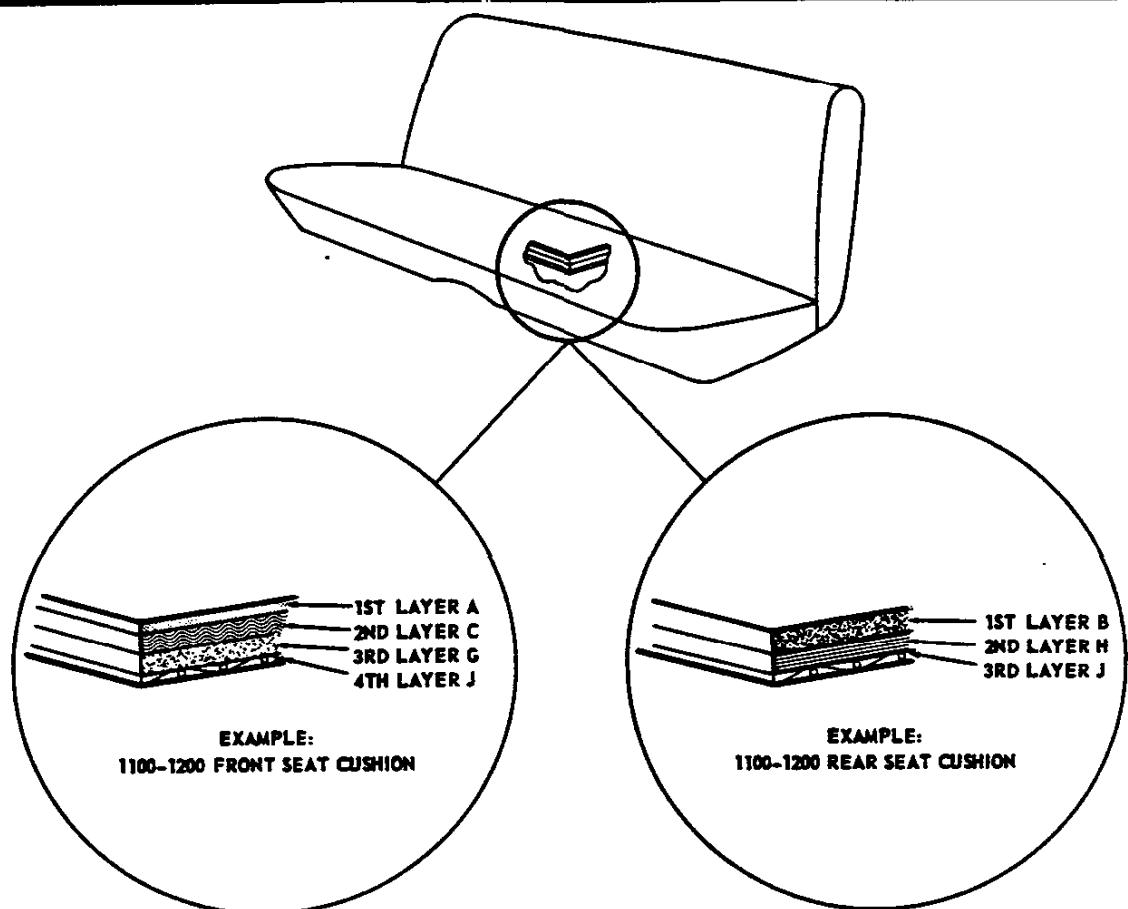
P - Pivoting, crank vent
 F - Fixed glass
 Z - Zip out
 ↴ - "Monkey" action
 ↤ - Rotating

BODY GLASS TYPE AND VISIBILITY AREA

Location	69	39	11	37	21	67	35	45
Laminated safety plate, one piece straight element*								
Windshield				1600.3		1463.3		1600.3
Front door	Ventipane				Laminated safety plate			
	Window	98.0	77.2	98.0	77.2	98.0	77.2	98.0
Rear door window	Window	564.4	602.6	816.4	865.4	816.4	768.2	564.4
		655.8	659.8					820.7
Rear quarter	Window			427.4	519.0	425.3	275.0	
	Rear side				Safety solid plate			1181.6
Back window				Safety solid plate		Plastic	Safety solid plate	
		1338.0	1224.0	1338.0	1721.1	1338.0	1059.1	916.0
Total visibility area		4256.5	4163.9	4280.1	4783.0	4278.0	3642.8	5181.0

* - Convertible has one piece, compound curve.

SEAT PADDING



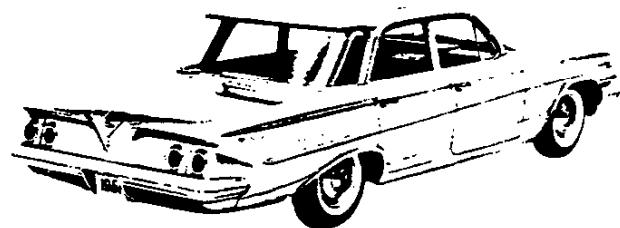
MODELS

MATERIAL APPLICATION	1100-1200-1300-1400V					1500-1600					1700-1800						
	11	21	69	35	45	11	69	37	39	35	45	11	69	37	39	67	35
Front Seat Cushion	A-C-G-J					A-D-G-J					A-E-F-J					A-D G-J	
Rear Seat Cushion	B-H-J					A-C-H-K					A-E-L						
Second Seat Cushion						B-H-J					A-C H-K					A-E L	
Third Seat Cushion						M E-L					M E-L					M E-L	

V - 1300-1400 series applicable to models 1311-1369; 1411-1469 only.

ITEM	MATERIAL TYPE
A	Cotton Topper - 3 oz
B	Cotton Pad - 6 oz
C	Polyurethane - 3/4"
D	Polyurethane - 1"
E	Polyurethane - 1-3/4"
F	Cotton Base Pad - 3 oz
G	Cotton Base Pad - 5 oz
H	Jute Pad .38
J	Wire - Burlap Insulator
K	Burlap - Plastic Insulator
L	Burlap (Composite) Insulator
M	Cotton Topper - 1-3/4 oz
N	Cotton Topper - 1-3/4 oz.

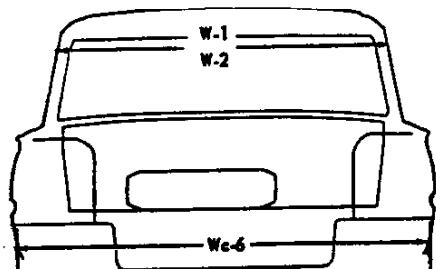
DIMENSIONS AND WEIGHTS



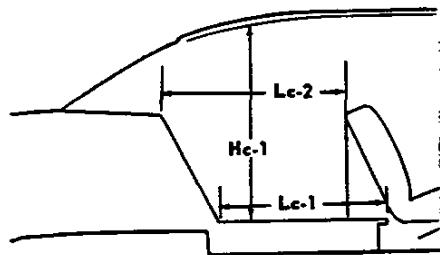
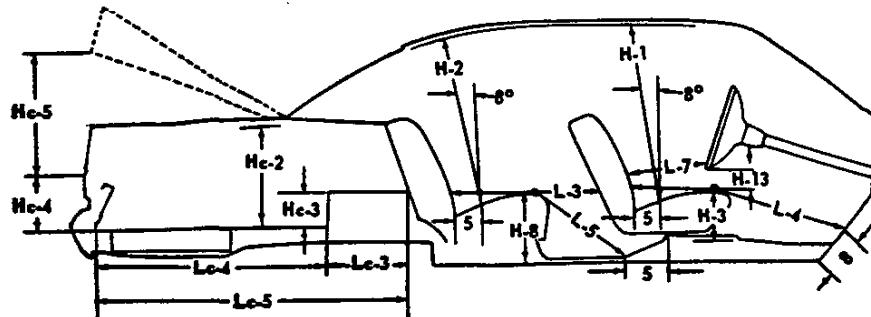
INTERIOR DIMENSIONS	2
EXTERIOR DIMENSIONS	4
VEHICLE WEIGHTS	6

INTERIOR DIMENSIONS

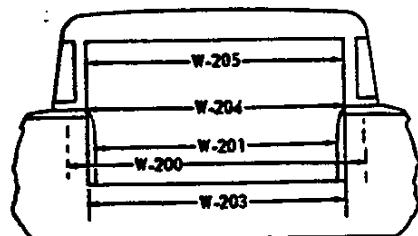
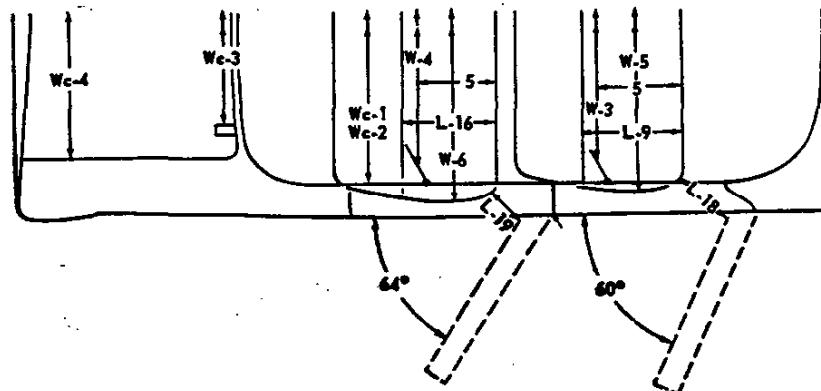
NOTE: DIMENSIONS SHOWN WITH A LETTER "c" SUFFIX ARE CHEVROLET, OTHERS ARE STANDARD GM DIMENSIONS. ONLY 8 CYLINDER MODELS ARE SHOWN.



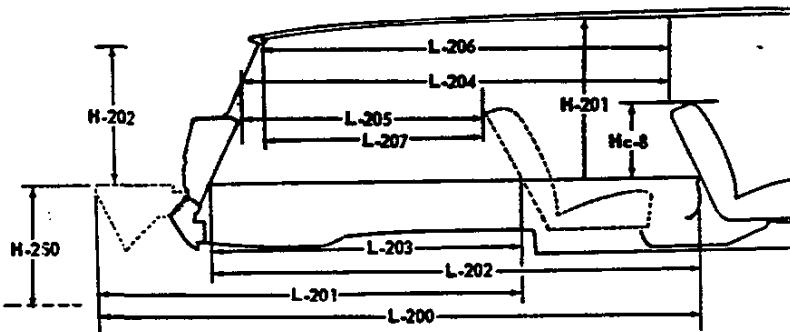
SEDANS AND COUPES



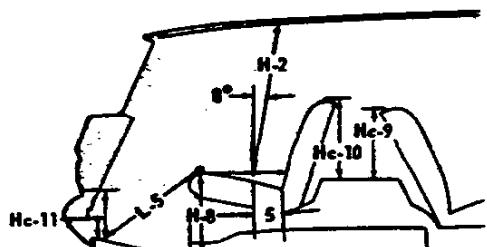
UTILITY SEDAN



6 and 9-PASSENGER STATION WAGON



6-PASSENGER STATION WAGON



9-PASSENGER STATION WAGON

TRUNK AND CARGO CAPACITIES (CU.FT.)

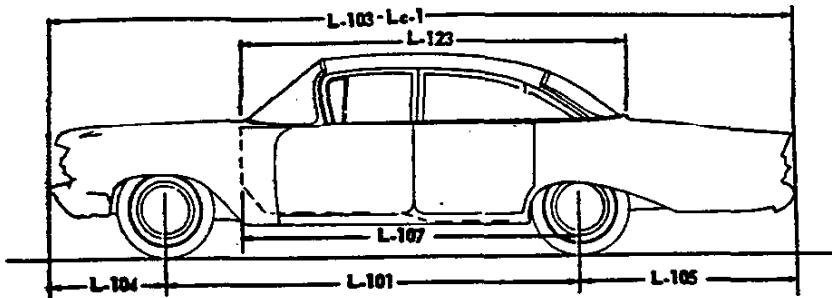
Models		Overall	Standard Luggage
Sedans, Sport Sedans, and Sport Coupes		29.7	19.0
Convertible	Top up	29.7	19.0
	Top down	28.2	19.0
	Rear seat folded	87.0	
	Rear seat erect	49.5	
	Hidden compartment	+10.5	
Station Wagons	Rear and third seat folded	87.0	
9-Pass.	Rear erect and third folded	49.5	
	Rear and third erect	5.6	
	Hidden compartment	+ 5.7	
Utility Sedan	Inside load space	28.5	

		MODELS					
		1211-21	1269	1637	1639	1867	1235-45
		1411	1469	1837	1839		1635-45
		1611	1669				1835-45
		1811	1869				
INTERIOR LENGTHS							
CODE	DESCRIPTION						
L-3	Rear compartment room	29.0		26.0	29.0	26.0	29.0
L-4	Leg room - front			45.0			
L-5	Leg room	42.0	39.0	42.0	39.0	42.0	
	third						36.5
L-7	Steering wheel clearance to seat back			14.0			
L-9	Seat depth - front			18.5			
L-16	Seat depth	18.0	18.5	18.0	18.5		
	third						18.0
L-18	Entrance - foot clearance - front			15.0			14.5
L-19	Entrance - foot clearance - rear	11.7	8.9	11.9	9.1	13.6	
L-200	Load length - floor - front seat to tailgate - open						118.8
L-201	Load length - floor - rear seat to tailgate - open						84.6
L-202	Load length - floor - front seat to tailgate - closed						94.2
L-203	Load length - floor - rear seat to tailgate - closed						60.0
L-204	Load length at belt - front seat to tailgate - closed						82.5
L-205	Load length at belt - rear seat to tailgate - closed						46.8
L-206	Load length at roof - front seat to back window						75.9
L-207	Load length at roof - second seat to back window						40.2
Lc-1	Rear compartment length at floor (Utility Sedan)	34.6					
Lc-2	Rear compartment length at belt (Utility Sedan)	34.8					
Lc-3	Trunk length - front			27.5			
Lc-4	Trunk length - rear			31.0			
Lc-5	Trunk length - overall			58.5			

INTERIOR WIDTHS							
W-1	Hat room - front						57.5
W-2	Hat room	rear	57.0	55.5	54.0	54.5	52.0
		third					55.0
W-3	Shoulder room - front						59.0
W-4	Shoulder room	rear	57.5	58.0	57.0	58.0	51.0
		third					57.0
W-5	Hip room - front						63.5
W-6	Hip room	rear	63.0	63.5	55.5	63.5	52.0
		third					63.5
W-200	Maximum platform width ahead of wheelhouse						62.1
W-201	Minimum width between wheel houses						46.1
W-203	Tailgate opening width at floor						56.4
W-204	Tailgate opening width at belt						54.7
W-205	Tailgate opening width above belt						54.2
Wc-1	Rear compartment width at floor (Utility Sedan)	64.3					
Wc-2	Rear compartment width at belt (Utility Sedan)	58.8					
Wc-3	Width between trunk hinge boxes			39.5			
Wc-4	Trunk maximum opening width			54.0			
Wc-6	Trunk maximum width at floor			73.0			

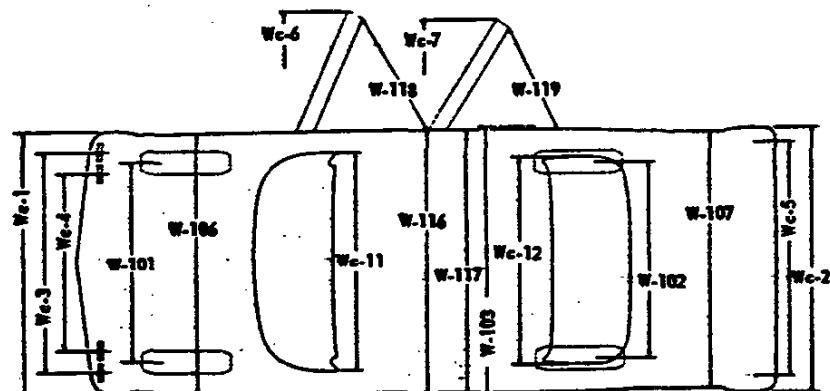
INTERIOR HEIGHTS							
H-1	Head room - front (Depressed)						39.5
H-2	Head room	rear (Depressed)	38.0		37.0	37.0	40.0
		third (Depressed)					37.0
H-3	Chair height - front						11.0
H-8	Chair height	rear	14.0	13.0	14.0	13.5	13.0
		third					14.5
H-11	Entrance room - front		29.4	29.6	29.4	27.7	29.1
H-12	Entrance room - rear			28.4	28.4		29.3
H-13	Steering wheel clearance				5.0		
H-201	Load height - maximum						31.5
H-202	Rear opening height						30.4
H-250	Tailgate to ground						23.0
Hc-1	Rear compartment - maximum height (Utility Sed.)	39.0					
Hc-2	Trunk maximum height			23.0			
Hc-3	Trunk floor kickup height			6.5			
Hc-4	Trunk sill to floor			11.2			
Hc-5	Trunk maximum opening height			38.2			
Hc-8	Front seat back to load floor						12.8
Hc-9	Rear seat back to load floor						13.5
Hc-10	Third seat back to load floor						14.8
Hc-11	Sill height third seat						13.3

EXTERIOR DIMENSIONS



EXTERIOR LENGTHS

CODE	DESCRIPTION	MODELS					
		1211-21	1269	1637	1639	1867	1235-45
L-101	Wheelbase				119.0		
L-103	Overall length - bumper to bumper				209.3		
L-104	Overhang - front				32.8		
L-105	Overhang - rear				57.5		
L-107	Front of dash to center of rear wheels				100.0		
L-123	Body upper structure length at C	102.9	101.7	102.9	105.2	140.7	
Lc-1	Overall length less bumpers				205.4		



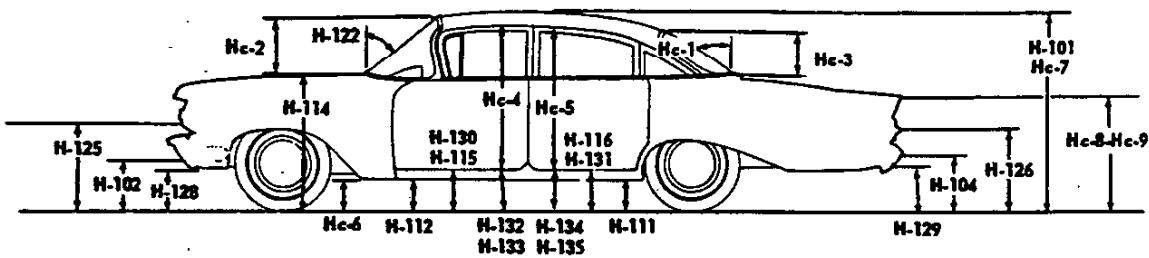
EXTERIOR WIDTHS

W-101	Tread - front			60.3		
W-102	Tread - rear			59.3		
W-103	Overall width (maximum)			78.4		
W-106	Front fender width at center of wheel			76.6		
W-107	Rear fender width at center of wheel			75.8		
W-116	Maximum overall width of body			76.0		
W-117	Maximum body width at center pillar			76.0		
W-118	Door swing out distance - front	46.2	37.4	46.2	37.4	46.2
W-119	Door swing out distance - rear		34.3		33.9	34.3
Wc-1	Front bumper width			78.4		
Wc-2	Rear bumper width			78.4		
Wc-3	Outer headlight centers width			66.8		
Wc-4	Inner headlight centers width			50.4		
Wc-5	Tail light centers width			66.2		
Wc-6	Overall width, front doors open	161.9	143.5	161.9	143.5	161.9
Wc-7	Overall width, rear doors open		139.8		139.8	139.8
Wc-8	Opening width at beltline - front door	38.5	28.8	38.5	28.4	38.5
Wc-9	Opening width below beltline - front door	43.9	31.4	43.9	31.2	43.9
Wc-10	Opening width below beltline - rear door		30.8		30.8	30.8
Wc-11	Windshield DLO width			61.2		
Wc-12	Rear window DLO width	61.4	59.1	58.7	53.3	

October 1960

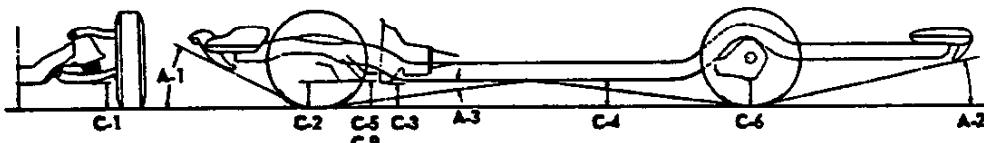
4 - DIMENSIONS AND WEIGHTS

1961 CHEVROLET PASSENGER CAR



EXTERIOR HEIGHTS

CODE	DESCRIPTION	MODELS					
		1211-21 1411 1611 1811	1269 1469 1669 1869	1637 1837	1639 1839	1867	1235-45 1635-45 1835-45
H-101	Overall height - loaded		55.5				56.0
H-102	Front bumper bottom to ground		15.5			16.0	16.5
H-104	Rear bumper bottom to ground		16.0			16.5	17.0
H-111	Rocker panel sill to ground - rear		8.0				
H-112	Rocker panel to ground - front		8.5				
H-114	Hood at rear to ground		38.0				
H-115	Step height - front door - loaded		13.0				
H-116	Step height - rear door - loaded		13.1		13.0		13.0
H-122	Windshield slope angle		57.3°		54.7°		57.3°
H-125	Headlight centerline to ground	25.4	25.8	25.4	25.8	25.9	26.3
H-126	Taillight centerline to ground	25.1	25.4	25.1	25.4	25.5	27.5
H-128	Bottom of front bumper guard to ground		11.0			11.5	12.0
H-129	Bottom of rear bumper guard to ground		11.5			12.0	12.5
H-130	Step height - front door - unloaded		15.0				
H-131	Step height - rear door - unloaded		15.0		15.0		15.0
H-132	Bottom of front door to ground - open			13.0			
H-133	Bottom of front door to ground - closed			11.5			
H-134	Bottom of rear door to ground - open		11.3		11.3		11.3
H-135	Bottom of rear door to ground - closed		11.3		11.3		11.3
Hc-1	Rear window slope angle	47°	61°	47°	57°	27°	
Hc-2	Windshield DLO vertical height			15.2			
Hc-3	Rear window DLO vertical height		13.2	14.8	14.0	15.0	
Hc-4	Front door opening height			37.0			
Hc-5	Rear door opening height		36.9		36.9		36.9
Hc-7	Overall height - unloaded		57.6			58.1	
Hc-8	Trunk sill to ground - loaded		21.9				
Hc-9	Tailgate to ground - open - loaded						23.0



GROUND CLEARANCES

A-1	Angle of approach	27°
A-2	Angle of departure	13°
A-3	Ramp breakover angle	11°
C-1	Front suspension to ground	7.0
C-2	Oil pan to ground	6.5
C-3	Flywheel housing to ground	7.0
C-4	Frame to ground	7.0
C-5	Exhaust system to ground	6.0
C-6	Rear axle to ground	7.1
C-9	Minimum ground clearance	6.0

VEHICLE WEIGHTS

1100-1200 BISCAYNE

Model	Vehicle Type Description	Shipping Weight			Curb Weight			Loaded Weight		
		Front	Rear	Total	Front	Rear	Total	Front	Rear	Total
1111	2-Door Sedan 6-cylinder	1830	1585	3415	1855	1720	3575	2170	2305	4475
1111P		1905	1610	3515	1935	1745	3680	2250	2330	4580
1211	2-Door Sedan 8-cylinder	1830	1595	3425	1855	1725	3580	2170	2310	4480
1211P		1905	1615	3520	1930	1745	3675	2245	2330	4575
1211T	Utility Sedan 6-cylinder	1840	1600	3440	1865	1735	3600	2180	2320	4500
1121		1835	1555	3390	1855	1690	3545	2090	1905	3995
1121P	Utility Sedan 8-cylinder	1910	1580	3490	1930	1715	3645	2165	1930	4095
1221		1830	1565	3395	1855	1700	3555	2085	1920	4005
1221P	4-Door Sedan 6-cylinder	1905	1590	3495	1930	1725	3655	2165	1940	4105
1221T		1840	1575	3415	1870	1705	3575	2100	1925	4025
1169	4-Door Sedan 8-cylinder	1865	1635	3500	1885	1770	3655	2200	2355	4555
1669P		1945	1660	3605	1965	1795	3760	2280	2380	4660
1269	4-Door Sedan 8-cylinder	1855	1650	3505	1880	1785	3665	2195	2370	4565
1269P		1935	1675	3610	1955	1810	3765	2270	2395	4665
1269T		1865	1660	3525	1890	1795	3685	2280	2380	4585

1300-1400 BISCAYNE FLEETMASTER

1311	2-Door Sedan 6-cylinder	1825	1585	3410	1850	1715	3565	2165	2300	4465
1311P		1905	1610	3515	1930	1740	3670	2245	2375	4570
1411	2-Door Sedan 8-cylinder	1825	1590	3415	1850	1725	3575	2165	2310	4475
1411P		1905	1615	3520	1925	1750	3675	2240	2345	4575
1411T	4-Door Sedan 6-cylinder	1840	1595	3435	1865	1730	3595	2180	2315	4495
1369		1860	1635	3495	1880	1770	3650	2195	2350	4545
1369P	4-Door Sedan 8-cylinder	1940	1660	3600	1965	1790	3755	2275	2375	4650
1469		1850	1650	3500	1875	1785	3660	2190	2370	4560
1469P	4-Door Sedan 8-cylinder	1930	1675	3605	1955	1810	3765	2270	2395	4665
1469T		1865	1655	3520	1890	1790	3680	2205	2375	4580

1500-1600 BEL AIR

VEHICLE TYPE		SHIPPING WEIGHT			CURB WEIGHT			LOADED WEIGHT		
Model	Description	Front	Rear	Total	Front	Rear	Total	Front	Rear	Total
1511	2-Door Sedan 6-cylinder	1835	1595	3430	1860	1700	3560	2175	2305	4480
1511P		1915	1615	3530	1935	1750	3685	2250	2335	4585
1611		1835	1600	3435	1860	1735	3595	2175	2320	4495
1611P	2-Door Sedan 8-cylinder	1915	1620	3535	1940	1755	3695	2255	2340	4595
1611T		1850	1605	3455	1875	1740	3615	2190	2325	4515
1537	2-Door Sport Coupe 6-cylinder	1865	1605	3470	1885	1740	3625	2180	2195	4375
1537P		1940	1630	3570	1965	1765	3730	2265	2215	4480
1637		1860	1620	3480	1875	1755	3630	2175	2205	4380
1637P	2-Door Sport Coupe 8-cylinder	1925	1645	3570	1950	1780	3730	2250	2230	4480
1637T		1865	1625	3490	1890	1760	3650	2190	2210	4400
1539	4-Door Sport Sedan 6-cylinder	1890	1660	3550	1915	1800	3715	2225	2390	4615
1539P		1965	1690	3655	1990	1825	3815	2305	2410	4715
1639		1870	1885	3555	1900	1820	3720	2215	2405	4620
1639P	4-Door Sport Sedan 8-cylinder	1955	1715	3670	1980	1845	3825	2295	2430	4725
1639T		1890	1695	3565	1915	1830	3745	2230	2415	4645
1569	4-Door Sedan 6-cylinder	1875	1640	3515	1895	1780	3675	2210	2360	4570
1569P		1950	1670	3620	1970	1800	3770	2285	2385	4670
1669		1860	1660	3520	1885	1790	3675	2195	2375	4570
1669P	4-Door Sedan 8-cylinder	1940	1680	3620	1960	1815	3775	2275	2400	4675
1669T		1875	1665	3540	1900	1795	3895	2215	2380	4595

1700-1800 IMPALA

1711	2-Door Sedan 6-cylinder	1845	1600	3445	1870	1730	3600	2185	2315	4500
1711P		1920	1625	3545	1945	1755	3700	2260	2340	4600
1811		1840	1600	3440	1860	1735	3595	2175	2320	4495
1811P	2-Door Sedan 8-cylinder	1915	1625	3540	1940	1755	3695	2255	2340	4595
1811T		1855	1605	3460	1875	1740	3615	2190	2325	4515
1737	2-Door Sport Coupe 6-cylinder	1870	1615	3485	1895	1750	3645	2195	2195	4390
1737P		1945	1640	3585	1970	1775	3745	2270	2220	4490
1837		1855	1625	3480	1880	1760	3640	2180	2210	4390
1837P	2-Door Sport Coupe 8-cylinder	1930	1650	3580	1955	1785	3740	2255	2235	4490
1837T		1870	1630	3500	1900	1760	3660	2185	2205	4410
1739	4-Door Sport Sedan 6-cylinder	1900	1675	3575	1925	1810	3735	2240	2390	4630
1739P		1980	1700	3680	2005	1835	3840	2320	2420	4740
1839		1880	1690	3570	1910	1820	3730	2225	2405	4630
1839P	4-Door Sport Sedan 8-cylinder	1960	1715	3675	1985	1845	3830	2300	2430	4730
1839T		1900	1695	3595	1925	1830	3750	2240	2410	4650
1767	Convertible 6-cylinder	1925	1680	3605	1940	1820	3760	2240	2270	4510
1767P		2000	1710	3710	2020	1845	3865	2320	2295	4515
1867		1900	1700	3600	1930	1830	3760	2230	2280	4510
1867P	Convertible 8-cylinder	1985	1725	3710	2010	1850	3860	2310	2305	4615
1867T		1930	1700	3630	1945	1835	3780	2245	2285	4530
1769	4-Door Sedan 6-cylinder	1880	1650	3530	1905	1780	3685	2215	2370	4585
1769P		1960	1675	3635	1985	1805	3790	2300	2390	4690
1869		1865	1660	3525	1890	1790	3680	2200	2380	4580
1869P	4-Door Sedan 8-cylinder	1945	1685	3630	1965	1820	3785	2300	2405	4685
1869T		1875	1670	3545	1905	1800	3705	2220	2385	4605

1100-1200 BROOKWOOD

VEHICLE TYPE		SHIPPING WEIGHT			CURB WEIGHT			LOADED WEIGHT		
Model	Description	Front	Rear	Total	Front	Rear	Total	Front	Rear	Total
1135	4-Door Station Wagon 6-cylinder	1795	2055	3850	1800	2205	4005	2120	2785	4905
1135P		1870	2085	3955	1880	2230	4110	2200	2810	5010
1235		1780	2065	3845	1785	2215	4000	2110	2790	4900
1235P	4-Door Station Wagon 8-cylinder	1860	2090	3950	1865	2240	4105	2190	2815	5005
1235T		1795	2075	3870	1805	2220	4025	2125	2800	4925
1145	4-Door Station Wagon 6-cylinder *	1780	2120	3900	1790	2265	4055	2045	3360	5405
1145P		1860	2145	4005	1865	2295	4160	2120	3390	5510
1245		1755	2140	3895	1760	2285	4045	2015	3385	5395
1245P	4-Door Station Wagon 8-cylinder *	1835	2165	4000	1840	2310	4150	2090	3410	5500
1245T		1765	2150	3915	1775	2295	4070	2030	3390	5420

1500-1600 PARKWOOD

1535	4-Door Station Wagon 6-cylinder	1800	2065	3865	1810	2210	4020	2130	2790	4920
1535P		1880	2090	3970	1885	2235	4120	2205	2815	5020
1635		1785	2075	3860	1795	2220	4015	2115	2800	4915
1635P	4-Door Station Wagon 8-cylinder	1865	2100	3965	1875	2245	4120	2195	2825	5020
1635T		1800	2085	3885	1810	2230	4040	2130	2810	4940
1545	4-Door Station Wagon 6-cylinder *	1785	2130	3915	1795	2270	4065	2045	3370	5415
1545P		1865	2155	4020	1870	2300	4170	2125	3395	5520
1645		1755	2150	3905	1765	2295	4060	2020	3390	5410
1645P	4-Door Station Wagon 8-cylinder *	1835	2175	4010	1845	2320	4165	2100	3415	5515
1645T		1775	2155	3930	1780	2305	4085	2035	3400	5435

1700-1800 NOMAD

1735	4-Door Station Wagon 6-cylinder	1810	2075	3885	1815	2225	4040	2140	2800	4940
1735P		1890	2105	3995	1895	2250	4145	2215	2830	5045
1835		1800	2080	3880	1800	2235	4035	2125	2810	4935
1835P	4-Door Station Wagon 8-cylinder	1875	2110	3985	1885	2255	4140	2205	2835	5040
1835T		1810	2095	3905	1820	2240	4060	2140	2820	4960
1745	4-Door Station Wagon 6-cylinder *	1795	2140	3935	1805	2285	4090	2055	3385	5440
1745P		1875	2165	4040	1880	2315	4195	2135	3410	5545
1845		1770	2160	3930	1775	2310	4085	2030	3405	5435
1845P	4-Door Station Wagon 8-cylinder *	1845	2190	4035	1855	2335	4190	2110	3430	5540
1845T		1785	2170	3955	1790	2320	4110	2045	3415	5460

P - Powerglide

T - Turboglide

* - 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 35 pounds to the 6-cylinder models, 37 pounds to the 283 V-8 models, and 43 pounds to the 348 V-8 models.

NOTE: Eight cylinder engine weights shown are for the standard 283 cubic inch V-8. For the optional 348 cubic inch V-8 add 145 pounds to front and total shipping weights, 152 pounds (engine weight plus water) to front and total curb and loaded weights.

LOADED WEIGHT: The curb weight of the basic vehicle plus a maximum of 150 pounds for each passenger.

Example:

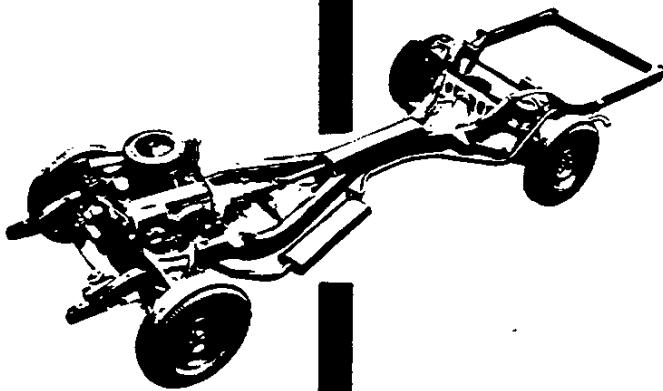
Model 1169 (6 passenger) ----- 3655 + 900 = 4555

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

Example:

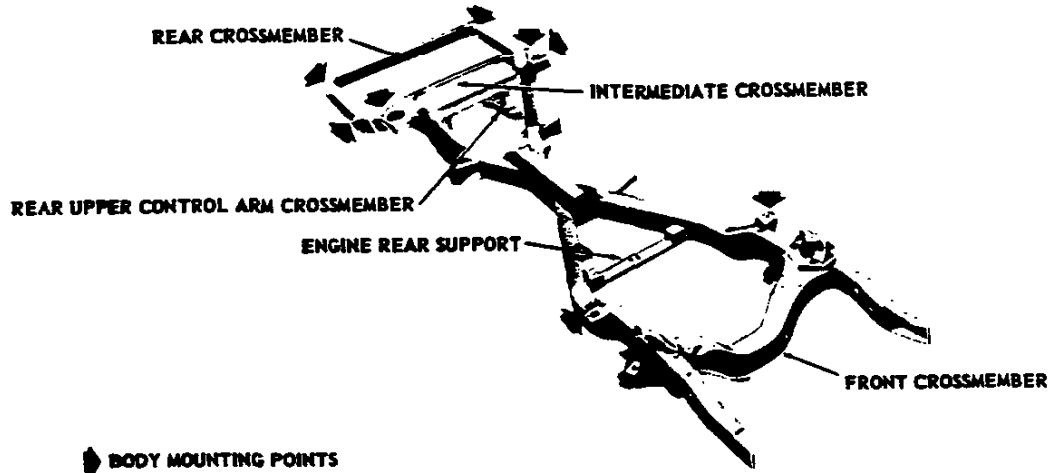
Model 1169 ----- 3655 + 600 = 4255

CHASSIS



FRAME	2
FRONT SUSPENSION	3
STEERING	5
REAR SUSPENSION	6
REAR AXLE	7
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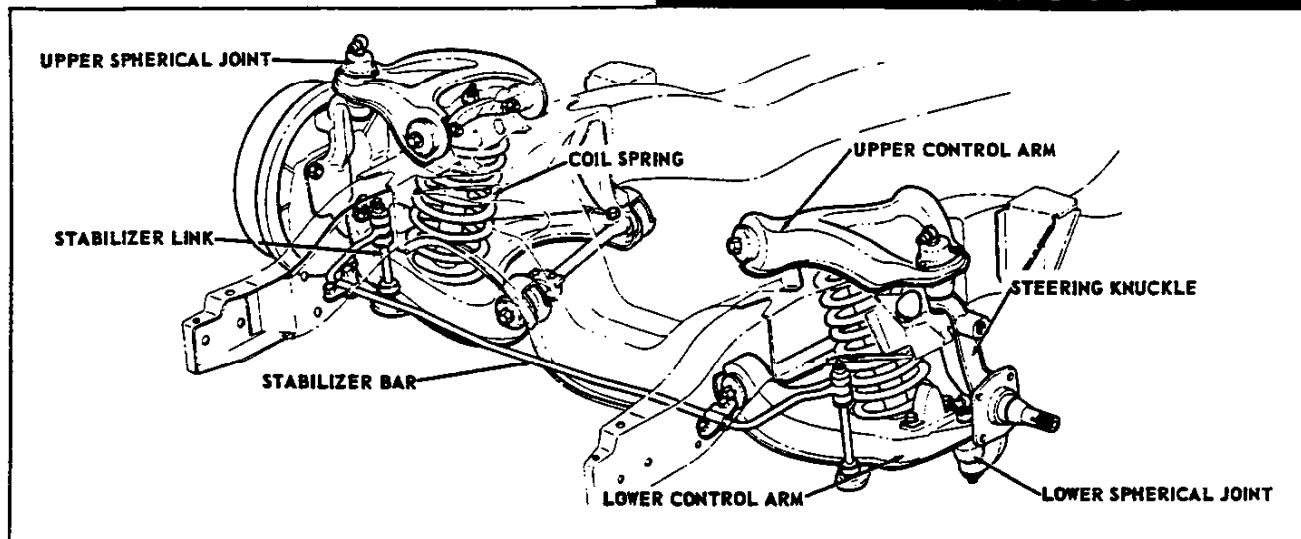
FRAME



GENERAL

Type	All welded X-design
Number Crossmembers	4
Sidemember Section Modulus (in ³)	1.90
Moment of inertia	4.27
Overall Length (Max)	194.5
Width (maximum over sidemembers at rear crossmember)	47.50
Convertible Frame	Steel plates welded to top and bottom of sidemember and center beam.
Body Mounting Points Convertible	12
All others	8

FRONT SUSPENSION



GENERAL

Make ----- Chevrolet
 Type ----- Independent, combining long and short control arms with spherical joints and coil springs.
 Provision for car leveling ----- Stabilizer bar
 Provision for brake dip control ----- Mounting angle of upper control arms

WHEEL TRAVEL

Vertical, Loaded Conditions
 Metal to Metal ----- 3.90 up, 4.54 down
 Wheel to Spring Ratio ----- 1.87:1

SPRING BUMPERS

Material and number ----- Rubber, 2 each RH & LH
 Location ----- On top side of lower control arm and top side of frame crossmember.

Spherical Joints

Type ----- Ball stud and socket in assembly, self adjusting for wear.
 Number ----- 1 each, upper and lower; LH & RH Ball Stud:
 Material ----- Hot rolled steel hardened and ground
 Ball spherical diameter:
 Upper ----- 1.304-1.308
 Lower ----- 1.246-1.250
 Bearings ----- Non-metallic; molded, phenolic impregnated fabric.

Seals:

Upper ----- Rubber with bonded nylon bushing
 Lower ----- Rubber with steel cover

Socket:

Type and material:

Upper ----- Two cup-shaped steel stampings bonded by grease-tight weld with rubber type loading ring to compensate for wear.

Lower ----- Forged seat and stamped socket, each cup shaped, and bonded by grease tight peening.

Lubrication ----- Through 4 high pressure fittings, one at top of each socket.

WHEEL BEARINGS

Type (inner & outer) ----- Tapered roller

STEERING KNUCKLE

Type ----- Forged steel with integral brake cylinder mounting, detachable steering arms.

Spindle Diameters:

At inner bearing ----- 1.2490-1.2495
 At outer bearing ----- .7490-.7495
 Spindle thread size ----- 3/4-20

SHOCK ABSORBERS

Make ----- Delco
 Type ----- Direct, double acting hydraulic
 Mounting ----- Vertically from lower control arm through coil spring to fr. suspension crossmember.
 Piston Diameter and Travel ----- 1.00; 4.9375

STABILIZER BAR

Type ----- Link
 Material ----- Hot rolled steel
 Diameter ----- 0.6875
 Bushings ----- Rubber; 10 (1 each at frame side rail and 4 each left hand and right hand at link attachment).
 Usage ----- All except 1111-69-21; 1311-69; 1511-69-37-39

CONTROL ARM BUSHINGS

Type and number ----- Pre-loaded rubber; 8 (2 each pivot shaft, left hand and right hand).
 Material ----- Steel encased rubber
 Size:
 Upper ----- .670-.677 x 1.76 approximately
 Lower ----- .737-.744 x 2.08 approximately

FRONT WHEEL ALIGNMENT:

Caster ----- $0^{\circ} \pm 30'$
 Camber ----- $+30^{\circ} \pm 30'$
 Steering axis inclination ----- $7^{\circ} 11'$
 Toe-in (per wheel) ----- 1/16-1/8

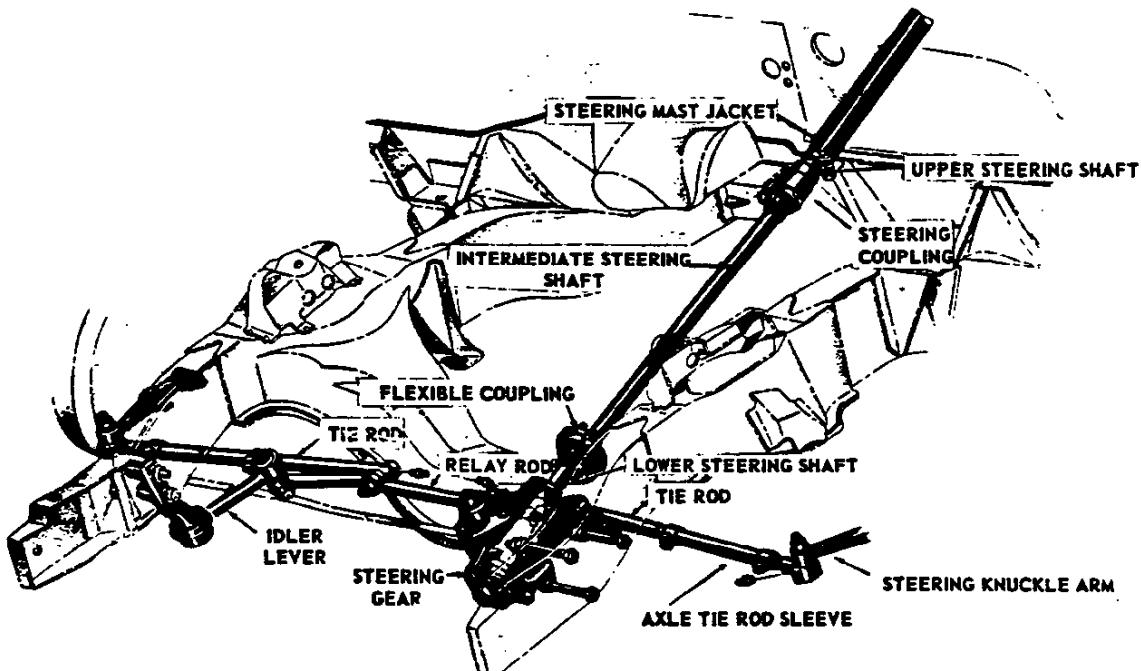
FRONT SPRINGS

Application	SERIES		11-1200					13-1400					15-1600					17-1800					
	Model		11	69	21	35	45	11	69	11	69	35	37	39	45	11	69	35	37	39	67	45	
6 Cylinder	Manual		B	B	B	A	B	B	B	B	B	A	B	B	B	A	A	A	A	F	B		
	Powerglide		C	C	C	F	C	C	C	C	C	F	C	C	C	F	F	F	F	J	C		
	Air	Manual	D	D	-	J	D	-	D	D	J	D	D	D	J	J	J	J	J	G	D		
	Cond.	PG	E	E	-	G	E	-	E	E	G	E	E	E	G	G	G	G	G	H	E		
	Manual or TG		A	A	A	A	B	A	A	A	A	A	A	A	B	A	A	A	A	A	F	B	
	Powerglide		F	F	F	F	C	F	F	F	F	F	F	F	C	F	F	F	F	J	C		
283 Cu. In. V-8	Air	PG	G	G	G	E	G	G	G	G	G	G	G	G	G	E	G	G	G	G	H	E	
	Cond.	TG or Man.	J	J	J	J	D	J	J	J	J	J	J	J	J	D	J	J	J	J	G	D	
	Manual or TG		F	F	F	F	C	F	F	F	F	F	F	F	C	F	F	F	F	J	C		
348 & 409 Cu.In. V-8 #	Powerglide (HD)		J	J	J	J	D	J	J	J	J	J	J	J	J	D	J	J	J	G	J	G	D
	Air Cond.	TG	G	G	G	G	E	G	G	G	G	G	G	G	G	E	G	G	G	G	H	E	

Application	A	B	C	D	E	F	G	H	J												
Part Number	3741497	3746852	3746853	3752906	3752908	3758760	3758763	3759987	3764582												
Type																					
Right hand helix																					
Material																					
High alloy steel																					
No. Coils																					
8.67, 10.11																					
Wire Dia.																					
.630																					
Outside Dia.																					
5.062																					
Pitch Dia.																					
4.432																					
Height	Free	17.05	15.32	15.53	15.76	15.98	17.33	17.08	17.27	16.82											
	Working	10.30@ 1855		10.30@ 1935	10.30@ 2020	10.30@ 2100	10.30@ 1935	10.30@ 2100	10.30@ 2160	10.30@ 2020											
Cap. @ grd.																					
Defl. @ spring																					
275 Lb/In.																					
96 Lb/In.																					
Rate @ wheel																					
129 Lb/In.																					

- 409 cu in available with manual transmissions only

STEERING



STEERING GEAR

Make -----	Saginaw
Type -----	Semi-reversible recirculating ball
Gear Ratio -----	24:1
Overall Ratio (Approx.) -----	28:1
Steering Mainshaft Diameter -----	.750
Steering Column Diameter -----	2.01
Steering Wheel Diameter -----	17.00
Turning Diameters	
Outside front:	
Right and left wall to wall -----	43.6 Ft.
Right and left curb to curb -----	40.8 Ft.
Inside rear:	
Right and left wall to wall -----	23.2 Ft.
Right and left curb to curb -----	24.5 Ft.
Outside Wheel Angle with Inside Wheel@20° 17°54'	
Number of Wheel Turns:	
To steering gear stop -----	6.14
To wheel stops on control arm -----	5.80

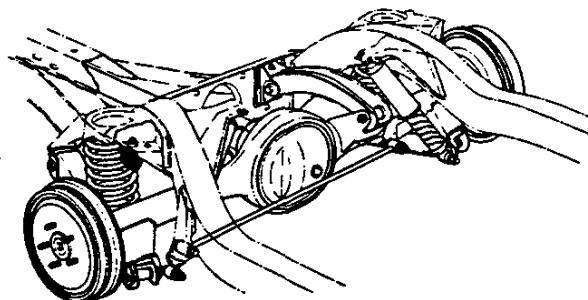
LINKAGE

Type -----	Relay
Location -----	To front of wheels
Tie Rods -----	2

POWER STEERING (RPO 324):

Make -----	Saginaw
Type -----	Hydraulic
Pump:	
Type -----	Vane
Mounting -- 6 cyl. ---	On bracket above generator
8 cyl. ---	On bracket below generator
Drive -----	From the crankshaft pulley.
Maximum pump pressure -----	750-800 PSI
Fluid capacity -----	1.5 pts
Generator:	
Make -----	Delco-Remy
Model -----	1102115
Pulley size (pitch diameter) -----	3.32, 36°V"
Ratio (generator to engine speed) -----	2.00:1
Belt size:	
Reg. prod. 6-cyl. eng. ---	.310 x 44.50 pitch length
Reg. prod. 8-cyl. eng. ---	.310 x 56.00 pitch length
Power Application -----	Double acting piston in power cylinder is actuated by control valve after approximately 3 pounds of pressure is exerted at the steering wheel.
Overall Ratio -----	24:1
Gear Ratio -----	20:1
Number of wheel turns -----	5.20

REAR SUSPENSION



GENERAL

Make ----- Chevrolet
 Type ----- Four-link with an upper control arm, a lateral control bar, and 2 lower control arms, coil springs.
 Provision for squat control ----- Rear suspension geometry, drive and torque taken through upper and lower control arms.

WHEEL TRAVEL

Vertical, Loaded Conditions
 Metal to Metal ----- 4.32 up, 5.56 down
 Wheel to Spring Ratio ----- 1.51:1

LATERAL CONTROL BAR

Mounting ----- Pivots at right side of axle housing banjo and at frame left sidemember.
 Diameter ----- .750
 Length (to C of bushings) ----- 31.35-31.47

SUSPENSION BUMPERS

Material and number ----- Rubber, 1 each RH & LH
 Location --- On under side of frame at top of kick-up

CONTROL ARMS

Mounting:
 Upper ----- Pivots at forward end to frame right sidemember, and on axle housing banjo at rear.
 Lower ----- Pivots at forward ends to frame brackets and at rear to axle housing brackets.

SHOCK ABSORBERS

Make ----- Delco
 Type ----- Direct, double acting hydraulic
 Mounting ----- Short cantilever brackets welded to frame sidemember at upper end and to rear spring anchor plate at lower end.
 Piston Diameter and Travel ----- 1.00; 8.4375

WHEEL BEARINGS

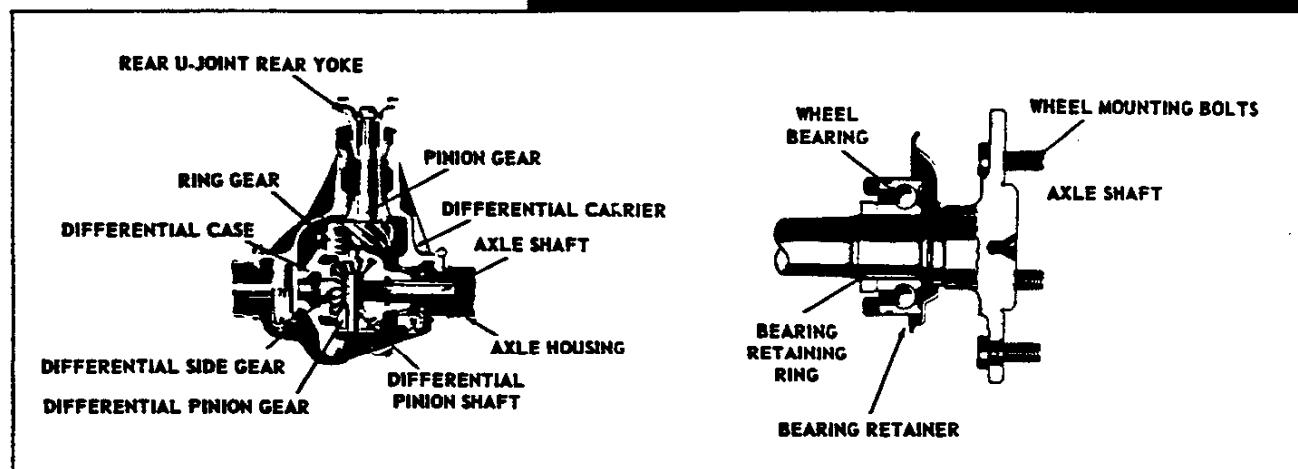
Type ----- Single row ball

REAR SPRINGS

Application	Series	11-1200				13-1400				15-1600				17-1800						
		Model	11	69	21	35	45	11	69	35	37	39	45	11	69	35	37	39	67	45
Standard	6 Cyl.	C	C	C	E	A	C	C	C	E	G	C	A	B	B	E	F	B	C	A
	V-8	B	B	B	E	A	B	B	B	E	F	B	A	B	B	E	F	B	C	A
Heavy Duty	6 Cyl.	D	D	D	A	-	D	D	D	D	A	D	D	-	D	D	A	D	D	-
	V-8	D	D	D	A	-	D	D	D	D	A	D	D	-	D	D	A	D	D	-

Application	A	B	C	D	E	F	G
Part Number	3777137	3777136	3777133	3777134	3765137	3752910	3754513
Type	Right hand helix						
Material	High alloy steel						
Number Coils	7.8, 94.1	8.8, 10.41	7.8, 9.41	8.8, 10.41	8.8, 10.41	7.8, 9.41	
Wire Dia.	.681	.583	.587	.630	.648	.583	.587
Outside Dia.	5.000	4.804	4.812	4.898	4.934	4.804	4.812
Pitch Dia.	4.319	4.221	4.225	4.268	4.286	4.221	4.225
Height	Free	15.06	16.66	15.77	15.03	16.02	16.33
	Working	9.88@ 2300	9.88@ 1560		9.88@ 1750	9.55@ 2200	9.55@ 1560
Capacity @ Ground	1700	1195		1315	1615	1195	
Deflection Rate	at spring	450 Lb/in.	230 Lb/in.	265 Lb/in.	340 Lb/in.	230 Lb/in.	265 Lb/in.
	at wheel	195 Lb/in.	101 Lb/in.	112 Lb/in.	145 Lb/in.	101 Lb/in.	112 Lb/in.

REAR AXLE



GENERAL

Make ----- Chevrolet
 Type ----- Semi-floating
 Rating ----- 3000 lb.

Four Link Suspension Drive:

Drive and torque taken through --- All control arms
 Lateral forces taken through --- Lateral control bar
 Housing Type ----- Pressed steel banjo, two
 piece welded construction with axle housing cover
 welded in place.
 Lubricant Capacity ----- 4 pints
 Lubricant Recommended ----- SAE 90 passenger
 car hypoid lubricant or "Multi-Purpose" lubricant.

AXLE SHAFT

Type and Material ----- Forged and hardened steel
 with wheel drive flange forged integral with shaft.
 Minimum Diameter ----- 1.96
 Oil Seal ----- Steel encased spring loaded
 synthetic rubber (part of rear wheel bearing assy.)
 Hub Attachment ----- Bolted to
 integrally forged wheel drive flange.

DIFFERENTIAL

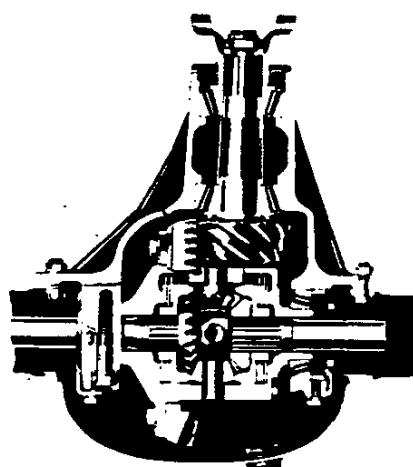
Type ----- Two pinion with Armasteel housing
 Drive Pinion Offset ----- 1.5
 Ring Gear Pitch Diameter and O.D. ----- 8.375

HYPOID GEARS, FINAL DRIVE (Also applicable to Positraction)

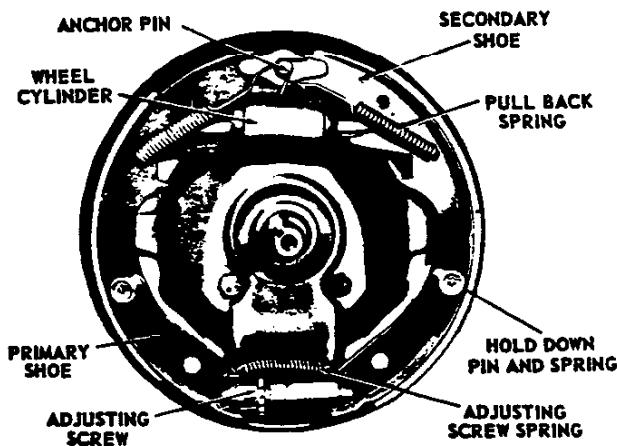
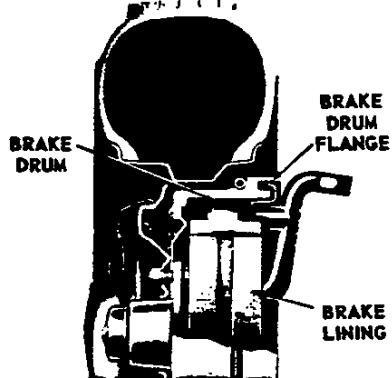
AXLE RATIO	RING & PINION	SPEEDOMETER GEAR
3.08:1	12-37	19
3.36:1	11-37	20
3.55:1	9-32	21
3.70:1	10-37	22

POSITRACTION

Make ----- Spicer, limited slip
 Type ----- Dual multiple disk clutches
 applied by reaction to drive line torque through the
 differential side gears.
 Available Ratios ----- 3.08, 3.36, 3.55, & 3.70:1
 Clutch Plate Material ----- CR steel
 Number Driving ----- 4
 Number Driven ----- 4
 Number of Pinions ----- 4
 Active Faces ----- 3
 • Lubricant capacity ----- 3.7 pts



BRAKES



SERVICE BRAKES

Make ----- Chevrolet
Type ----- Servo, four wheel hydraulic
Brake Drum:

Type ----- Composite
Rim material ----- Cast alloy iron
Web material ----- Pressed steel
Diameter, front and rear ----- 11
Total effective area ----- 328 sq. in.

Distribution of Braking Effort (theoretical):
On front wheels ----- 58.5%
On rear wheels ----- 41.5%
Brake Lining (dimensions after grinding):
Material ----- Full molded asbestos composition
Width, front brakes ----- 2.75
Width, rear brakes ----- 2.00
Thickness (Minimum) ----- .168
Length per wheel ----- 21.00
Length, primary shoe ----- 9.30
Length, secondary shoe ----- 11.70
Method of attachment to shoe ----- Bonded
Clearance ----- Adjust to a light drag and back off seven notches.
Total effective area ----- 185.6 sq.in.*

Master Cylinder:
Mounting ----- Under hood on dash panel
Diameter ----- 1.0
Piston travel (Max.) ----- 1.329

Wheel cylinders:
Mounting ----- Front, on wheel spindles,
rear, on backing plate.
Front, inside diameter ----- 1.1875
Rear, inside diameter ----- 1.00

Braking Ratio:
Pedal ----- 6.21:1
Hydraulic ----- 4.82:1
Total overall ----- 29.93:1

* - Gross lining area is 199.5 square inches.
All primaries have .38 inch full length groove.

Foot Pedal:

Type ----- Pendant
Travel ----- 6.38
Mounting ----- On brace under dash
Brake system fluid capacity --- 0.70 pint (approx.)
Line pressure @ 100 lb. pedal load ----- 750

PARKING BRAKE

Make and Type ----- Chevrolet, mechanical pull rods and cables operate the two rear service brakes.
Total Effective Lining Area ----- 77 sq. in.
Control ----- Applied by pendulum foot pedal;
released by T-handle below instrument panel left of steering column

POWER BRAKES (RPO 412)

Type ----- Regular production master cylinder assisted by vacuum power unit.
Power Unit Location ----- Mounted on dash under hood.

Braking Assistance (percentage):

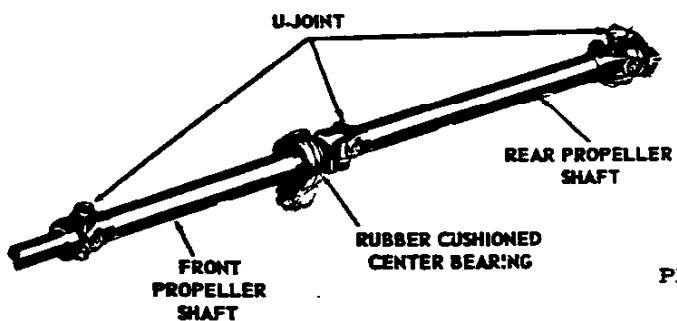
By vacuum cylinder ----- 40%
By foot pedal ----- 60%

Braking Ratio:
Pedal ----- 3.43:1
Hydraulic ----- 4.82:1
Overall ----- 16.53:1
Pedal Load to Actuate Power Brakes ----- 10 lb.

STOP LIGHT SWITCH (Reg. prod. & RPO 412)
Type ----- Mechanical
Mounting ----- Under dash

METALLIC BRAKES (RPO 686)
For detailed information refer to passenger car general section page 11.

DRIVELINES



SPLINES

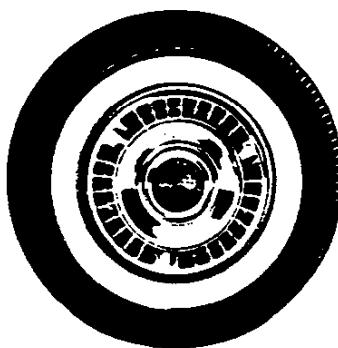
Clutch Disc to Trans. Clutch Gear Shaft ----- 10 straight side
 Trans. Mainshaft to Fr. U-joint Fr. Yoke ----- 16 involute
 Fr. Prop. Shaft to Intermediate U-joint Fr. Yoke ----- 9 straight side
 Rear U-joint R. Yoke to R. Axle Pinion Shaft ----- 17 involute
 Diff. Side Gears to R. Axle Shafts ----- 17 involute

UNIVERSAL JOINTS

Make ----- Chevrolet
 Number ----- Three
 Type ----- Yoke and spider (trunnion)
 Bearing (intermediate) ----- Prepack, anti-friction

PROPELLER SHAFTS

Make -----	Chevrolet
Number -----	Two
Type -----	Tubular exposed
Tube OD -----	1.995-2.003
Length front 3-speed & TG -----	30.12
Overdrive & 4-speed -----	24.97
Powerglide -----	24.03
Length rear -----	35.00
Wall Thickness -----	0.097
Yoke Types	
Front shaft, fr; rear shaft, fr & rr -----	Welded
Front shaft, rear -----	Slip



ACCESSORY WHEEL DISK
ALL MODELS

WHEELS

Make and Type ----- Chevrolet, short spoke disk
 Attachment to Hub ----- 5 studs, 7/16-20
 Offset ----- 0.560
 Rim Size 9-Pass Wagons ----- 14 x 6.0JK
 Remainder models ----- 14 x 5.0J

TIRES

Type ----- Rayon tubeless
 Size Convertible & Sta. Wgn (Std) ----- 8.00 x 14-4
 Sedans & coupes (Std) ----- 7.50 x 14-4
 Sedans & coupes (Opt) ----- 8.00 x 14-4
 Sidewall Color Standard ----- Black
 Optional ----- White

WHEELS AND TIRES

TIRE DATA

Tire Size	Loaded			Pressure (cold)
	Rolling Radius	Revs./Mi	Cap. /tire	
7.50 x 14-4	12.78	789	1085	24
8.00 x 14-4	13.01	774	1175	24 24*

* - 28 psi on 9-pass. wagon

SPARE TIRE

Location Station Wagon ----- Vertically in right rear quarter panel, rear of wheelhouse
 Remainder models ----- Horizontally on left side of Kickup shelf

TOOLS

Jack Type ----- Column
 Stowage ----- Column serves as spare wheel support and base as spare wheel retainer
 Wheel Wrench ----- Serves also as jack handle and hub cap remover

ELECTRICAL COMPONENTS

HEADLIGHTS

Make ----- Guide, T-3
 Type ----- Dual, horizontal
 Sealed Beam Unit Diameter ----- 5.75
 Dimmed By ----- Foot switch
 High Beam Indicator ----- Chevrolet emblem
 in speedometer face
 Watts ----- 37.5-50
 Volts ----- 12-16
 Location ----- Outer extremity
 of radiator grille

PARKING LIGHTS

Location ----- Above headlights at ends of
 air inlet
 Bulb Replacement ----- Remove screws in bezel
 Controlled By ----- Main switch

TAIL AND STOP LIGHTS

Type Biscayne & Brookwood ----- One outboard each
 side serving as tail stop and direction signal unit,
 inboard light simulated backup lights
 Bel Air & Parkwood ----- Two each side, outboard
 serving as tail, stop and direction signal, inboard
 serving as tail light only
 Impala & Nomad ----- Two each side,
 outboard and inboard serving as tail, stop and di-
 rection signal unit

DIRECTIONAL SIGNAL

Make ----- Guide Lamp
 Type ----- Flasher, front and rear,
 self cancelling
 Front ----- Uses double filament
 parking light bulb
 Rear ----- Uses double filament
 tail and stop light bulb
 Indicators on Instrument Panel ----- Arrows at
 each end of speedometer face

BACKUP LIGHTS

Application Impala & Nomad ----- Regular production
 Remainder models ----- Optional
 Location Biscayne & Brookwood ----- One each side,
 in place of simulated backup light
 Bel Air & Parkwood ----- One each side,
 in place of inboard tail light
 Impala & Nomad ----- One each side,
 between outboard and inboard tail lights

INSTRUMENT PANEL LIGHTING

Temperature Gauge ----- Clear white light
 Gasoline Gauge ----- Clear white light

Speedometer ----- Clear white light
 High Beam Indicator ----- Red when lighted
 Oil Pressure Indicator ----- The word "OIL"
 (black letters on red background) visible when oil
 pressure is below safety level

Generator ----- The word "GEN"
 (black letters on red background) visible when gen-
 erator is not charging.

Turn Indicators ----- Green when lighted
 Heater and Radio Controls ----- Reflected
 green light

Glove Compartment ----- Clear white
 light when switch is actuated by opening compartment door.

MAIN SWITCH

Type ----- Three position "pull" type switch
 mounted on instrument panel with protective fuse.
 A rheostat operated by rotating the switch knob con-
 trols the brightness of the instrument panel lights.
 Passenger compartment lights are controlled by a
 detent in the rheostat when switch knob is rotated to
 extreme travel counter clockwise.

PASSENGER COMPARTMENT LIGHTS

Impala Sport Coupe and Sport Sedan ----- Dual
 roof rail lamps
 Convertible ----- Dual courtesy lamps,
 one under instrument panel each side.
 Station Wagon (9-Passenger) ----- Single courtesy
 lamp on left side to rear of third seat.
 Station Wagons ----- Single dome light
 located approximately at center of roof. In addition
 to switches listed below, a manual switch is provided
 at light.
 Manually Controlled By ----- Main switch
 Automatically Controlled By ----- Opening
 front doors only on 15-16-17-1800 Series. No auto-
 matic control on 11-1200, 13-1400 Series.

REAR LICENSE LIGHTS

Station Wagons ----- Outer extremity
 of license recess
 All Others ----- Two bulbs in upper side
 of recess for license plate.

HORNS

Make ----- Delco-Remy
 Type ----- Vibrator
 Number and Location ----- Two,
 attached to radiator side support
 Relay in Circuit ----- Yes
 Current
 High and low notes ----- 8-11 amperes

BULBS

Location			Quan.	Trade No.	CP¢	Location			Quan.	Trade No.	CP¢
Headlamp	Outer	High beam	2	4002	37.5 W	1	Clock		1	1816	2
		Low beam			50W		Direction Signal Indicator		2		
	Inner	High beam	2	4001	37.5 W		Generator Indicator		1		
Transmission Indicator (auto)			1				Glove Compartment Light		1		
Cigarette Lighter Lamp			1				Instrument Cluster		4 or 5		
Compass			1				Oil Pressure Indicator		1		
Headlamp Beam Indicator			1	57			Parking Brake Alarm		1		
Heater Lamp or Air Cond.			1				Side or Hardtops		2	90	6
Ignition Lock Light			1	53			Dome Lamps Others		1	211	15
Courtesy Lamp	Conv.		2				License Plate Lamp		1 or 2	67	3
	Sta. Wgn.		1	89	6		Luggage Compartment Lamp		1	1003	15
Back-up Lamp			2	1073	32		Underhood Lamp		1	93	15
Directional Signal-Frt.	Parking & turn		2	1034	4-32		Spot Lamp Inside operated		1	4405	
Directional Signal-Rear	Tail, stop & turn		4				Portable		1	4416	30W
							Radio Dial		1	1891	1

FUSES AND CIRCUIT BREAKERS

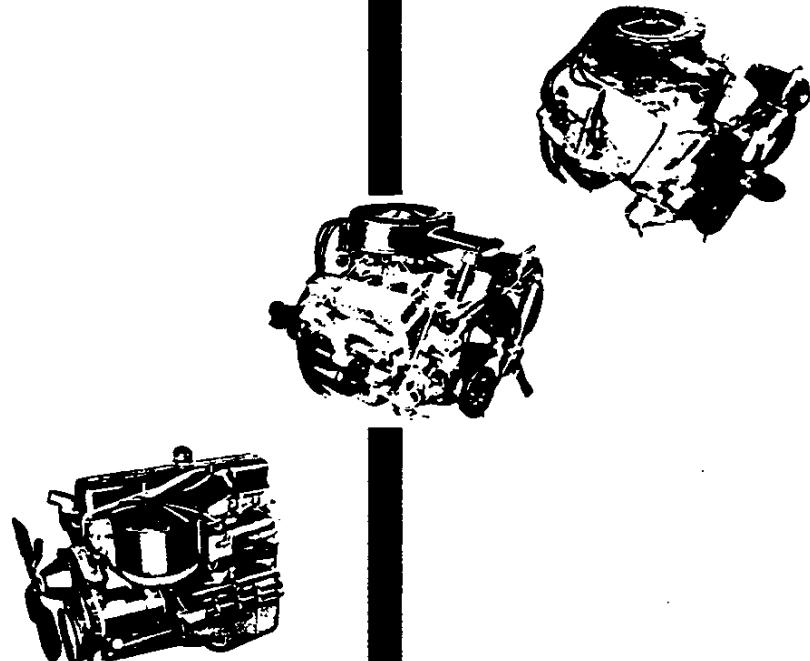
Device or Circuit Protected	Fuse & Amp	Circuit Breaker	Location
Air Conditioning (incl. heater)	SAE 20		Fuse block
Overdrive Solenoid	SAE 15		Eng. compt.
Underhood Lamp	SAE 9		Dash panel
Cigarette Lighter Lamp			
Clock Lamp			
Compass Lamp			
Ignition Light			
Instrument Lamps			
Radio Lamp			
Back Up Lamp			
Clock Motor			
Heater & Defroster (deluxe)			
Heater & Defroster (recirculating)			
Parking Brake Alarm			
Dome lamp			
Glove Compartment Lamp			
License Lamp			
Luggage Compartment Lamp			
Stop Lamps			
Tail Lamps			
Directional Signal Indicator	Flasher		Fuse block
Hydraulic Folding Top Motor		40 amp	
Headlamps		15 amp	
Parking Lamps			Dr. Pillar
Power Seats		40 amp	
Power Windows			
Windshield Wiper Motor		10 amp	Switch
Radio Receiver Manual & pushbutton	AGC 4		
Spot Lamp Inside operated	AGC 15		Fuse block

)

)

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POWER TRAINS



POWER TEAM COMBINATIONS	2
HI-THRIFT SIX CYLINDER ENGINE	4
283 CUBIC INCH V-8 ENGINE	12
348 CUBIC INCH V-8 ENGINE	22
• 409 CUBIC INCH V-8 ENGINE	36
CLUTCHES	39
THREE AND FOUR SPEED TRANSMISSIONS	40
OVERDRIVE UNIT	42
POWERGLIDE	43
TURBOGLIDE	45

POWER TEAM COMBINATIONS

POWER TEAM COMBINATIONS

<u>ENGINE</u>	<u>CARBURETION</u>	<u>TRANSMISSION</u>	<u>AXLE RATIO</u>
235 CU. IN. L-6 135 H.P. HI-THRIFT	SINGLE BARREL	3-SPEED STATION WAGON OVERDRIVE POWERGLIDE	3.36:1 3.55:1 3.70:1 3.36:1
283 CU. IN. V-8 170 H.P. TURBO-FIRE	2-BARREL	3-SPEED OVERDRIVE POWERGLIDE TURBOGLIDE	3.36:1 3.70:1 3.08:1 3.36:1
283 CU. IN. V-8 RPO 410 230 H.P. SUPER TURBO-FIRE	4-BARREL	3-SPEED OVERDRIVE POWERGLIDE TURBOGLIDE	3.36:1 3.70:1 3.08:1 3.36:1
348 CU. IN. V-8 RPO 576 250 H.P. TURBO-THRUST	4-BARREL	3-SPEED 4-SPEED TURBOGLIDE	3.36:1 3.08:1 3.08:1
348 CU. IN. V-8 RPO 573A 280 H.P. SUPER TURBO-THRUST	3 x 2-BARREL	3-SPEED 4-SPEED TURBOGLIDE	3.36:1 3.36:1 3.08:1
348 CU. IN. V-8 RPO 572 305 H.P. TURBO-THRUST SPECIAL	ALUMINUM 4-BARREL	3-SPEED 4-SPEED POWERGLIDE - SPEC.	3.36:1 3.36:1 3.55:1
348 CU. IN. V-8 RPO 590 340 H.P. TURBO-THRUST SPECIAL	ALUMINUM 4-BARREL SPECIAL CAM	3-SPEED 4-SPEED	3.70:1 3.70:1
348 CU. IN. V-8 RPO 573B 350 H.P. SUPER TURBO-THRUST SPECIAL	3 x 2-BARREL SPECIAL CAM	3-SPEED 4-SPEED	3.70:1 3.70:1
409 CU. IN. V-8 RPO 580 360 H.P.	ALUMINUM 4-BARREL SPECIAL CAM	3-SPEED 4-SPEED	3.36:1 3.36:1

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		
135 HP Std Six Cylinder	Single Barrel	3-speed	9.88	5.64	3.36			11.18	3.36:1
		Overdrive	out	10.88	6.22	3.70		12.32	3.70:1
170 HP Std V-8	2-Barrel	3-speed	9.88	5.64	3.36			11.18	3.36:1
		Overdrive	out	10.88	6.22	3.70		12.32	3.70:1
230 HP V-8 (RPO 410)	4-Barrel	3-speed	9.88	5.64	3.36			11.18	3.36:1
		Overdrive	out	10.88	6.22	3.70		12.32	3.70:1
250 HP V-8 (RPO 576)	4-Barrel	3-speed	8.30	5.14	3.36			9.41	3.36:1
		4-speed	7.82	5.19	4.65	3.08	8.04	3.08:1	2252
280 HP V-8 (RPO 573A)	3x2-Barrel	3-speed	8.30	5.14	3.36			9.41	3.36:1
		4-speed	8.53	6.45	5.07	3.36	8.77	3.36:1	2457
305HP V-8 (RPO 572)	4-Barrel	3-speed	8.30	5.14	3.36			9.41	3.36:1
		4-speed	8.30	6.45	5.07	3.36	8.77	3.36:1	
340 HP V-8 (RPO 590)	4-Barrel Special cam	3-speed	9.14	5.66	3.70			10.36	3.70:1
		4-speed	9.40	7.10	5.50	3.70	9.66	3.70:1	
350 HP V-8 (RPO 573B)	3x2-Barrel Special cam	3-speed	9.14	5.66	3.70			10.36	3.70:1
		4-speed	9.40	7.10	5.59	3.70	9.66	3.70:1	
360 HP V-8 (RPO 580)	4-Barrel Special Cam	3-Speed	8.30	5.14	3.36			9.41	3.36:1
		4-Speed	7.39	5.58	4.40	3.36	7.59	3.36:1	

* - Axle ratio x transmission ratio.

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

WITH AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE MULTIPLICATION	AXLE RATIO
135 HP Std Six Cylinder	Powerglide	Drive	12.84:1-3.36:1	3.36:1
		Low & Rev	12.84:1-6.12:1	
170 HP Std V-8 and 230 HP V-8 (RPO 410)	Powerglide	Drive	11.77:1-3.08:1	3.08:1 (3.36 with FOA 110)
		Low & Rev	11.77:1-5.61:1	
250 & 280 HP V-8's (RPO 576 & 573A)	Turboglide	Drive	14.45:1-3.36:1	3.36:1
		Reverse	10.4	
305 HP V-8 (RPO 575)	Turboglide	Drive	13.24:1-3.08:1	3.08:1
		Reverse	9.5	
305 HP V-8 (High performance)	Powerglide	Drive	13.56:1-3.55:1	3.55:1
		Low & Rev	13.56:1-6.46:1	

235 CUBIC INCH SIX CYLINDER ENGINE

GENERAL DATA

Engine		Synchromesh	Overdrive	Powerglide
Piston Displacement (Cu In)		235.5		
Type		Valve-in-head		
Number Cylinders		6		
Bore and Stroke (nominal)		3.56 x 3.94		
Compression Ratio		8.25:1		
Taxable (SAE) Horsepower		30.4		
Idling Speed (RPM)		475 in neutral		425 in drive
Compression Pressure (PSI) @ Cranking Speed, Engine Hot		130		
Dry Weight (Lbs)	Engine and clutch	605	555	
	With transmission	670	700	775
Lubrication		Full pressure		
Power Plant Mounting		Three point mounting, two front and one rear; combination compression and shear type		
Measurements	Fan to rear of clutch housing	41.26	36.37	
	Front of cylinder block to rear of clutch housing	34.26	29.37	
	Length of cylinder block	27.95		
	Top air cleaner to bottom oil pan	29.30		
	Crankcase vent tube to air cleaner (width)	25.75		

ADVERTISED MAXIMUM ENGINE PERFORMANCE

Engine		Synchromesh and Powerglide	
Carburetor		Single-barrel	
Brake Horsepower	Gross	135 @ 4000 RPM	
	Net	115 @ 3600 RPM	
Torque (Lb-Ft)		217 @ 2000-2400 RPM	
	Gross	197 @ 1200-2000 RPM	
	Net		

ENGINE SPEED AND PISTON TRAVEL

Transmission	3-Speed	3-Speed with Overdrive		Powerglide
		OD Locked Out	OD Locked In	
Rear Axle Ratio	3.36:1	3.70:1		3.36:1
Tire Size	7.50 x 14-4 (8.00 x 14-4 std on 1767 & station wagon models)			
Crankshaft Revolutions per Mile	2651.0	2919.3	2043.5	2651.0
Crankshaft RPM @ 1 MPH	Low and reverse	129.94	143.2	100.2
	Second	74.25	81.8	57.3
	Third (N/V factor)	44.2	48.7	34.1
Piston Travel (ft/mile)	1739.0	1915.1	1340.5	1739.1

ADVERTISED CAR PERFORMANCE FACTORS
(Model 1569)

Transmission	3-Speed	3-Speed with Overdrive (RPO 315)		Powerglide * (RPO 313)
		Locked out	Locked in	
Performance Weight (pounds)	4270	4301		4368
Pounds/Gross Horsepower	31.6	31.86		32.36
Pounds/Cu In Displacement	18.13	18.26		18.55
Gross Horsepower/Cu In Displacement		.573		
Power Displacement (Cu Ft/mile)	180.6	198.9	139.2	180.6
Displacement Factor (Cu Ft/ton mile)	84.6	92.5	64.8	82.7

* - Data computed assuming zero slippage in torque converter.

GLOSSARY

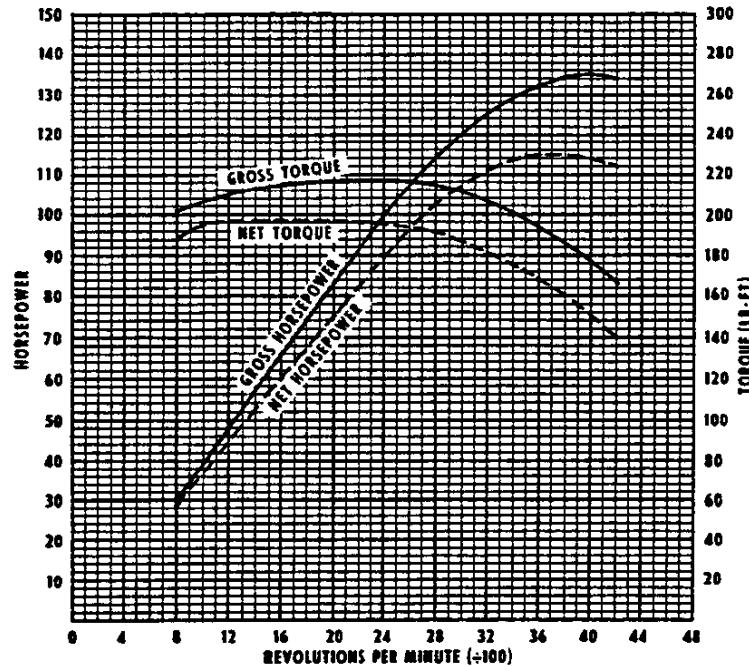
Performance Weight = Curb Weight plus 600 Lb
(weight of four 150 Lb passengers)

Power Displacement = $\frac{\text{Crankshaft Revs/Mi} \times \text{Piston Displacement}}{2 \times 1728}$

Displacement Factor = $\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

135 HP HI-THRIFT 6-CYLINDER

One Barrel Carburetor



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°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.

135 CUBIC INCH SIX CYLINDER ENGINE-Cont'd.

CYLINDER HEAD AND CASE

Material ----- Cast alloy iron
 Bore Diameter ----- 3.5620-.3.5640
 Head Bolt Torque (Lb-Ft) ----- 90-95
 Number of Head Bolts ----- 18

CRANKSHAFT

Material ----- Forged steel
 End Play ----- .0035-.0095
 Vibration Damper ----- Oscillating (rubber mounted)
 Weight (Lb) ----- 80
 Counterweights ----- 7
 Crankshaft Pulley Diameter ----- 6.64 PD
 Main Bearings ----- Extra-life steel backed babbitt
 Type ----- Precision, removable
 End Thrust Against Bearing ----- #3
 Clearance ----- Bearings #1 & 2 ----- .0008-.0024
 Bearings #3 & 4 ----- .0010-.0026

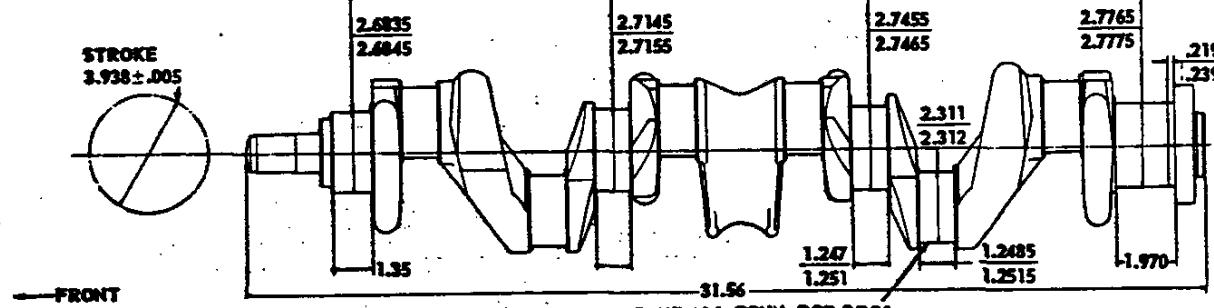
Dimensions

Bearing	Theoretical Inner Dia	Effective Length	Projected Area
1	2.6856	1.063	2.855
2	2.7166	.907	2.464
3	2.7478	.979	2.690
4	2.7788	1.189	3.304

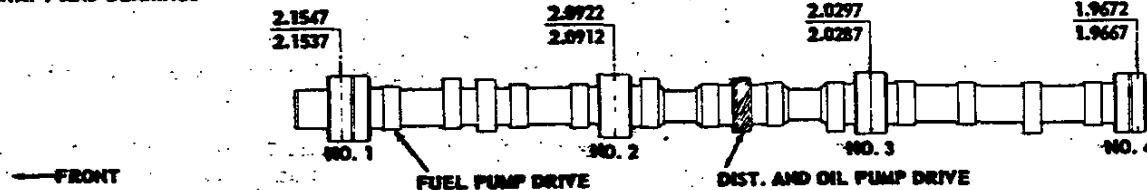
CAMSHAFT

Make ----- Chevrolet
 Material ----- Cast alloy iron
 End Play ----- .003-.005
 Drive ----- Gear
 Camshaft Gear Material ----- Bakelite and fabric composition with steel hub

CRANKSHAFT AND BEARINGS



CAMSHAFT AND BEARINGS



Clearance	.0007-.0027
End play	.005-.010
Inside diameter	2.3132
Projected area (Sq In)	2.332

VALVES

Material Inlet	Carbon steel
Material Exhaust	High alloy steel
Stem to Guide Clearance	.0010-.0027
Lift	.3275

VALVE SPRINGS

Compressed Length (In@Lb)

Valves closed	1.858@ 62-68
Valves opened	1.528@ 158-168
Free Length	2.16
Valve Spring Dampers	None

VALVE TIMING

		1300 Series (3-Speed)	All Others
Inlet	Opens	1° ATC	16° BTC
	Closes	39° ABC	48° ABC
Exhaust	Opens	42° BBC	46°30'BBC
	Closes	9° ATC	17°30'ATC

PISTONS

Material	Cast aluminum alloy
Type	Flat head, controlled expansion
Weight (Oz)	18.88
Top Land Clearance	.033-.042

Skirt Clearance	.0006-.0010
Compression Ring Groove Depth	.199-.205
Oil Ring Groove Depth	.199-.205

PISTON PINS

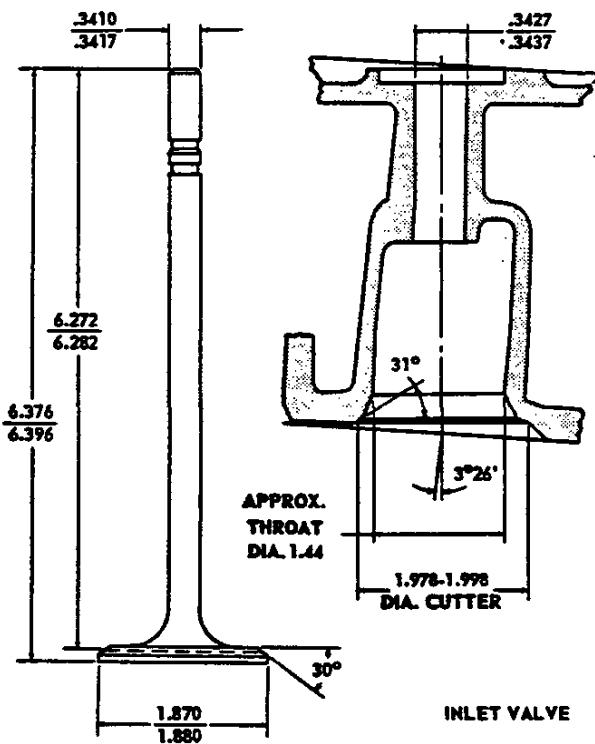
Material	Chromium steel
Type	Locked in rod
Length	3.168-3.198
Diameter	.8660-.8665
Clearance	.00015-.00025
Direction of Offset	Major thrust side

COMPRESSION RINGS

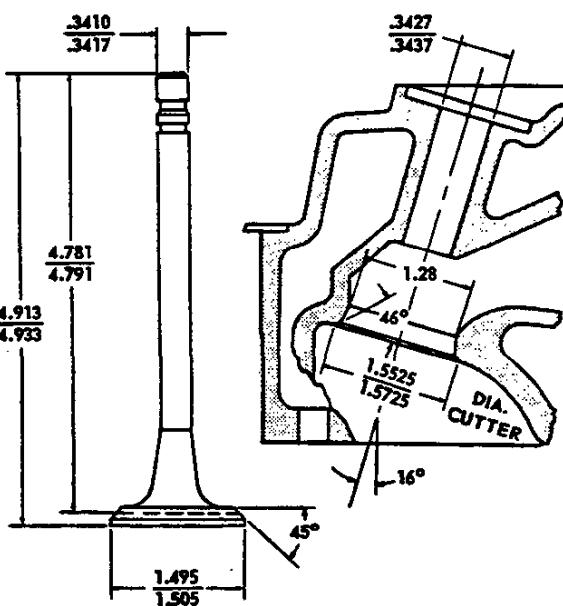
Type Upper and Lower	Thickwall, inside bevel or counterbore.
Material	Cast alloy iron
Coating	Wear resistant
Width	.0930-.0935
Wall Thickness	.168-.178
Gap	.007-.017

OIL RINGS

Type	Multi-piece (two rails and one spacer)
Material Rails	Steel
Spacers	Stainless steel
Coating	Rails chrome plated OD
Width	.187-.189
Gap (rails)	.015-.055
Wall Thickness (rails)	.150-.156



INLET VALVE



EXHAUST VALVE

235 CUBIC INCH SIX CYLINDER ENGINE-Cont'd.

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
 Hydraulic Lifters ----- Pressure
 Timing Gear ----- Nozzle sprayed

OIL PUMP

Type ----- Gear
 Normal Oil Pressure ----- 35 PSI @ 2000 RPM
 Intake Type ----- Fixed
 Capacity (GPM @ engine RPM) 4.01-4.22 @ 1170-1200

CRANKCASE CAPACITY (quarts)

Dry ----- 5.5
 Refill ----- 5.0

OIL FILTER (RPO 237)

Make and Type ----- AC, partial flow

Capacity (dry) ----- 1 Qt
 Replacement Type ----- Element

OIL PRESSURE GAUGE

Type ----- Electric

LUBRICANT GRADES AND TEMPERATURES

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

CRANKCASE VENTILATION

Type ----- Road draft

OIL PAN DRAIN SCREW

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

FUEL AND EXHAUST SYSTEM

FUEL TANK

Capacity (gal)
 9-Pass Station Wagon ----- 19
 6-Pass Station Wgn, Sed Del & Sed Pick-up ----- 19
 All others ----- 20

Filler Location

Station Wgn, Sed Del & Sed Pickup ----- Behind
 opening in left rear quarter panel.
 All others ----- At center of body back lower
 panel to rear of hinged license plate bracket.

FUEL FILTER

In Fuel Tank ----- Strainer
 In Carburetor Inlet ----- Sintered bronze filter

FUEL GAUGE (Tank Unit)

Make and Type ----- AC, electric

FUEL PUMP ASSEMBLY

Make ----- AC
 Type ----- Mechanical
 Location ----- Lower right front corner of engine
 Pressure Range ----- 3.50-4.50 PSI

CARBURETOR

Make ----- Rochester
 Model
 Regular ----- 7013003
 Powerglide ----- 7019000
 Type ----- Single barrel, down draft
 SAE Flange Size ----- 1.50
 Venturi Diameter ----- 1.34
 Choke ----- Automatic
 Throttle Bore ----- 1.5625

CARBURETOR (RPO 581)

Make ----- Rochester
 Model
 Regular ----- 7013955
 Powerglide ----- 7013956
 Venturi Diameter ----- 1.062

EXHAUST SYSTEM

Type ----- Single, diffusion resonance
 Muffler ----- Reverse flow
 Exhaust Pipe Outside Diameter ----- 2.00
 Tailpipe Inside Diameter ----- 1.81

COOLING SYSTEM

GENERAL

Type ----- Pressure, with full length water jackets around cylinders

THERMOSTAT

Make ----- Harrison
 Type ----- Pellet
 Begins to Open @ ----- 167-172°F
 Fully Opened @ ----- 192°F

RADIATOR

Make and Type ----- Harrison, tube on center
 Core Constant and Thickness----- .17 x .55 x 1.26
 Frontal Area (Sq In) ----- 356
 Capacity (quarts)
 3-Speed transmission:
 With heater ----- 18
 Without heater ----- 17
 Powerglide transmission:
 With heater ----- 17.5
 Without heater ----- 16.5

RADIATOR, HEAVY DUTY (RPO 257)

Core Constant and Thickness:
 Synchromesh & Powerglide Trans.--- 20 x .55 x 1.75
 Frontal Area (Sq In) ----- 428.74

RADIATOR HOSE

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

RADIATOR CAP

Type ----- Pressure
 Valve Opens at ----- Approx 13 PSI

WATER PUMP

Type ----- Centrifugal
 Capacity ----- 55 GPM @ 4000 RPM
 Drive ----- Fan belt
 Bearing ----- Permanent lubricated double row ball

DRAIN LOCATIONS

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

FAN

Number of Blades ----- 4, staggered
 Diameter ----- 17.62
 Ratio (fan to engine RPM) ----- .949:1

FAN AND GENERATOR BELT

Number Used ----- One
 Angle of "V" ----- 37°-44°
 Pitch Line Length ----- 40.50
 Width ----- .375
 Fan Pulley Size (pitch diameter) ----- 7.00

ELECTRICAL SYSTEM

GENERATOR

Make and Model ----- Delco-Remy, 1102096
 Type ----- Two brush, shunt wound
 Drive ----- By fan belt
 Pulley Size ----- 2.88 PD
 Generator RPM MPH ----- Approx. 107
 Maximum Generator Output RPM (Hot) ----- 2450
 Eng RPM @ Max Gen Output ----- 1065
 Car MPH (high gear) @ Max Gen Output ----- 22.9
 Ratio (generator to engine speed) ----- 2.30:1
 Rating
 Amps ----- 30
 Volts ----- 12-15

BATTERY

Make and Model ----- Delco, 1980458
 Voltage Rating ----- 12
 Capacity ----- 53 amp hr at 20 hr rate
 Plates Per Cell ----- 9
 Terminal Grounded ----- Negative
 Location ----- Front engine compartment near radiator baffle.

BATTERY, HD (RPO 345)

Make and Model ----- Delco-Remy 1980668
 Capacity----- 70 amp hr. @ 20 hr. rate
 Plates per Cell ----- 11

VOLTAGE AND CURRENT REGULATOR

Make and Model ----- Delco-Remy, 1119001
 Type ----- Vibrator
 Cutout Relay
 Closing voltage @ generator RPM - 11.8-13.5@1300
 Voltage Regulator
 Voltage ----- 13.8-14.8
 Current Regulator
 Amperes ----- 27-33

OPTIONAL GENERATOR EQUIPMENT

35 Amp (RPO 338) ----- 1102174
 40 Amp (RPO 326) Medium duty ----- 1105123
 50 Amp (RPO 378) Low Cut-in ----- 1106681

235 CUBIC INCH SIX CYLINDER ENGINE-Cont'd.

ELECTRICAL SYSTEM - Continued

COIL

Make ----- Delco Remy
Model ----- 1115120
Amperes Drawn ----- 4.0 engine stopped, 1.8
engine idling (500 RPM)

IGNITION TIMING

Crankshaft Degrees (initial setting) ----- 5° BTC
Mark Location ----- On flywheel
Firing Order ----- 1-5-3-6-2-4

SPARK PLUG

Make and Model ----- AC. 44
Thread Size ----- 14mm
Gap ----- .033-.038
Torque ----- 25 Lb Ft

STARTING MOTOR

Make & Model ----- Delco-Remy, 1107888
Rotation (Drive end view) ----- Clockwise
Test Conditions ---- Engine at operating temperature
No Load Test
Amps ----- 49-76
Volts ----- 10.6
RPM ----- 6200-6900

Drive

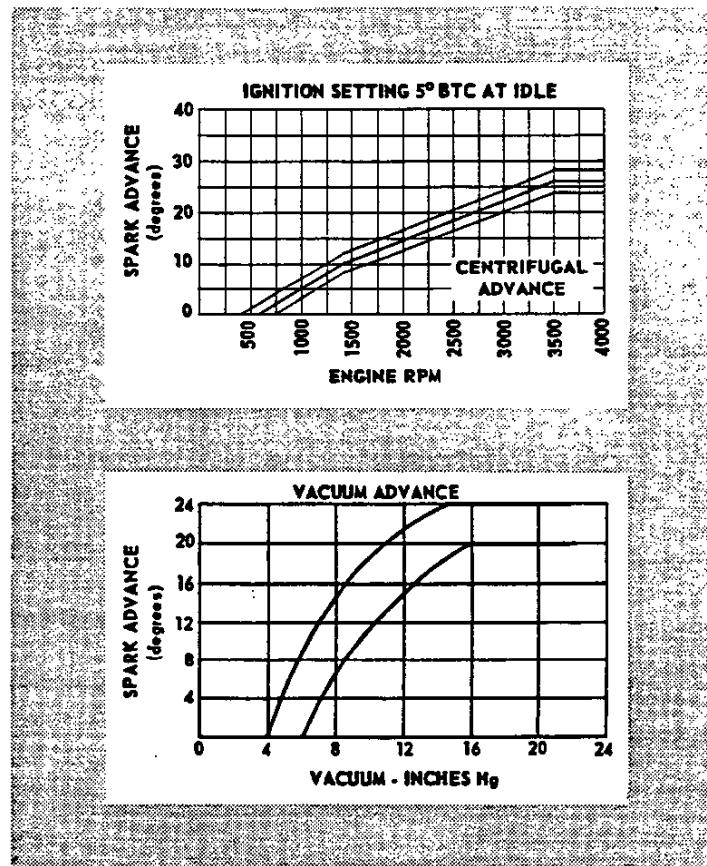
Engagement type ----- Solenoid
No. of teeth ----- 9
Gear ratio (flywheel to starter) ----- 18.6:1
Flywheel tooth face width ----- .4135

STARTING

Ignition Switch ----- Five (5) positions:
Accessory, Lock, Off, On, Start
Starting Procedure
Turn ignition key to extreme right after placing
shift lever in neutral and depressing clutch
Powerglide models - Place selector lever in Park
or Neutral

DISTRIBUTOR

Make and Model ----- Delco-Remy, 1112403
Breaker Gap ----- .019 (new)
Cam Angle ----- 28°-35°
Breaker Arm Tension ----- 19-23 oz
Centrifugal advance begins (RPM) ----- 600
Max degrees @ RPM ----- 26° @ 3500
Vacuum advance begins (Inches Hg) ----- 6
Max degrees @ inches Hg ----- 22° @ 15.5



283 CUBIC INCH V-8 ENGINE

GENERAL DATA

Engine	3-Speed	O'drive	Powerglide	Turboglide
Piston displacement (Cu In)			283	
Type			Valve-in-head	
Number of cylinders			8	
Bore and stroke (nominal)			3.875 x 3.000	
Compression ratio			8.5:1 ^M	
Taxable (SAE) horsepower			48	
Idling speed (RPM)	475 in neutral		450 in neutral	
Compression press (PSI)@ cranking speed, engine hot			150**	
Dry weight (pounds)	595 With transmission	600 690	535 755	520 670
Lubrication			Full pressure	
Power plant mounting			Three point mounting, two front and one rear; combination compression and shear type	
Measurements	Fan to rear of clutch housing	36.57	31.66	
	Front of cylinder block to rear of clutch housing	29.57	24.66	
	Length of cylinder block		23.28	
	Top air cleaner to bottom oil pan		29.54	
	Exhaust manifold to generator (width)		26.72	

^M - 9.5:1 on Super Turbo-Fire engine

^V Overdrive transmission

** - 160 PSI on Super Turbo-Fire engine

ADVERTISED MAXIMUM ENGINE PERFORMANCE

Engine	Turbo-Fire	Super Turbo-Fire
Carburetor	2-barrel (Production)	4-barrel (RPO 410)
Brake horsepower	Gross 170@ 4200 RPM Net 135@ 4000 RPM	230@ 4800 RPM 175@ 4400 RPM
Torque (Lb-Ft)	Gross 275@ 2200 RPM Net 245@ 2000 RPM	300@ 3000 RPM 255@ 2800 RPM

ENGINE SPEED AND PISTON TRAVEL

Transmission	3-Speed (Production)	Overdrive (RPO 315)		Powerglide (RPO 313)*	Turboglide (RPO 302)*
		Locked out	Locked in		
Rear axle ratio	3.36:1		3.70:1		3.08:1
Tire size			7.50 x 14-4 8		
Crankshaft Rev./Mi.	2651.0	2919.3	2043.5	2430.1	2651.0
Crankshaft RPM @ 1 MPH	Low	110.2	143.2	100.2	73.7
	Reverse	123.8		143.2	
	Second	67.6	81.8	57.3	
	Direct ▲	44.2	48.7	34.1	40.5
Piston travel (Ft/mile)	1325.5	1459.7	1021.8	1215.1	1325.5

* - Data computed assuming zero slippage in torque converter

8 - 8.00 x 14-4 tires standard on 1867, station wagon, Sedan Delivery and Sedan Pick-up

▲ - Also known as N/V factor

ADVERTISED VEHICLE PERFORMANCE FACTORS
(Model 1669)

	Turbo-Fire	Super Turbo Fire
--	------------	---------------------

3-Speed Transmission

Performance Weight (pounds)	4275	4290
Pounds per Gross Horsepower	25.15	18.65
Pounds per Cu In Displacement	15.1	15.2
Gross Horsepower per Cu In Displacement	.601	.813
Power Displacement (Cu Ft/mile)	217.1	217.1
Displacement Factor (Cu Ft/ton mile)	101.6	101.2

3-Speed w/Overdrive Transmission (Overdrive Locked In)

Performance Weight (pounds)	4315	4330
Pounds per Gross Horsepower	25.4	18.8
Pounds per Cu In Displacement	15.25	15.30
Gross Horsepower per Cu In Displacement	.601	.813
Power Displacement (Cu Ft/mile)	167.3	167.3
Displacement Factor (Cu Ft/ton mile)	77.6	77.3

Powerglide Transmission (Data computed assuming zero slippage in torque converter)

Performance Weight (pounds)	4375	4370
Pounds per Gross Horsepower	25.74	19.08
Pounds per Cu In Displacement	15.46	15.51
Gross Horsepower per Cu In Displacement	.601	.813
Power Displacement (Cu Ft/mile)	198.9	198.9
Displacement Factor (Cu Ft/ton mile)	90.9	90.6

Turboglide Transmission (Data computed assuming zero slippage in torque converter)

Performance Weight (pounds)	4295	4310
Pounds per Gross Horsepower	25.26	18.74
Pounds per Cu In Displacement	15.18	15.23
Gross Horsepower per Cu In Displacement	.601	.813
Power Displacement (Cu Ft/mile)	217.1	217.1
Displacement Factor (Cu Ft/ton mile)	101.1	100.7

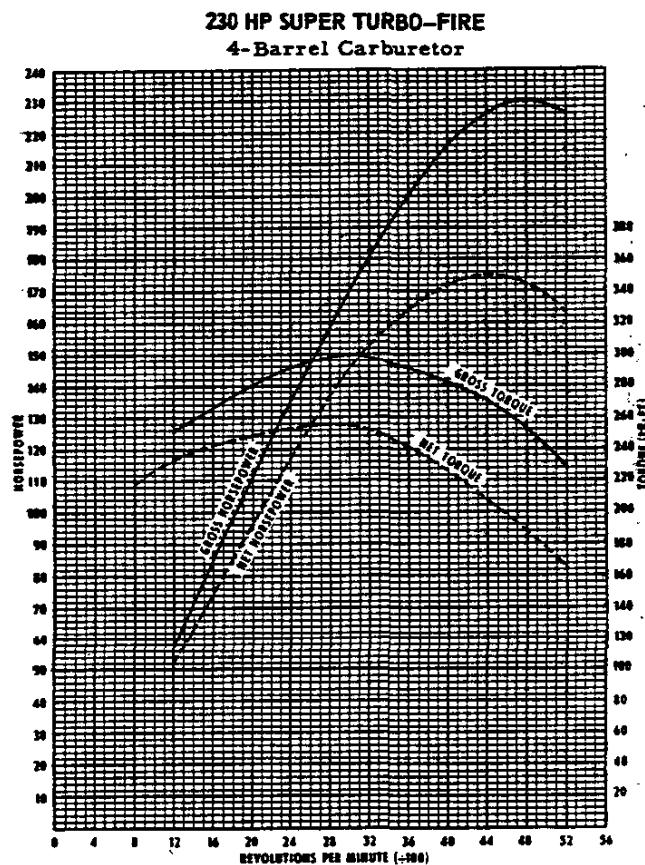
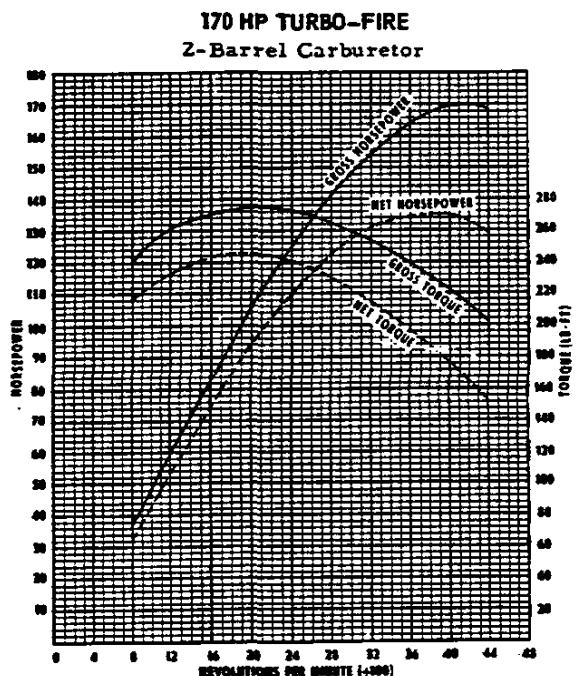
GLOSSARY

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 = $\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

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



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°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 HEADS AND CASE

Material ----- Cast alloy iron
 Bore Diameter ----- 3.8745-3.8775
 Head Bolt Torque (Lb-Ft) ----- 60-70
 No of Cylinder Head Bolts ----- 34

CRANKSHAFT

Material ----- Forged steel
 End Play ----- .002-.006
 Vibration Damper ----- Super Turbo-Fire only
 Weight (Lb) ----- 48
 Counterweights ----- 6
 Crankshaft Pulley Diameter ----- 6.64 PD
 Main Bearings ----- Extra-life steel backed babbitt
 Type ----- Precision, removable
 End Thrust Against Bearing ----- #5
 Clearance ----- .0008-.0034
 Dimensions #1-4, Theo ID ----- 2.3004
 Effective length ----- .762
 Projected area (Sq In) ----- 1.753
 Dimensions #5, Theo ID ----- 2.3004
 Effective length ----- 1.169
 Projected area (Sq In) ----- 2.689

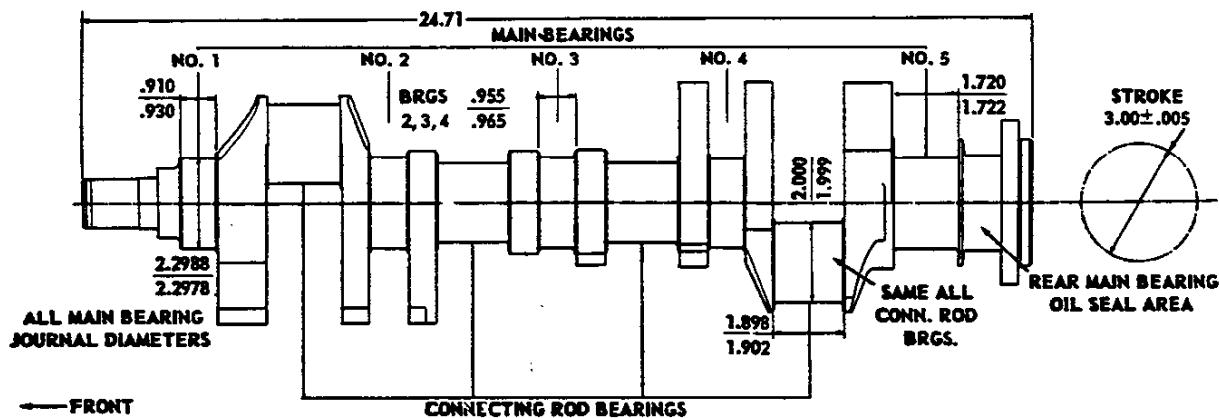
CAMSHAFT

Make ----- Chevrolet
 Material ----- Cast alloy iron
 Bearings ----- Extra-life steel backed babbitt
 Dimensions #1-4, Ream Dia ----- 1.8712
 Effective length ----- .740
 Projected area (Sq In) ----- 1.385
 Dimensions #5, Rear Dia ----- 1.8712
 Effective length ----- .940
 Projected area (Sq In) ----- 1.759
 Drive ----- Chain and sprocket
 Crankshaft sprocket material ----- Steel
 Camshaft sprocket material ----- Cast alloy iron
 Timing chain
 Type ----- Link belt
 No of links ----- 46
 Width ----- .875
 Pitch ----- .500

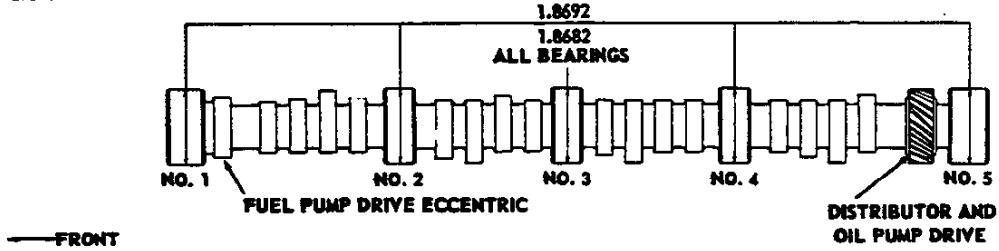
VALVE MECHANISM

Type ----- Rocker arm, push rod actuated
 Lifters ----- Hydraulic

CRANKSHAFT AND BEARINGS



CAMSHAFT AND BEARINGS



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

PRINCIPAL COMPONENTS - Continued

VALVE MECHANISM - Cont'd

Material	
Foot	Cast alloy iron
Sleeve	Steel
Plunger	Steel
Push rod	Steel
Rocker Arm Ratio	1.5:1
Valve Lash (hot)	Zero

VALVES

Material Inlet	Carbon steel
Material Exhaust	High alloy steel
Stem to Guide Clearance	.0015-.0032
Lift Exhaust and Inlet	
Turbo-Fire engine	.3336
Super Turbo-Fire engine	.3987

VALVE SPRINGS

Material	High alloy steel
Compressed Length (In@ Lb)	
Engine	Turbo-Fire
Valves closed	1.696@ 76-84
Valves open	1.366@ 155-165
Free Length	2.03
	2.08
Super Turbo-Fire	1.696@ 69-79
	1.306@ 159-169

VALVE SPRING DAMPERS

Turbo-Fire Engine	None
-------------------	------

Super Turbo-Fire Engine

No of coils	4
Free length	2.00

PISTONS

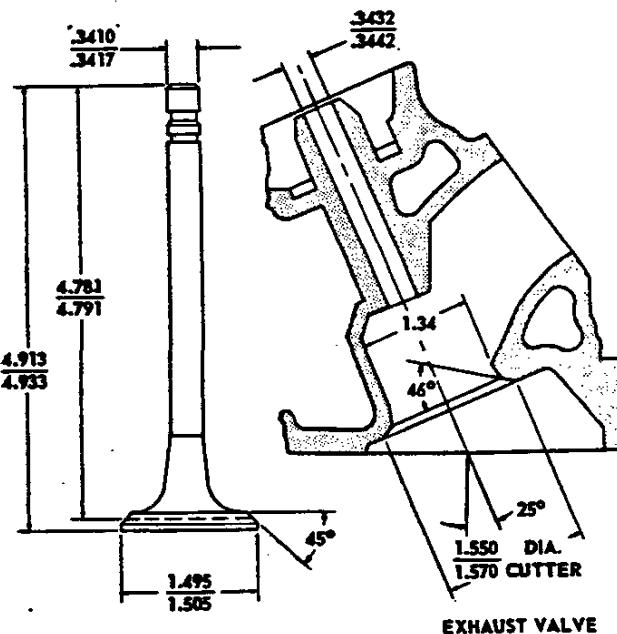
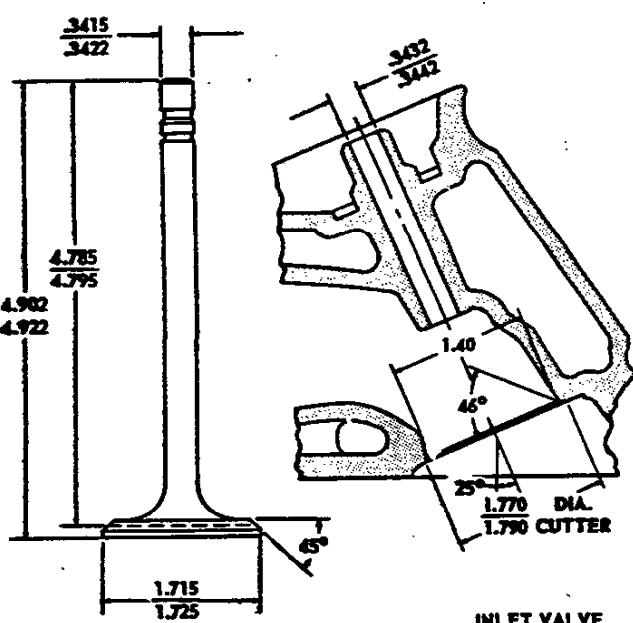
Material	Cast aluminum alloy
Head Type	Flat, notched
Skirt Type	Slipper
Weight (Oz)	20.40
Top Land Clearance	.035-.040
Skirt Clearance	.0006-.0010
Compression Ring Groove Depth	.2153-.2218
Oil Ring Groove Depth	.2093-.2158

PISTON PINS

Material	Chromium steel
Type	Rod shrunk fit to piston
Length	2.990-3.010
Diameter	.9270-.9273
Clearance in Piston	.00015-.00025
Direction of Offset	Major thrust side

COMPRESSION RINGS

No per Piston	Two
Type, Upper and Lower	Thickwall, inside bevel or counterbore
Material	Cast alloy iron



Coating, Upper ----- Flash chrome plating
 Coating, Lower ----- Wear resistant
 Width
 Upper ----- .0775-.0780
 Lower ----- .0770-.0780
 Gap ----- .010-.020
 Wall Thickness ----- .184-.194

OIL CONTROL RINGS

No per Piston ----- One
 Type ----- Multi-piece (2 rails and one spacer)
 Material ----- Steel
 Coating ----- Chrome plated OD
 Width ----- .193-.195
 Gap ----- .015-.055
 Wall Thickness ----- .150-.156

CONNECTING RODS

Material ----- Drop forged steel
 Length (center to center) ----- 5.699-5.701
 Bearings, Material --- Extra-life steel backed babbitt
 Type ----- Precision, removable
 Effective length ----- .817
 Clearance ----- .0007-.0027
 End play ----- .008-.014

Theoretical ID ----- 2.0012
 Projected area ----- 1.635 Sq In

TIMING DIAGRAM DATA (Turbo-Fire)

Inlet Valve Opens - BTC -----	18°
Closes - ABC -----	54°
Exhaust Valve Opens - BBC -----	52°
Closes - ATC -----	20°
Inlet Ramp Opening -----	.0030, 7°30'
Closing -----	.0060, 24°
Exhaust Ramp Opening -----	.0040, 10°
Closing -----	.0060, 15°
Tappet Lift -----	.2224

TIMING DIAGRAM DATA (Super Turbo-Fire)

Inlet Valve Opens - BTC -----	12°30'
Closes - ABC -----	57°30'
Exhaust Valve Opens - BBC -----	54°30'
Closes - ATC -----	15°30'
Ramp Opening -----	.0047, 10°
Closing -----	.0067, 15°
Tappet Lift -----	.2658

INLET MANIFOLD

Material ----- Cast alloy iron

LUBRICATION SYSTEM

METHOD OF LUBRICATION

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
 Timing Gears ----- Nozzle sprayed
 Crankcase Capacity (Qt)
 Dry ----- 4.5
 Refill ----- 4.0
 Oil Pressure Gauge ----- Electric
 Crankcase Vent ----- Road draft tube
 Oil Filler Location ----- Right front of intake
 manifold

OIL PUMP

Type ----- Gear
 Normal Oil Pressure ----- (PSI @ RPM)-45 @ 2000

Intake Type ----- Fixed
 Capacity (GPM @ RPM, hot) ----- 4.3 @ 2000

OIL PAN DRAIN SCREW

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

OIL FILTER

Type ----- Full flow, spring loaded disc by-pass
 Capacity (dry) ----- 1.0 qt
 Replacement Type ----- Element

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

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

FUEL AND EXHAUST SYSTEM

FUEL PUMP

Make ----- AC
 Type ----- Mechanical
 Pressure Range ----- 5.25-6.50 PSI

MANIFOLD HEAT CONTROL

Type ----- Automatic

AIR CLEANER

Make ----- AC
 Type ----- Dry
 Element ----- Paper

FUEL TANK

Capacity (Gal) Station Wagon ----- 19
 Remainder models ----- 20
 Location Station Wagon ----- In left rear quarter panel behind rear wheel
 Remainder models ----- Rearward of rear axle Kick-up in shelf area
 Filler Location All Models ----- Behind opening in left rear quarter panel

CARBURETOR (Turbo-Fire)

With Synchromesh Transmission
 Make ----- Rochester
 Model ----- 7019007
 With Automatic Transmission
 Make ----- Rochester
 Model ----- 7019008
 Type ----- 2-barrel, downdraft
 SAE Flange Size ----- 1.25
 Venturi Diameter ----- 1.09

Throttle Bore ----- 1.4375

Choke ----- Automatic
 Attaching Stud Centers ----- 3.25 x 1.875

CARBURETOR (Super Turbo-Fire)

With Synchromesh Transmission

Make ----- Carter
 Model ----- 3779178

With Automatic Transmission

Make ----- Rochester
 Model ----- 7019004

Type ----- 4-bbl, downdraft

Venturi Dia by Make	Rochester	Carter
Primary	1.00	1.00
Secondary	1.06	1.13

Throttle Bore ----- 1.3125

Attaching Stud Centers ----- 5.625 x 4.25

FUEL FILTER

In Fuel Tank ----- Strainer
 In Carburetor Inlet ----- Sintered bronze filter

FUEL GAUGE

Make ----- AC
 Type ----- Electric

EXHAUST SYSTEM

Type, Production ----- Single
 RPO 220 ----- Dual with resonators
 Flow ----- Reverse
 Exhaust Pipe OD ----- 2.00
 Wall thickness ----- .0625
 Tail Pipe OD ----- 1.875
 Wall thickness ----- .0598

COOLING SYSTEM

GENERAL

Type ----- Pressure, full length water jacket around each cylinder
 Shroud ----- Regular production

THERMOSTAT

Make ----- Harrison
 Type ----- Pellet
 Begins to Open @ ----- 167-172°F
 Fully Opened @ ----- 192°F

RADIATOR

Make ----- Harrison
 Type ----- Tube on center
 Core Constant Synchromesh Trans ----- .25 x .55
 Powerglide ----- .22 x .55
 Turboglide ----- .19 x .55
 Thickness ----- 1.26
 Frontal Area (sq in) ----- 356.8
 Capacity (Qts):
 Reg trans less heater ----- 17.5

With heater ----- 18.5
 Auto trans less heater ----- 17.25
 With heater ----- 18.25

RADIATOR, HD (RPO 257)

Core Constant Synchromesh Trans ----- .25 x .55
 Powerglide ----- .22 x .55
 Turboglide ----- .20 x .55
 Thickness ----- 1.75
 Frontal Area (sq in) ----- 428.7

RADIATOR HOSE

Location, Inlet ----- Thermostat housing to radiator
 Location, Outlet ----- Water pump to radiator
 Type ----- Molded elbow
 ID, Inlet ----- 1.50
 ID, Outlet ----- 1.75

RADIATOR CAP

Type ----- Pressure
 Valve Opens @ ----- 13 PSI

FAN

Number of Blades ----- 4 staggered
 Diameter ----- 17.62
 Ratio (fan to engine rpm) ----- .949:1

FAN AND GENERATOR BELT

Number used ----- One
 Angle of "V" ----- 37-44°
 Pitch Line Length ----- 54.12
 Width ----- .380±.005
 Fan Pulley Size ----- 7.00 PD, 36°V

WATER PUMP

Type ----- Centrifugal
 Capacity(GPM @ RPM) ----- 44.5 @ 4000
 Drive ----- Fan belt
 Bearing ----- Permanently lubricated double row ball

DRAIN LOCATIONS

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

ELECTRICAL SYSTEM**GENERATOR**

Make and Model ----- Delco-Remy, 1102097
 Type ----- Two brush, shunt wound
 Drive ----- By fan belt
 Pulley Size ----- 2.88 PD
 Generator RPM MPH ----- Approx 107
 Max Gen Output RPM (hot) ----- 2450
 Engine RPM @ Max Gen Output ----- 1065
 Ratio (Gen to engine RPM) ----- 2.3:1
 Rating, Amperes ----- 30
 Volts ----- 12-15

OPTIONAL GENERATOR EQUIPMENT

35 Amp (RPO 338) ----- 1102174
 40 Amp (RPO 326) ----- 1105123 (Medium duty)
 50 Amp (RPO 378) ----- 1106681 (Low cut-in)

Voltage Regulator, Volts ----- 13.8-14.8
 Current Regulator, Amperes ----- 27-33

STARTING MOTOR

Make ----- Delco-Remy
 Model, with Conv. & Powerglide ----- 1107 889
 With Turboglide ----- 1107 892
 Rotation (drive end view) ----- Clockwise
 Test Conditions ----- Engine @ operating temperature
 No Load Test, Amperes ----- 49-76
 Volts ----- 10.6
 RPM ----- 6200-9400
 Drive, Engagement type ----- Positive shift solenoid
 Number of teeth ----- 9
 Flywheel to Starter Gear Ratio ----- 18.6:1
 Flywheel Face Tooth Width
 Turboglide ----- .3435
 Regular & Powerglide ----- .4135

STARTING

Ignition Switch Positions ----- Accessory, locked,
 Off, Start
 Starting Procedure, Reg trans ----- Turn Ignition
 key to extreme right after placing shift lever in
 neutral and depressing clutch
 Auto trans ----- Turn key to extreme
 right, selector in Park or Neutral

COIL

Make ----- Delco-Remy
 Model ----- 1115115
 Amperes, Engine stopped ----- 4.0
 Amperes, Engine idling ----- 1.8

IGNITION TIMING (Turbo-Fire)

Crankshaft Deg (Initial setting) ----- 4°BTDC
 Mark Location ----- Timing indicator assembly
 Firing Order ----- 1-8-4-3-6-5-7-2

IGNITION TIMING (Super Turbo-Fire)

Mark Location ----- Vibration damper

VOLTAGE AND CURRENT REGULATOR

Make ----- Delco-Remy
 Model ----- 1119001
 Type ----- Vibrator
 Cut-Out Relay, Closing voltage
 @ RPM ----- 11.8-13.5 @ 1300

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

SPARK PLUG

Make ----- AC
 Model ----- 44
 Thread Size ----- 14 MM
 Gap ----- .033-.038
 Torque (Lb-Ft) ----- 25

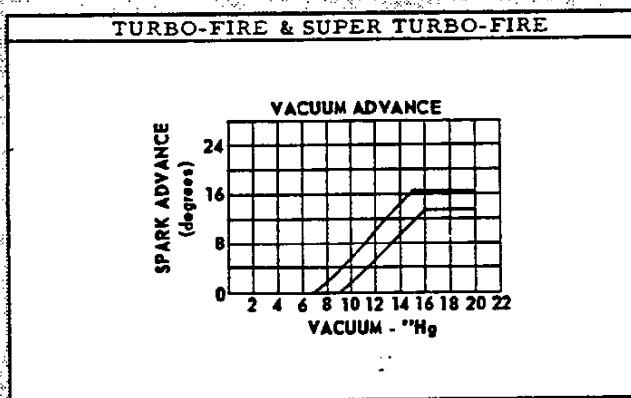
DISTRIBUTOR (Turbo-Fire)

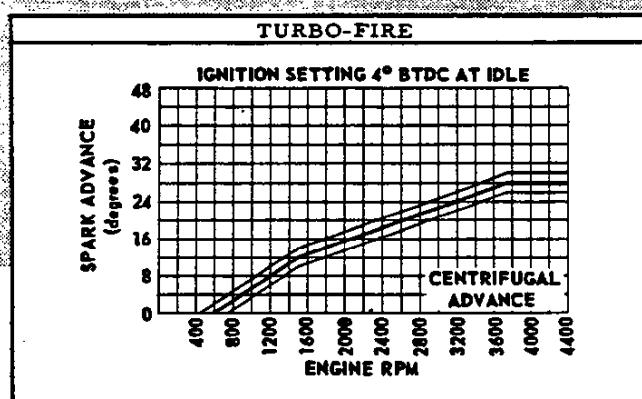
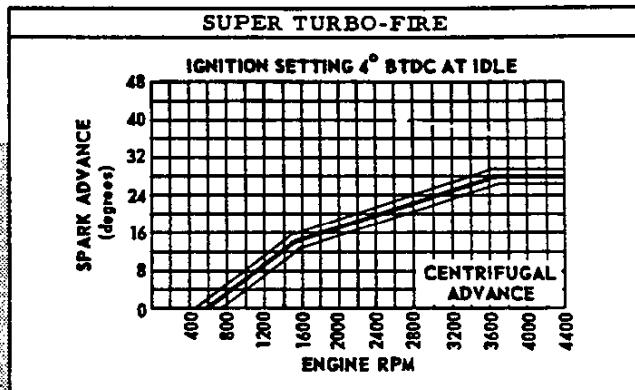
Make ----- Delco-Remy
 Model ----- 1110947

Breaker Gap ----- .019 (new)
 Cam Angle ----- 26-33°
 Breaker Arm Tension (Oz) ----- 19-23
 Centrifugal Spark Advance Begins ----- 600 RPM
 Maximum degrees @ RPM ----- 28 @ 3750
 Vacuum Advance, Maximum "Hg ----- 15° @ 15.5

DISTRIBUTOR (Super Turbo-Fire Differences)

Model ----- 1110946
 Centrifugal Spark Advance (Max Deg@RPM)---28@3700





348 CUBIC INCH V-8 ENGINE

GENERAL DATA

Engine	Synchromesh	Powerglide	Turboglide
Piston displacement (Cu In)	348		
Type	Valve-in-head		
Number of cylinders	8		
Bore and stroke (nominal)	4.125 x 3.25		
Compression ratio	9.5:1 ▼		
Taxable (SAE) horsepower	54.5		
Idling speed (RPM)	475 in neutral	450 in drive	
Compression press. (PSI) @ cranking speed, engine hot		150	
Dry weight (pounds)	Engine and clutch With transmission	710 770	650 870
Lubrication		Full pressure	
Power plant mounting		Three point mounting, two front and one rear combination compression and shear type	
Measurements	Fan to rear of flywheel housing	38.23	33.82
	Front cylinder block to rear of flywheel housing	29.92	25.51
	Length of cylinder block		23.63
	Exhaust manifold to generator (width)		25.57
	Top air cleaner to bottom oil pan		28.90

▼ - 11.25:1 on 340 & 350 HP, special camshaft, engines

ADVERTISED MAXIMUM ENGINE PERFORMANCE

ENGINE	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special	Super Turbo-Thrust Special
Option	RPO 576	RPO 573A	RPO 572	RPO 590
Carburetor	4-Barrel	3x2-Barrel	4-Barrel (AFB)	3x2-Barrel
Camshaft		Standard		Special
Brake Horsepower	Gross Net	250 @ 4400 210 @ 4400	280 @ 4800 235 @ 4800	305 @ 5200 340 @ 5800
Torque (Lb-Ft)	Gross Net	355 @ 2800 320 @ 2600	355 @ 3200 320 @ 2800	355 @ 3400 362 @ 3600
				350 @ 6000 364 @ 3600

ENGINE SPEED AND PISTON TRAVEL

Transmission	3-speed (production)		4-speed RPO 685			Powerglide RPO 313* (HD)	Turboglide RPO 302
Rear Axle Ratio	3.36:1 3.70:1		3.08:1 3.36:1 3.70:1			3.55:1	3.08:1
Tire Size				7.50 x 14-4 Pr			
Crankshaft Revs./mile	2651.0	2919.3	2430.1	2651.0	2913.3	2801.0	2430.1
Crankshaft RPM @ 1 MPH	Low	109.2	120.3	102.9	112.3	123.7	85.0
	Second	67.6	74.5	77.8	84.9	93.5	
	Third			61.2	66.7	73.5	
	Direct N/V	44.2	48.7	40.5	44.2	48.7	46.7
	Reverse	123.8	136.4	105.7	115.4	127.1	85.0
Piston Travel (Ft /mile)	1434.2	1579.3	1314.7	1434.2	1579.3	1515.3	1314.7

* - Data computed assuming zero slippage in torque converter.

**ADVERTISED VEHICLE PERFORMANCE FACTORS
(MODEL 1669)**

ENGINE - 348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special	Turbo-Thrust Special	Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP	350 HP

3-Speed Transmission

Performance Weight (pounds)	4430	4445	4435	4435	4445
Pounds per Gross HP	17.7	15.9	14.8	13.0	12.7
Pounds per Cu In (Displ)	12.7	12.8	12.7	12.7	12.8
Gross HP per Cu In (Displ)	.718	.805	.897	.977	1.01
Power Displ (Cu Ft/Mile)	266.9	266.9	266.9	293.7	293.7
Displ Factor (Cu Ft/Ton Mile)	121.0	120.1	120.8	132.5	132.2

4-Speed Transmission

Performance Weight (pounds)	4450	4460	4455	4455	4460
Pounds per Gross HP	17.8	15.9	14.6	13.1	12.7
Pounds per Cu In (Displ)	12.8	12.8	12.7	12.8	12.8
Gross HP per Cu In (Displ)	.718	.805	.897	.977	1.01
Power Displ (Cu Ft/Mile)	244.6	266.9	266.9	293.7	293.7
Displ Factor (Cu Ft/Ton Mile)	109.9	119.7	119.8	132.3	131.7

Powerglide Transmission*

Performance Weight (pounds)			4535		
Pounds per Gross HP			14.9		
Pounds per Cu In (Displ)			13.0		
Gross HP per Cu In (Displ)			.876		
Power Displ (Cu Ft/Mile)			281.9		
Displ Factor (Cu Ft/Ton Mile)			124.3		

Turboglide Transmission*

Performance Weight (pounds)	4450	4460			
Pounds per Gross HP	17.8	15.9			
Pounds per Cu In (Displ)	12.8	12.8			
Gross HP per Cu In (Displ)	.718	.805			
Power Displ (Cu Ft/Mile)	244.6	244.7			
Displ Factor (Cu Ft/Ton Mile)	109.9	109.7			

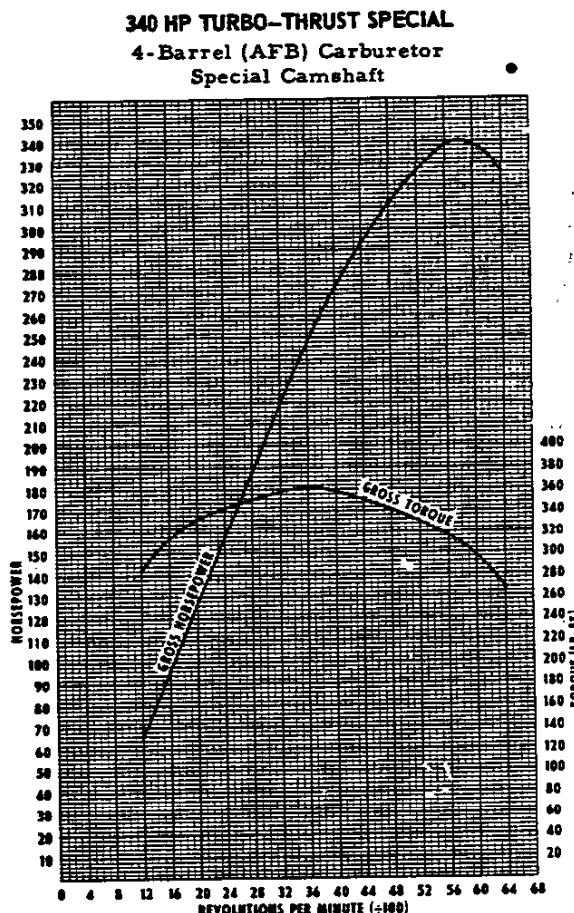
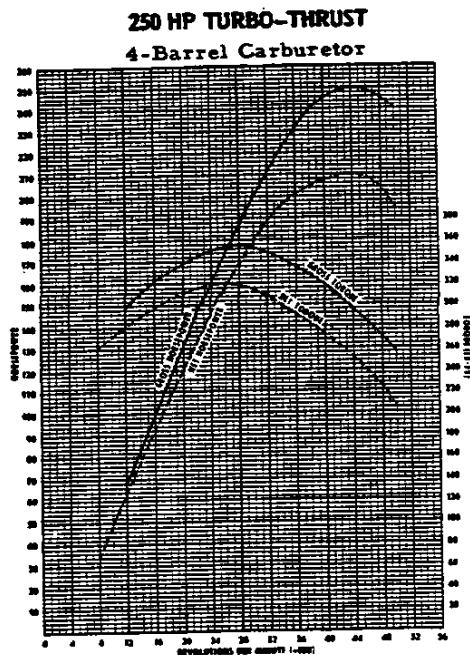
GLOSSARY

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 = $\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

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



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°F.

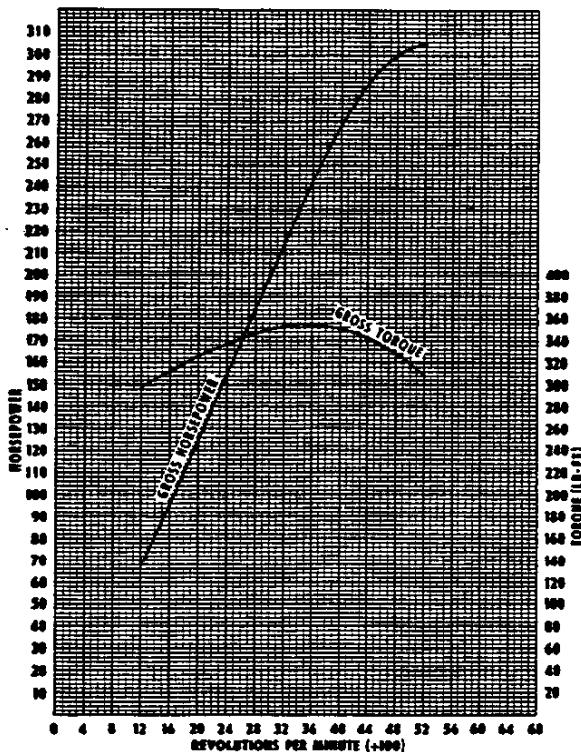
GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust

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

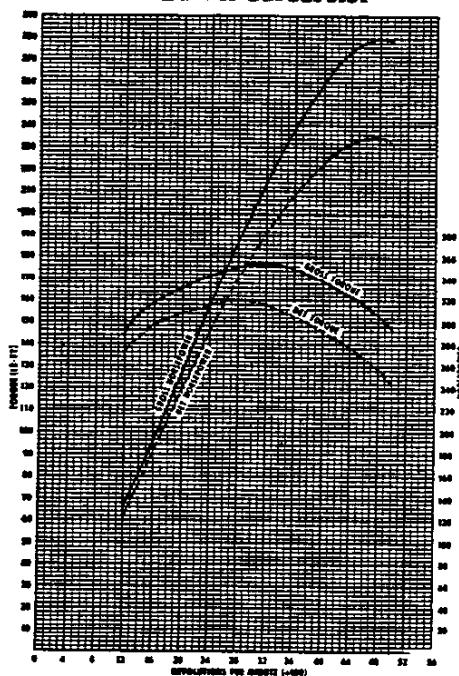
NET POWER and TORQUE were obtained from a dynamometer test simulating actual operating conditions when the engine is in its vehicle, except the generator is not charging.

305 HP TURBO-THRUST SPECIAL

• 4-Barrel (AFB) Carburetor

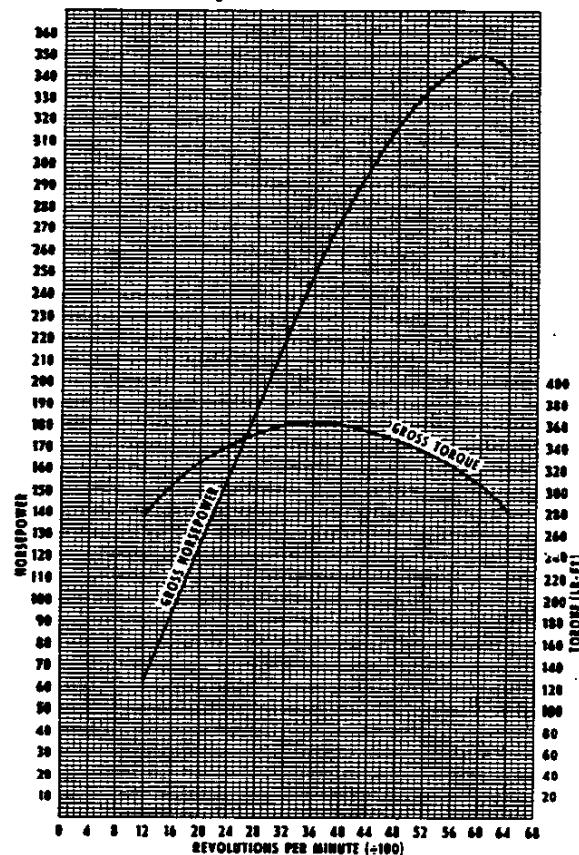


280 HP SUPER TURBO-THRUST
3 x 2-Barrel Carburetor



350 HP SUPER TURBO-THRUST SPECIAL

3 x 2-Barrel Carburetors
Special Camshaft



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

PRINCIPAL COMPONENTS

ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special		Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP	350 HP

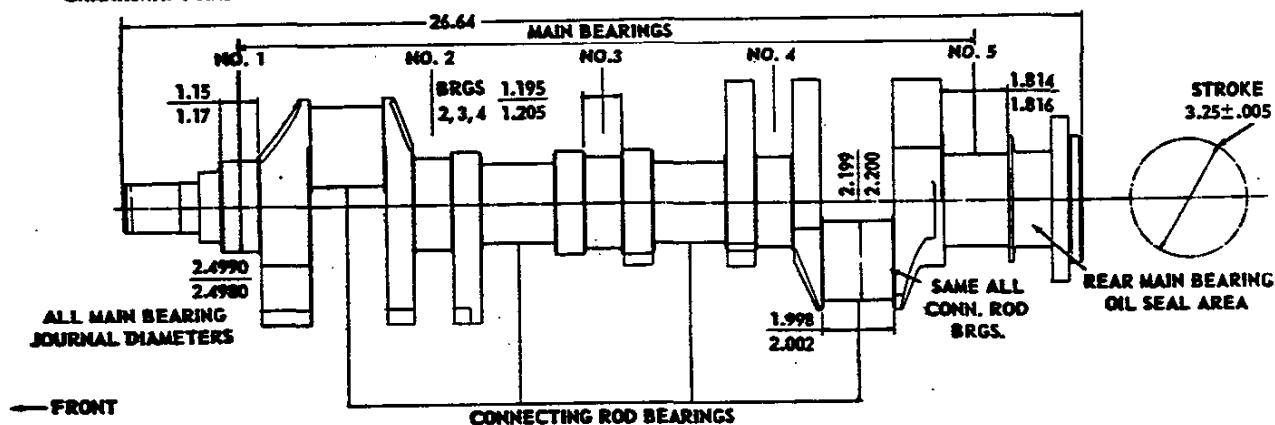
CYLINDER CASE AND HEADS

Material	Cast alloy iron
Bore Diameter	4.124-4.127
Head Bolt Torque	60-70 Lb Ft
No Cylinder Head Bolts	36

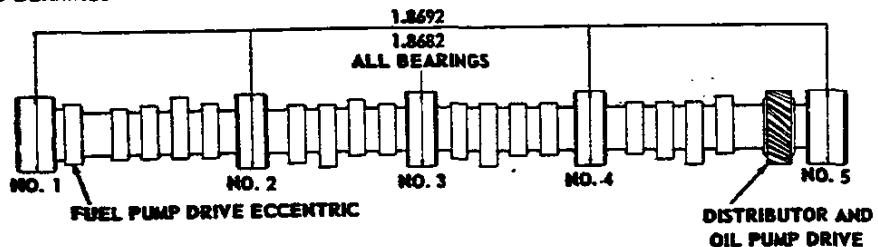
CRANKSHAFT

Material	Forged steel	
End Play	.003-.007	
Vibration Damper	Oscillating (rubber mounted)	
Weight	58.75 Lb	
Counterweights	6	
Crankshaft Pulley Diameter	6.64 PD	
Main Bearings	Extra-life steel backed babbitt	Premium, aluminum
Type	Precision, removable	
End Thrust Against Bearing	#5	
Clearance	.0006-.0032	
Brg Dim's #1-4, Theo ID	2.5006	
Effective length	1.002	
Projected area (Sq In)	2.5056	
Brg Dim's #5, Theo ID	2.5006	
Effective length	1.262	
Projected area (Sq In)	3.1558	

CRANKSHAFT AND BEARINGS



CAMSHAFT AND BEARINGS



—FRONT

October 1960

26-POWER TRAINS

1961 CHEVROLET PASSENGER CAR

ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special		Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP	350 HP

CAMSHAFT

Make	Chevrolet
Material	Cast alloy iron
Bearings	Extra-life steel backed babbitt
Dim's. #1-4, Ream Dia	.8712
Effective length	.860
Projected area (Sq In)	1.609
Dim's. #5, Ream Dia	.8712
Effective length	.940
Projected area (Sq In)	1.759
Drive	Chain and Sprocket
Crankshaft sprocket matl	Steel
Camshaft sprocket matl	Cast alloy iron
Timing Chain, Make	Link Belt
No. of links	48
Width	.88
Pitch	.500

VALVE MECHANISM

Type	Rocker arm, push rod actuated	
Lifters	Hydraulic	Mechanical
Body material		
Foot	Cast alloy iron	
Sleeve	Steel	
Plunger	Steel	
Push rod	Steel	
Rocker Arm Ratio	1.75:1	
Valve Lash		
Inlet	Zero	.008
Exhaust	Zero	.018

VALVES

Inlet		
Material	High alloy steel *	
Stem to guide clearance	.0010-.0027	
Lift	.4005	.4058
Exhaust		
Material	High alloy steel *	
Stem to guide clearance	.0025-.0042	
Lift	.4119	.4120

* - Valve faces aluminized with special cam and synchromesh transmission

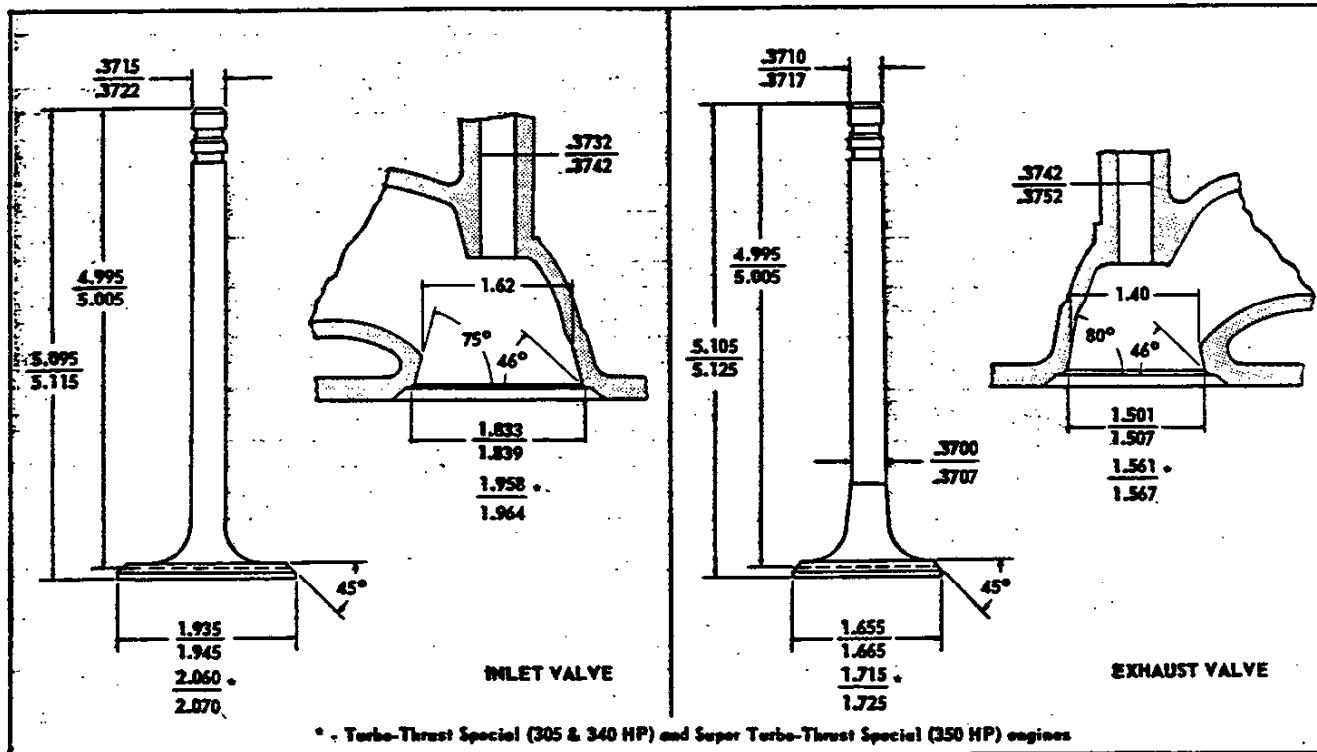
VALVE SPRINGS

Compressed Length (In @ Lb)			
Valves closed	Inner	1.626 @ 78-86 lb	1.488 @ 20-24
	Outer		1.696 @ 76-84
Valves opened	Inner	1.230 @ 184-196 lb	1.06 @ 55-61
	Outer		1.366 @ 155-165
Free Length	Inner	Approx 2.0	1.84
	Outer		2.03

Inner and outer valve springs apply only to special cam and synchromesh transmission

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

PRINCIPAL COMPONENTS - Continued



ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special		Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP	350 HP

VALVE SPRING DAMPERS

No. of Coils	3.56	
Free Length	1.765	

PISTONS

Material	Cast aluminum alloy	
Head, Type	Peak roof	Half flat; half slanted downward 16°, notched
Skirt, Type	Slipper, autothermic	
Weight (Oz)	28.08	29.20
Top Land Clearance	.0325-.0367	
Skirt Clearance	.0016-.0020	
Groove Depth		
Compression ring	.2283-.2334	
Oil control ring	.2183-.2234	

COMPRESSION RINGS

No per Piston	Two	
Type, Upper and Lower	Thick wall, inside bevel or counterbore	
Material	Cast alloy iron	
Coating		
Upper ring	Flash chrome plate	.004-.007 chrome plating
Lower ring	Wear resistant	
Width	.0770-.0780	
Gap	.015-.025	
Wall Thickness	.196-.206	

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

LUBRICATION SYSTEM

ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special		Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP	350 HP

GENERAL

Type	Controlled full pressure
Main Bearings	Pressure
Connecting Rods	Pressure
Piston Pins	Splash
Cylinder Walls	Pressure, jet cross spray
Camshaft Bearings	Pressure
Lifters	Pressure
Timing Gear	Nozzle sprayed
Oil Pressure Gauge	Electric
Crankcase Vent	Road draft type
Crankcase Capacity (Qt)	
Dry	4.5
Refill	4.0

OIL PUMP

Type	Gear
Normal Oil Pressure	45 PSI @ 2000 RPM
Intake Type	Fixed
Capacity (GPM, hot)	4.3 @ 2000 RPM

OIL FILTER

Availability	Production
Type	Full flow, spring loaded disc by-pass
Capacity (dry)	1.0 quart
Replacement Type	Element

LUBRICANT GRADES AND TEMPERATURES

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

OIL PAN DRAIN SCREW

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

ENGINE - 348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special	Super Turbo- Thrust Special
	250 HP	280 HP	305 HP	340 HP

OIL RINGS

Type	Multi-piece (2 steel rails and one spacer)		
No. per Piston	One		
Material			
Rails	Steel		
Spacers	Stainless steel		
Coating, Rails	Chrome plated OD		
Width	.187-.189		
Gap	.015-.055		
Wall Thickness	.165-.171		

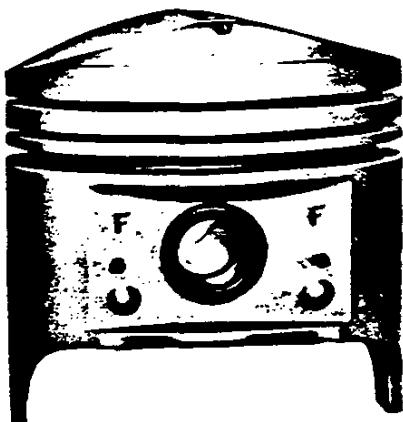
CONNECTING RODS

Material	Forged steel	
Length	6.134-6.136	
Bearings		Premium*
Material	Steel backed babbitt	
Type	Precision, removable	
Effective length	.867	
Clearance	.0007-.0027	
End play	.008-.014	
Theoretical ID	2.2012	
Projected area (Sq In)	1.908	

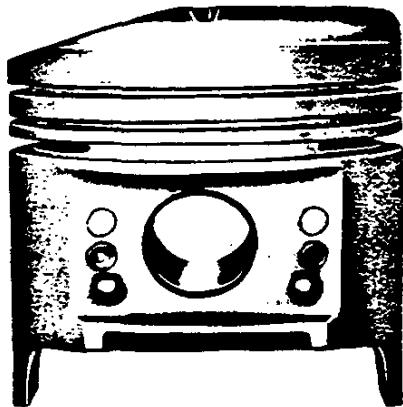
* - Aluminum

TIMING DIAGRAM DATA

Inlet Valve Opens - BTC	18° 30'	49° 37'40"
Closes - ABC	67° 30'	86° 37'40"
Exhaust Valve Opens - BBC	68° 30'	77° 31'38"
Closes - ATC	25° 30'	32° 31'38"
Inlet Ramp Opening	.0034, 10°	.0059, 18°
Closing	.0044, 13°	
Exhaust Ramp Opening	.0034, 10°	.0059, 29°
Closing	.0044, 13°	
Inlet Tappet Lift	.2288	.2319
Exhaust Tappet Lift	.2354	.2354



348 CU.IN. 250, 280 & 305 HP
COMPRESSION RATIO 9.5:1



348 CU.IN. 340 & 350 HP
COMPRESSION RATIO 11.25:1

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

COOLING SYSTEM

ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special		Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP	350 HP

GENERAL

Type	Pressure with full length water jacket around each cylinder
Shroud	Production
Drain Locations	
Radiator	Right front side
Type	Petcock
Engine block	Right and left center
Type	Plug

THERMOSTAT

Make	Harrison
Type	Pellet
Begins to Open @	167-172°F
Fully Opened @	192°F

RADIATOR

Make	Harrison
Type	Tube on center
Core Constant and Thickness	
3 and 4-speed	.25 x .55 x 1.75
Powerglide	.22 x .55 x 1.75
Turboglide	.20 x .55 x 1.75
Frontal Area (Sq In)	428
Capacity (Qt)	
Less heater	21
With heater	22

RADIATOR, HEAVY DUTY (RPO 257)

Core Constant & Thickness	
3 & 4-speed	.20 x .55 x 1.985
Automatic transmission	.18 x .55 x 1.985
Frontal Area (Sq. In)	450.93

RADIATOR CAP

Type	Pressure
Valve Opens @	Approx 13 psi

RADIATOR HOSE

Location, Inlet	Thermostat housing to radiator
Location, Outlet	Water pump to radiator
Type	Molded elbow
Inlet ID	1.50
Outlet ID	1.75

FAN AND GENERATOR BELT

Number Used	One
Angle of "V"	37-44°
Pitch Line Length	56.50
Width	.375-.385
Fan Pulley Size	7.00 PD, 36° "V"

FUEL AND EXHAUST SYSTEM

ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special	Super Turbo- Thrust Special
	250 HP	280 HP	305 HP	340 HP

FUEL GAUGE

Make	AC
Type	Electric

FUEL TANK

Capacity (Gallons)	
Station wagons	19
All others	20
Filler Location	In left rear quarter panel

FUEL FILTER

Fuel Tank	Strainer
Carburetor Inlet	Sintered bronze filter

FUEL PUMP

Make	AC
Type	Mechanical
Pressure Range (PSI)	5.25-6.50
	9.25-10.75

CARBUREATORS

Regular Transmission				
Make	Carter	Rochester	Carter	Rochester
Model	3779180		3772600**	
Front		7013015		7013973
Center		7013020		7013974
Rear		7013017		7013975
Automatic Transmission				
Make	Carter, Rochester	Rochester	Carter	
Model	3779179, 7013006		3772600	
Front		7013015		
Center		7013016		
Rear		7013017		
Type	4 bbl., downdraft	2 bbl., downdraft	4 bbl., downdraft	2 bbl., downdraft
SAE Flange Size		1.25	1.50	1.25
Venturi ID by Make*	Carter	Rochester	Carter	Rochester
Primary	1.06	1.13	Fr & Rr 1.19	1.25
Secondary	1.25	1.25	Center 1.25	1.56
Throttle Bore		1.4375	1.56 Pr, 1.68 Sec	1.4375
Choke			Automatic	

AIR CLEANER

Make	AC
Element	Paper

EXHAUST SYSTEM

Type	Dual with resonators	
Exhaust Pipe OD	2.00	2.50
Wall thickness	.0625	
Tail Pipe OD	1.87	2.00
Wall thickness	.0598	

* - Primary and Secondary data applies to 4-barrel carburetors only
 ** - Aluminum intake manifold on engines with synchromesh transmissions

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

ELECTRICAL SYSTEM, Continued

ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special	Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP

SPARK PLUGS

Make	AC		
Model	44N		43N
Thread Size		14 MM	
Gap		.033-.038	
Torque		25 Lb-Ft	

DISTRIBUTOR

Make	Delco-Remy		
Model	1110948		1110919 *
Breaker Gap		.019 (new)	
Cam Angle	26-33°		29° ▼
Breaker Arm Tension		19-23 Oz	
Centrifugal Spark Adv Starts		700 RPM	
Max degrees @ RPM		24 @ 4600	
Maximum Vacuum Adv		15°@ 15" Hg	

STARTING MOTOR

Make	Delco-Remy		
Model, Conv and PG	1107891		
Turboglide	1107890		
Rotation (drive end view)	Clockwise		
Test Conditions	Engine at operating temperature		
No Load Test, Amps	65-100		
Volts	10.6		
RPM	3600-5100		
Drive, Engagement Type	Positive shift solenoid		
Number of teeth	9		
Flywheel to Starter			
Gear Ratio	18.6:1		
Flywheel Face Tooth			
Width, Conv & PG	.4135		
Turboglide	.3435		

STARTING

Ignition Switch Positions	Accessory, Lock, Off, On, and Start
Starting Procedure	Turn ignition key to extreme right after placing shift lever in neutral and depressing clutch
Regular Transmissions	
Automatic Transmission	Turn key to extreme right, selector in Park or Neutral

COIL

Make	Delco-Remy			
Model	1115083	1115156	1115083	1115107
Amps Drawn, Eng Stopped			4.0	
Engine Idling			1.8	

IGNITION TIMING

Initial Setting	8° BTC	12° BTC
Mark Location	Vibration damper	
Firing Order	1-8-4-3-6-5-7-2	

* - Dual breaker points

▼ - Per breaker, 33-34° total cam angle

COOLING SYSTEM - Continued

ENGINE-348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special	Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP

FAN

Type	Temperature modulated viscous drive
Number of Blades	5, Staggered
Diameter	18.00
Viscous Drive	Functions above 140°F and under 3200 RPM

WATER PUMP

Type	Centrifugal
Capacity (GPM @ RPM)	53@ 4000
Drive	Fan belt
Bearing	Permanently lubricated double row ball

ELECTRICAL SYSTEM

GENERATOR

Make	Delco-Remy
Model	1102097
Type	Two brush, shunt wound
Drive	By fan belt
Pulley Size	2.88 PD
Generator RPM MPH	Approx 101
Max Gen Output RPM (hot)	2450
Eng RPM@ Max Gen Output	1065
Ratio (Gen to engine RPM)	2.3:1
Rating, Amperes	30
Volts	12-15

OPTIONAL GENERATOR EQUIPMENT

35 Amp (RPO 338)	1102174
40 Amp (RPO 326)	1105123 (Medium duty)
50 Amp (RPO 378)	1106681 (Low cut-in)

BATTERY

Make	Delco-Remy
Model	1980558
Voltage Rating	12
Number of Cells	6
Plates per Cell	11
Terminal Grounded	Negative
Location	Right front of engine compartment on radiator baffle
Capacity	61 amp hr @ 20 hr rate

OPTIONAL BATTERY EQUIPMENT (RPO 345)

Model	1980668
Capacity	70 amp hr @ 20 hr rate

VOLTAGE AND CURRENT REGULATOR

Make	Delco-Remy
Model	1119234
Type	Vibrator
Cut-out Relay, Closing Voltage @ Gen RPM	11.8-13.5 @ 1300
Voltage Regulator, Volts	13.8-14.8
Current Regulator, Amps	27-33
	33-37

409 CUBIC INCH V-8 ENGINE

GENERAL DATA

Engine		3-Speed	4-Speed
Piston Displacement (cu. in.)		409	
Type		Valve-in-head	
Number of Cylinders		8	
Bore and Stroke (Nominal)		4.3125 x 3.50	
Compression Ratio		11.0:1	
Taxable (SAE) Horsepower		59.5	
Idling Speed (RPM)		600	
Compression Press. psi @ crank speed, engine hot		150	
Dry Weight (lbs)	Engine and Clutch	NA	NA
	With Transmission		
Lubrication		Full Pressure	
Power Plant Mounting		Three point mounting, two front and one rear combination compression and shear type	
Measurements	Fan to rear of flywheel housing	38.23	
	Front cylinder block to rear of flywheel housing	29.92	
	Length of cylinder block	23.63	
	Width of engine, manifold to manifold	27.02	
	Top of air cleaner to bottom of oilpan	28.90	

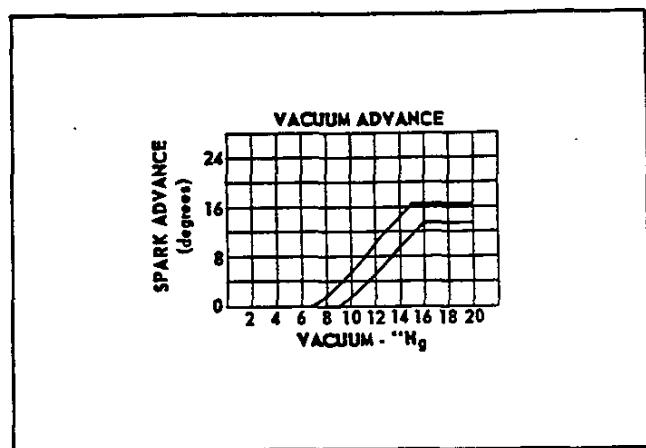
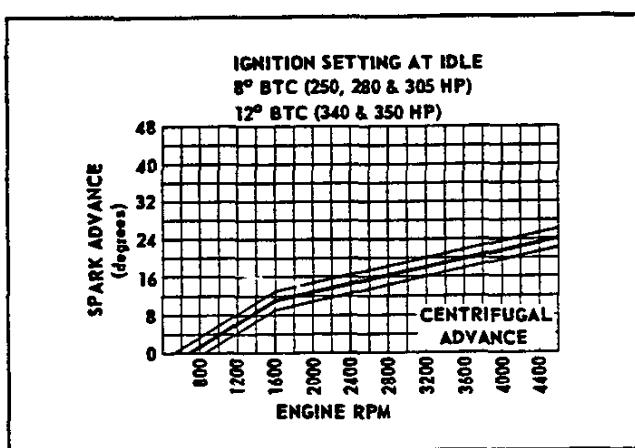
ADVERTISED MAXIMUM ENGINE PERFORMANCE

Engine	360 H.P. V-8
Option	RPO 580
Carburetor	4-Barrel (AFB)
Camshaft	Special
Brake Gross Horsepower	360 @ 5800
Brake Gross Torque	409 @ 3600

ENGINE SPEED AND PISTON TRAVEL

Transmission		3-Speed	4-Speed
Rear Axle Ratio		3.36:1	3.36:1
Tire Size		7.50 x 14-4 Ply	
Crankshaft Revs/Mile		2651.0	2651.0
Crankshaft rpm @ 1 mph	Low	109.2	97.2
	Second	67.6	73.3
	Third		57.9
	Direct N/V	44.2	44.2
	Reverse	123.8	99.9
Piston Travel (Ft/Mile)		1434.2	1434.2

ELECTRICAL SYSTEM - Continued



**409 CUBIC INCH V-8 ENGINE SAME AS 348
CUBIC INCH 360 H.P. ENGINE EXCEPT FOR
THE FOLLOWING DIFFERENCES**

CRANKSHAFT

Weight -----	66.5 lbs
Vibration Damper -----	Special
Bearing clearance -----	.0020-.0036
Crankshaft end play -----	.006-.010

CONNECTING ROD

Weight -----	26.28 (oz)
Length (center to center) -----	6,009-6.011
Bearing clearance -----	.0012-.0033
End (side) play -----	.015-.021

PISTONS

Type -----	Forged Aluminum
Wear Resistance Coating -----	Tin plated
Head Type -----	Half slant
Skirt Type -----	Solid
Weight (oz.) -----	31.6
Top Land Clearance -----	.0465-.0425
Skirt to Bore Clearance -----	.0031-.0035 (measured 2.94" from top of piston)
Compression Ring Groove Depth -----	.2205-.205
Oil Ring Groove Depth -----	.194-.192
Piston Pin Offset -----	None

PISTON PIN

Clearance -----	.00025-.00035
-----------------	---------------

CARBURETOR

Barrel Diameter:	
Primary -----	1.62
Secondary -----	1.68

VALVE TIMING DATA

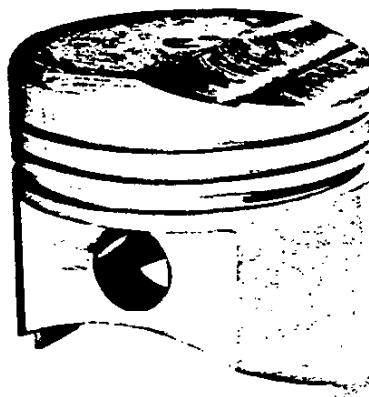
Inlet Valve Opens - BTC -----	59°12'22"
Valve Closes - ABC -----	106°36'10"
Duration -----	345°48'32"
Exhaust Valve Opens - BTC -----	97°54'44"
Valve Closes - ABC -----	26°44'36"
Duration -----	304°38'20"
Valve Opening Overlap -----	85°56'58"
Valve Lift:	
Inlet -----	.4058
Exhaust -----	.4120

VALVE SPRING DATA

Inlet Outer Spring	
Pressure (valve closed) -----	130-138 psi @ 1.68 In
Pressure (valve open) -----	273-285 psi @ 1.29 In
Inlet inner spring damper	
Pressure (valve closed) -----	20-24 psi @ 1.488 In
Pressure (valve open) -----	55-61 psi @ 1.06 In
Exhaust outer spring	
Pressure (valve closed) -----	130-138 psi @ 1.68 In
Pressure (valve open) -----	273-285 psi @ 1.29 In
Exhaust inner spring	
Pressure (valve closed) -----	20-24 psi @ 1.488 In
Pressure (valve open) -----	55-61 @ 1.06 In

LUBRICATION SYSTEM

Crankcase Capacity (Qt)	
Dry -----	7
Refill -----	6



**409 CU.IN. 360 HP
COMPRESSION RATIO 11.0:1**

ADVERTISED VEHICLE PERFORMANCE FACTORS
(MODEL 1669)

Engine 409 Cu. In. V-8	360 H.P.
------------------------	----------

3-Speed Transmission

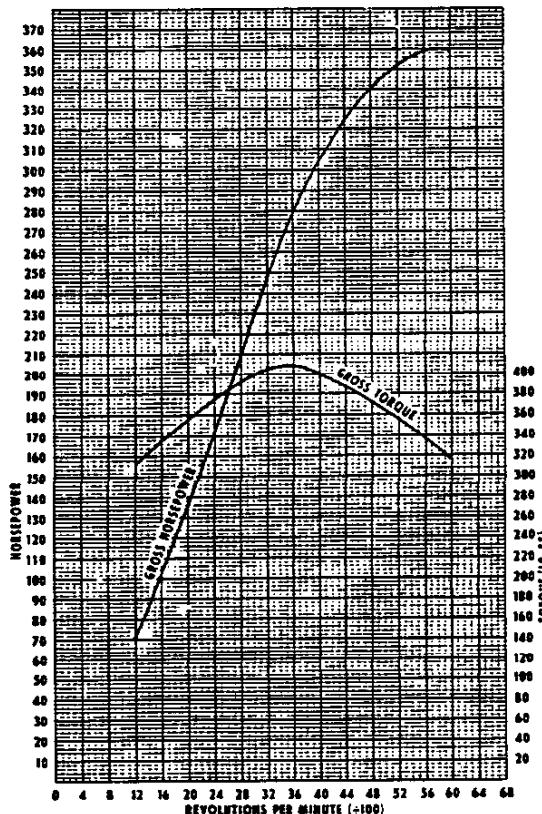
Performance Weight (pounds)	4435
Pounds per Gross H. P.	12.3
Pounds per Cu. In. (Displ)	10.8
Gross H. P. per Cu. In. (Displ)	.880
Power Displ (Cu. Ft. / Mile)	313.7
Displ Factor (Cu. Ft. / Ton Mile)	141.5

4-Speed Transmission

Performance Weight (pounds)	4450
Pounds per Gross H. P.	12.4
Pounds per Cu. In. (Displ)	10.9
Gross H. P. per Cu. In. (Displ)	.880
Power Displ (Cu. Ft. / Mile)	313.7
Displ Factor (Cu. Ft. / Ton Mile)	141.0

360 H. P. V-8 409 CUBIC INCH

Special Camshaft



GLOSSARY

Performance Weight = $\frac{\text{Curb Weight plus } 600 \text{ lb}}{(\text{Weight of four } 150 \text{ lb passengers})}$

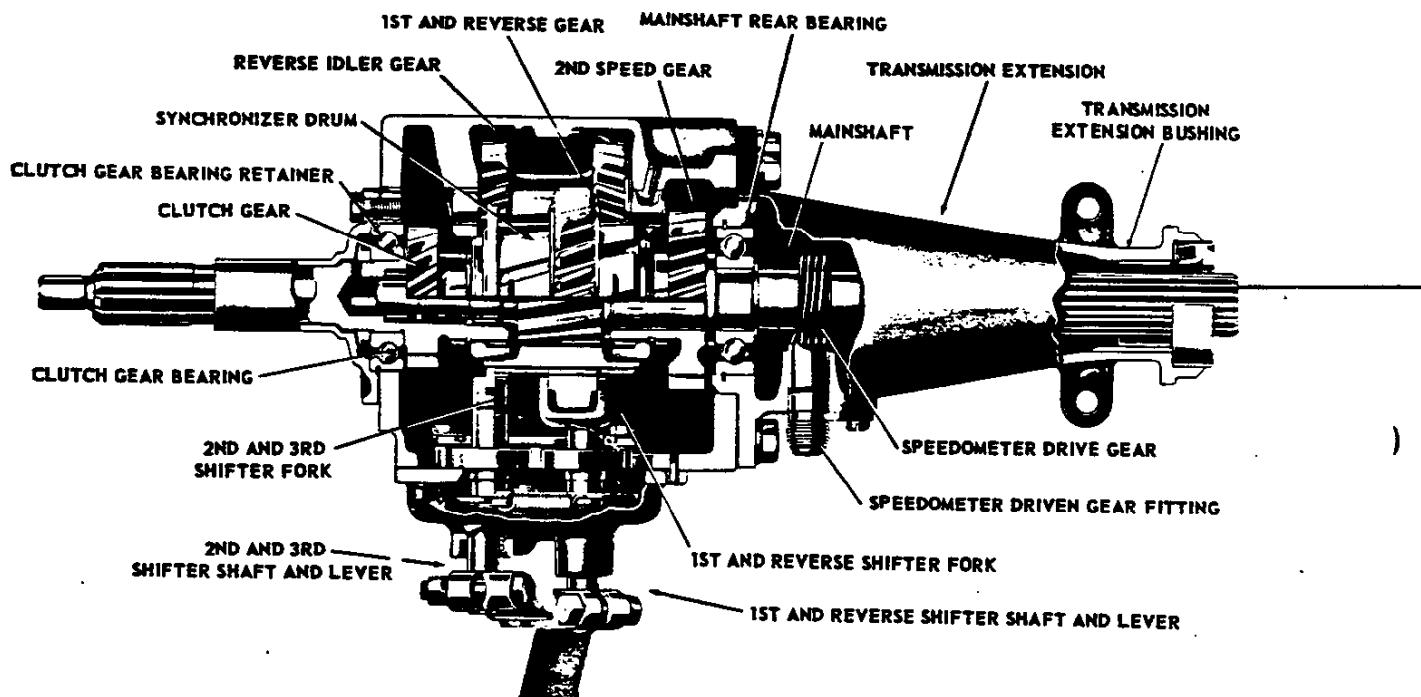
Power Displacement = $\frac{\text{Crankshaft Rev/Mi} \times \text{Piston Disp}}{2 \times 1728}$

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°F.

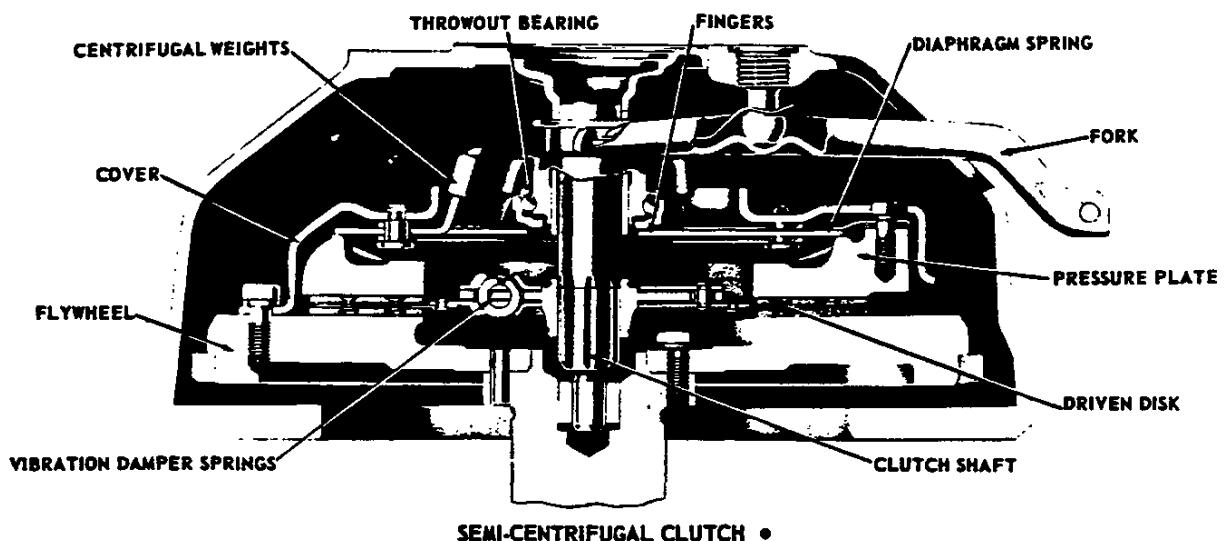
GROSS POWER and TORQUE were obtained in a regular dynamometer test with the dynamometer exhaust system, no fan, generator not charging, optimum spark advance & optimum fuel setting.

TRANSMISSIONS



THREE-SPEED TRANSMISSION

CLUTCHES

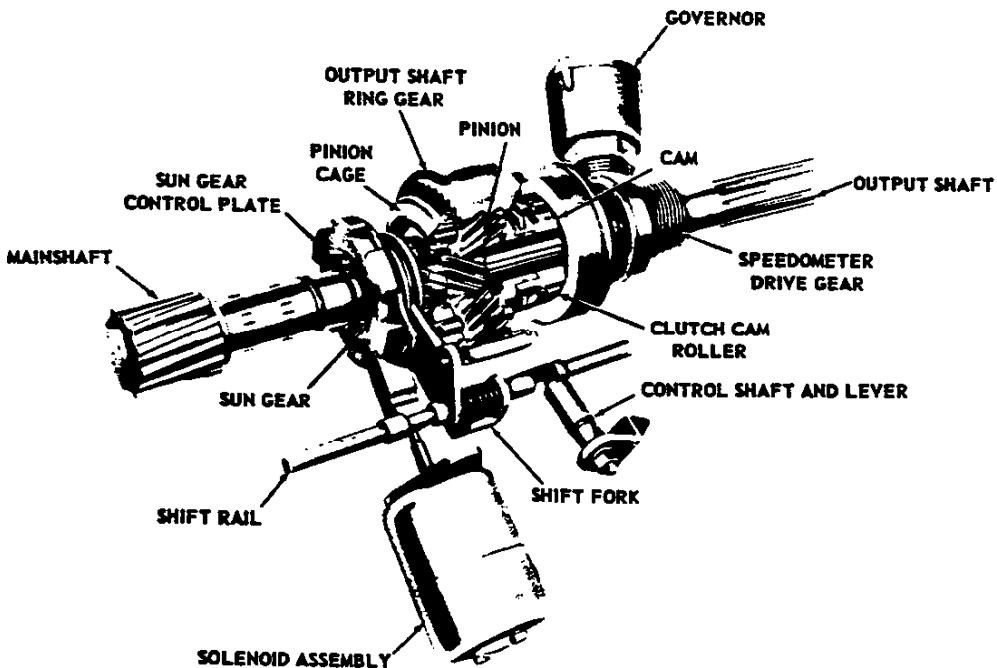


ITEM	235 Cu in 135 HP	283 Cu in 170 HP	283 Cu in 230 HP	283 Cu in 170 & 230 HP	348 Cu in 250, 280, 305, 340 & 350 HP	409 Cu in 360 HP				
	3-Speed & O'Drive	Heavy Duty Clutch	3-Speed	3-Speed	O'Drive	3-Speed 4-Speed				
Type	Single plate, dry disk				Semi-centrifugal Single plate, dry disk					
Drive	Straps									
Clutch Spring	Type	Diaphragm								
	Material	Heat treated spring steel								
	Total pressure	1450-1600	1575-1725	1785-1875	1575-1725	1775-1875				
	Spring release	Diaphragm action								
	Type	Single plate, dry disk with two facings								
	Vibration dampers	6 springs		12 springs		10 springs				
Driven Disk	Material	Molded	Woven asbestos*			Woven asbestos**				
	OD	9.5	11.0	10.0		10.5				
	ID	6.0	6.5	6.0	6.5					
	Facing Area (total)	85.22	123.70	100.53	90.72	106.81				
	Thickness			.135						
Bearings	Clutch Release	Type	Single row ball							
		Lubrication	Permanently lubricated							
	Pilot	Type	Sintered powdered bronze bushing							
		Make & No	Chevrolet - 3752437							
		OD	1.0935-1.0945							
		ID	.5915-.5925							
		Width	.740-.760							
		Lubrication	Oil impregnated bushing							
Controls	Clutch fork type	Drop forged steel, pivot mounted on ball								
	Pedal mounting	Pendent from brace on dash								
Flywheel	Material	Cast alloy iron								
	Wt w/ ring gear (Lb)	30.90	31.40	28.22		29.30				
	Type	Hot rolled steel, shrunk on flywheel								
	Ring Gear	Teeth No	168							
		Width & PD	.4110-.4160; 14.0 PD							
Clutch attachment to flywheel		6-Special bolts; 3/8-16 x 1; shank dia. .375-.373								

* - Molded asbestos used optionally in 235 Cu In engine 3-speed & O'Drive clutches.

** - Woven, premium grade.

• Revised February 1961 October 1960
POWER TRAINS -39



OVERDRIVE TRANSMISSION

OVERDRIVE UNIT-RPO 315

GENERAL DATA

Type ----- 3-speed synchro-mesh with 3-pinion planetary drive unit. The drive unit with its integral mainshaft replaces the mainshaft and extension of the regular 3-speed transmission.

Lockout Switch ----- Manually controlled by "pull type" cable located under instrument panel to right of steering column. With handle fully extended, overdrive is locked-out.

Kickdown Switch ----- On carburetor, actuated by accelerator pedal.

Minimum Cut-in Speed ----- 27-30 MPH
Cut-out Speed ----- 18-22 MPH

GEAR RATIOS

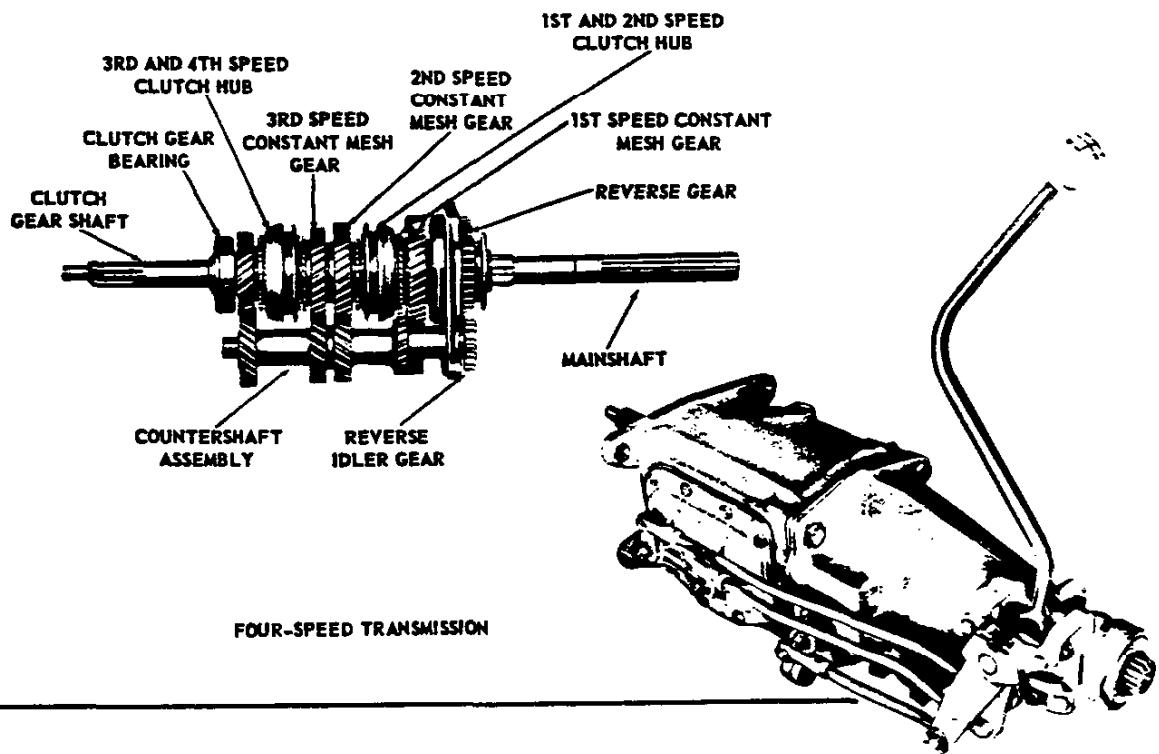
Overdrive Unit	Locked Out	Locked In
First	2.94:1	2.058:1
Second	1.68:1	1.176:1
Third	1.00:1	0.700:1
Reverse	3.33:1	

SPEEDOMETER GEARS

Tooth Pitch ----- 30
Teeth-driving and Driven ----- 8 & 24

LUBRICANT

Type ----- SAE 90 transmission or mineral oil
Capacity
Transmission ----- 2 pints
Overdrive unit ----- 1 pint
Total ----- 3 pints



FOUR-SPEED TRANSMISSION

THREE AND FOUR-SPEED CONVENTIONAL TRANSMISSIONS

ITEM	235 Cu. In. 135 H.P.	283 Cu. In. 170 & 230 H.P.	348 & 409 Cu. In. 250, 280, 305, 340, 350 & 360 H.P.	348 Cu. In. 250, 280, 305, 340 & 350 H.P.	409 Cu. In. 360 H.P. +
TRANSMISSION TYPE	THREE SPEED				FOUR SPEED
Make	Chevrolet, Synchromesh, Manual Shift				
Case Material	Cast Iron				
Gearshift	Control	Remote			
	Type	Lever			
	Location	On steering column			On floor
Gears	Type	All helical			
	Material	Forged steel, hardened			
	Synchronization	2nd and 3rd		1st, 2nd, 3rd, 4th	
	Constant mesh gears	2nd		1st, 2nd, 3rd	
	Sliding gears	1st and reverse		Reverse	
	Ratio	First	2.94:1	2.47:1	2.54:1
		Second	1.68:1	1.53:1	1.92:1
		Third	Direct (1:1)		
		Fourth	Direct (1:1)		
		Reverse	3.33:1	2.80:1	2.61:1
Speedometer Gears	Tooth pitch	28			
	Teeth	Drive	8		
		Driven ▲	20	19	20
Lubricant	Type recommended	SAE 90 transmission multi-purpose			
	Capacity	2 pints		2.5 pints	
Oil seal (transmission extension)		Steel encased double seal of spring loaded synthetic rubber and felt			

+ - This four speed gear ratio information also applicable to Corvette.

▲ - See chassis section page 7 for complete speedometer driven gear data.

• Revised February 1961 October 1960

POWER TRAINS -41

POWERGLIDE - Cont'd.

OIL PUMPS

General ----- Both front and rear oil pumps are inter-connected by oil channels and supply pressure together or independently depending on the action of the pressure regulator valve and check valves.

Front Oil Pump

Type ----- Internal-external gear type
Driven by ----- Torque converter housing hub
Function ----- Provides oil pressure to main system at low vehicle speeds (up to 45 MPH, depending on throttle position)

Rear Oil Pump

Type ----- Internal-external gear type
Driven by ----- Transmission out-put shaft
Function ----- Provides line pressure to main oiling system at high vehicle speeds (over 15 MPH to 45 MPH depending on throttle position), also provides oil pressure to transmission when a push start is necessary.

Oil Cooler ----- Integral with radiator assembly and connected to transmission by inlet and outlet pipes.

LUBRICANT

Type	----- Type "A", suffix "A"
Capacity dry	----- 10.5 qt
Capacity refill	----- 4.5 qt

HIGH PERFORMANCE POWERGLIDE

This transmission used with Turbo-Thrust Special 305 HP engine and Corvette is same as regular production (RPO 313) except for the following differences:

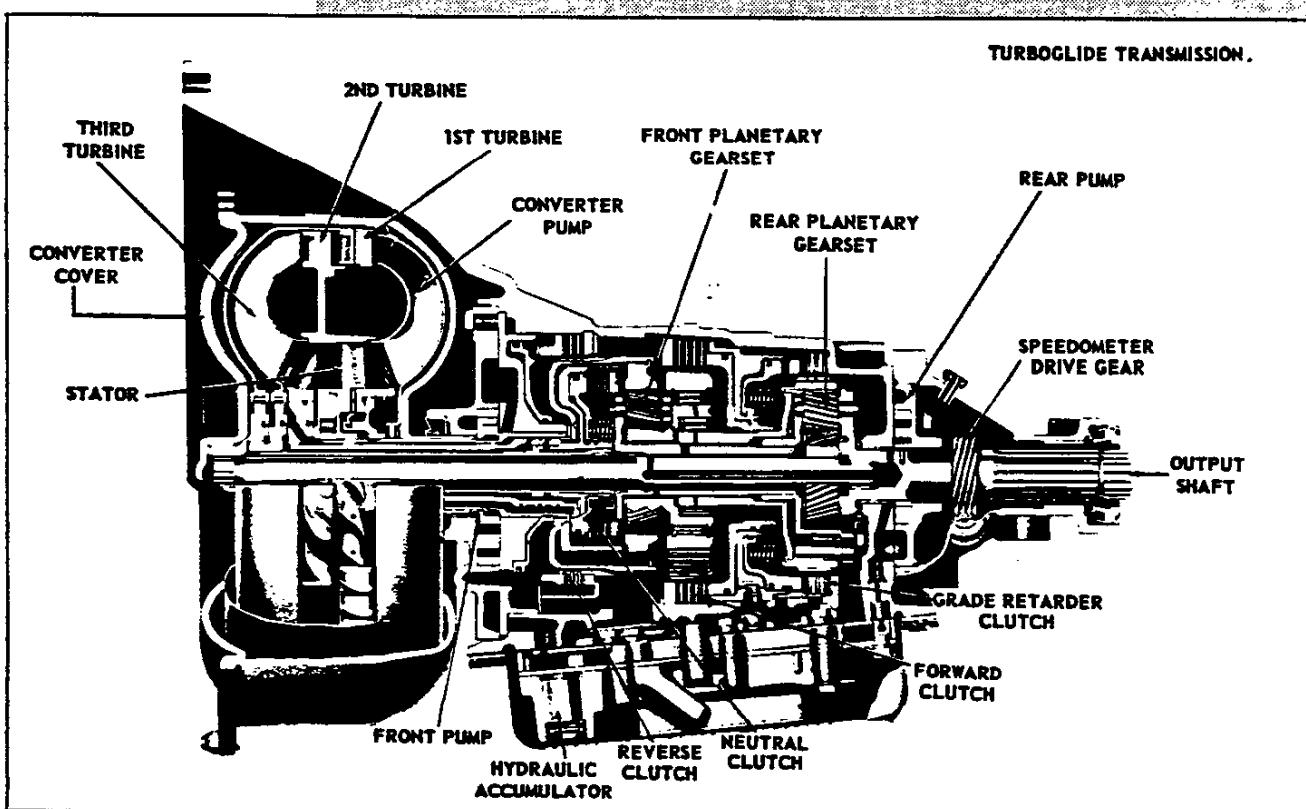
CONVERTER COVER

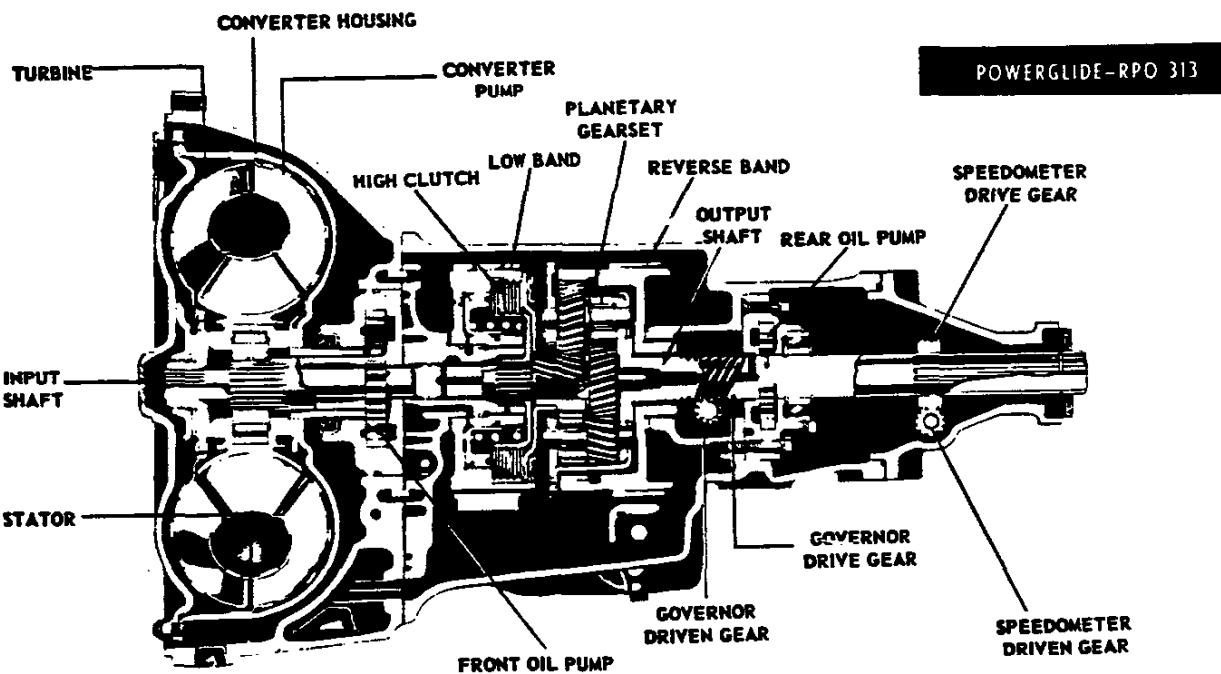
Type ----- Welded to converter cover.

GOVERNOR

Type ----- Modified to raise shift point

	Upshift	Downshift
Closed throttle	12-15	10-14
Throttle at detent	36-52	13-17
Full throttle	54-60	50-58





POWERGLIDE-RPO 313

GENERAL DATA

Make ----- Chevrolet
 Type ----- Automatic hydraulic torque with planetary gear system for reverse and low
 Selector Lever Location ----- On steering column
 Selector Lever Operation --- Actuates manual valve in hydraulic control system
 Selector Lever Quadrant Positions -- Park-Reverse-Neutral-Drive-Low
 Parking Lock Type ----- Pawl and gear
 Parking Lock Operation --- Applied by selector lever through positive linkage
 Fly wheel --- Steel stamping with welded on ring gear

HYDRAULIC CONTROLS

Manual valve type ----- Spool
 Pressure Regulator Valve ----- Spool
 Pressure Range (psi at idle):

	V-8	6 Cyl
Drive and Neutral	50-100	50-77
Low and Park	120	77
Reverse	98-250	96-181

GOVERNOR

Type ----- Centrifugal
 Drive ----- From transmission output shaft
 Location ----- Accessible from rear of transmission left side
 Operation ----- Regulates pump oil pressure to automatic shift control valve body

ACCELERATOR PEDAL CONTROL (miles per hour)

	Upshift	Downshift
Closed throttle	13-15	10-13
Throttle at detent	30-45	14-18
Full throttle	48-53	45-50

HYDRAULIC TORQUE CONVERTER

Type ----- Three element Converter (driving member) ----- Sheet metal, multi-vane type, spot welded to torque converter housing. The housing cover is bolted to the flywheel.
 Turbine (driven member) ----- Sheet metal, multi-vane type supported by torque converter housing cover. Turns independently of housing. Splined to input shaft.
 Stator (reaction member) ----- Aluminum air foil type supported on a stationary sleeve by an overrunning clutch of cam and roller design.

PLANETARY GEAR UNIT

Type ----- Compound planetary
 Gear ratio range:

Drive Range	1:1 Direct drive
Low Range	1.82:1
Reverse	1.82:1

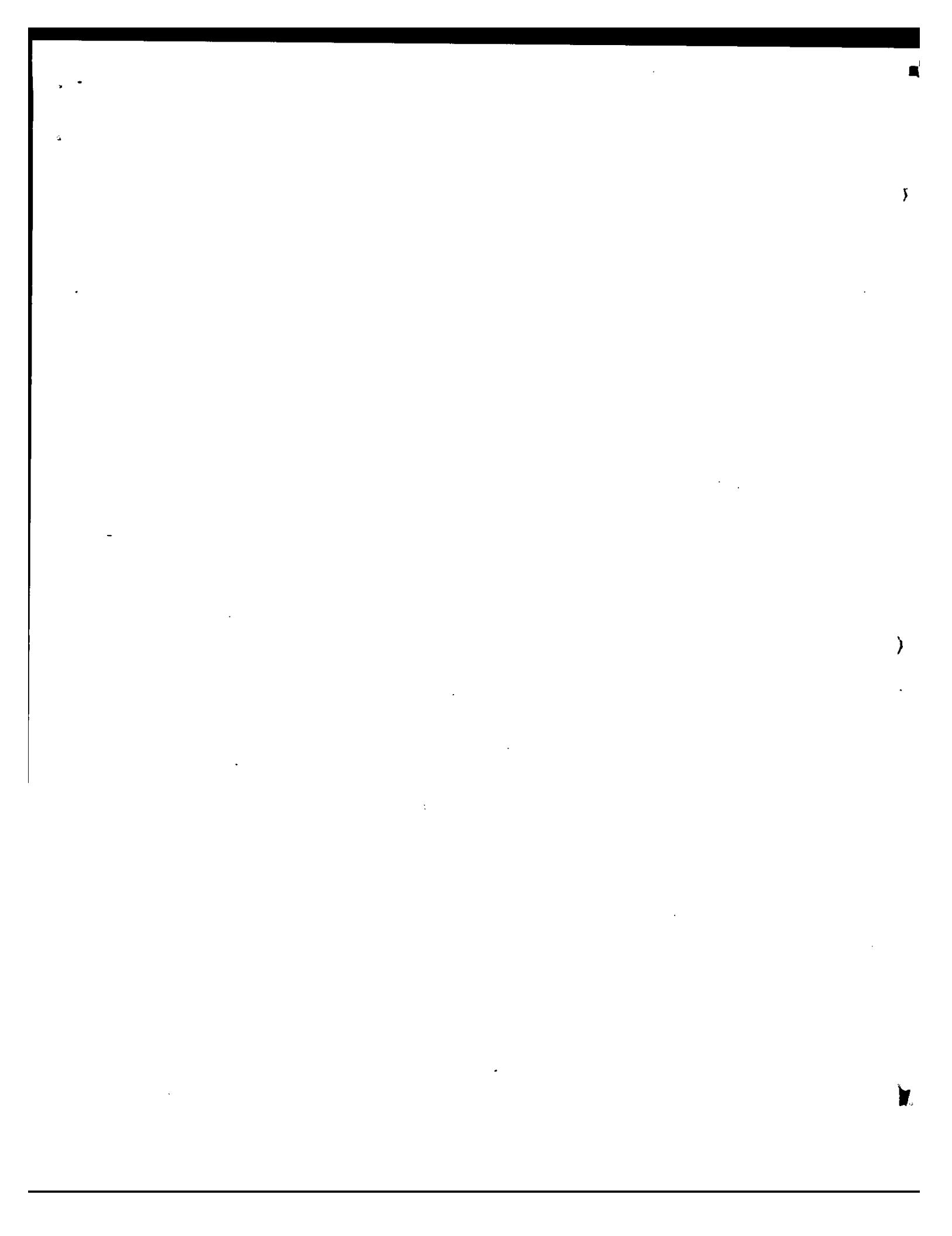
Low brake band ----- Double wrapped design (linked circular segments)
 Low band servo type ----- Piston, are release spring spring and inner cushioning spring.

HIGH CLUTCH

Type ----- Multiple-disk
 Driving disks type ----- Steel with cork and paper facings, bonded
 Driving disks number ----- Four
 Driven disk type ----- Steel
 Driven disk number ----- Five

TORQUE MULTIPLICATION

Maximum overall ratio	3.82:1
Low gear or low range	3.82:1 to 1.82:1
Reverse range	3.82:1 to 1.82:1



TURBOGLIDE - RPO 302

GENERAL DATA

Make ----- Own
 Type ----- Triple turbine hydraulic torque converter with first turbine and second turbine driving output shaft through planetary gearsets. Third turbine drives output shaft directly. Planetary gearsets also provide Reverse and Grade Retarder operation. Two position stator vanes provide extra multiplication.
Drive Position Torque Multiplication (maximum)
 Low stator angle ----- 3.8
 High stator angle ----- 4.3
Reverse Position Torque Multiplication ----- 3.1
 Oil Type ----- Type A
 Suffix "A"
Oil Capacity
 Dry ----- 19 Pt
 Refill ----- 4 Pt
 Oil Cooler ----- Integral with radiator assy and connected to transmission by inlet and outlet pipes
Selector Lever
 Location ----- On steering column
 Operation ----- Actuates manual valve in hydraulic control system
Quadrant Positions (on stg column)
 Number ----- Five
 P ----- Park
 R ----- Reverse
 N ----- Neutral
 D ----- Drive
 GR ----- Grade Retarder
Line Pressures
 Park ----- 80 PSI
 Reverse ----- 80-200 PSI
 Neutral ----- 80 PSI
 Drive ----- 80-200 PSI
 Grade Retarder ----- 80 PSI

HYDRAULIC TORQUE CONVERTER

Type ----- Five element
 Driving Member (pump) ----- Sheet metal, multi-vane type, spot-welded to torque converter housing. Housing cover is bolted to the flywheel.
Driven Members
 First turbine ----- Die cast aluminum axial flow air foil type, drives rear sun gear shaft
 Second turbine ----- Die-cast aluminum axial flow air foil type, pinned and press fit to steel hub; drives front ring gear shaft

Third turbine ----- Sheet metal, multi-vane type, drives output shaft
 Reaction member (stator) ----- Magnesium air foil type with dual pitch, controlled by accelerator position.

CLUTCHES

Type	-----	Multiple-disk
Material		
Driven plates	---	Faced with non-metallic compound
Pressure plate	-----	Sintered iron
Reaction plates	-----	Steel
Return Spring		
Forward & Grade Retarder	-----	Radial row of coil springs
Reverse	-----	Diaphragm type
Active Faces		
Forward	-----	Eight
Reverse and neutral	-----	Six
Grade Retarder	-----	Six

PLANETARY GEAR UNIT

Material	-----	Steel
Number of Pinions		
Front	-----	Six
Rear	-----	Three
Drive Gear Ratios		
Drive position		
Front planetary gear set	-----	1.63:1
Rear planetary gear set	-----	2.67:1
Gear Retarder position		
Rear planetary gear set	-----	2.67:1

PARKING LOCK MECHANISM

Type	-----	Spring loaded wedge
Operation	-----	Applied by selector lever through positive linkage

SPEEDOMETER GEARS *

Teeth		
Drive gear	-----	8
Driven gear		
283 Cu In engine	-----	20
348 Cu In engine	-----	18

* - Also applicable to Powerglide transmission

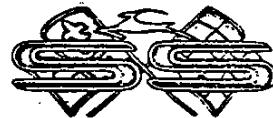
IMPALA SUPER SPORT SUPPLEMENT

Model Application:

All 1800 Series except Normad Station Wagon

SPECIFICATIONS OTHER THAN SHOWN ARE REGULAR PRODUCTION

Impala



IMPALA SUPER SPORT EQUIPMENT - RPO-240

EXTERIOR

- "SS" emblem with crossed flags on deck lid and rear quarter panel
- Full wheel disks with 3-lug simulated knock-off hubs
- Black wheels on all body colors

INTERIOR

- Instrument panel assist bar (chrome with padded vinyl insert and "Impala SS" script)
- 4-speed transmission floor shift lever anodized aluminum trim plate in chrome housing with a figure and flags ornament

MANDATORY OPTIONAL EQUIPMENT

- | | |
|----------------|---|
| RPO 200 | Shock Absorber, front and rear |
| RPO 253 | Heavy Duty front springs |
| RPO 313
or | Powerglide transmission (see power train section page 39) |
| RPO 685 | Four Speed Transmission (see power train section page 37) |
| RPO 324 | Hydraulic steering (see chassis section page 3) |
| RPO 331 | Tachometer (redlined at 5000-5500 RPM for 305 HP V-8
6000-6500 RPM for 340, 350, & 360 HP V-8) |
| RPO 427 | Instrument panel pad (color keyed to interior trim) |
| RPO 412 | Vacuum Power Brake (see chassis section page 8) |
| RPO 593 | Heavy Duty rear coil spring (see chassis section page 6) |
| RPO 686 | Metallic Brakes (see Corvette section page 8) |
| RPO 691 | 8.00-14-4 ply thinline rayon whitewall tires |
| RPO 572
or | 348 cu. in. V-8, 305 HP high performance engine (see power train section page 22) |
| RPO 573B
or | 348 cu. in. V-8, 350 HP special high performance engine (see power train section page 22) |
| RPO 580
or | 409 cu. in. V-8, 360 HP engine (see power train section page 36) |
| RPO 590 | 348 cu. in. V-8, 340 HP special high performance engine (see power train section page 22) |

348 CUBIC INCH V-8 ENGINE

GENERAL DATA

Engine	Synchromesh	Powerglide	Turboglide
Piston displacement (Cu In)	348		
Type	Valve-in-head		
Number of cylinders	8		
Bore and stroke (nominal)	4.125 x 3.25		
Compression ratio	9.5:1 v		
Taxable (SAE) horsepower	54.5		
Idling speed (RPM)	475 in neutral	450 in drive	
Compression press. (PSI) @ cranking speed, engine hot	150		
Dry weight (pounds)	710 With transmission	650 870	635 785
Lubrication	Full pressure		
Power plant mounting	Three point mounting, two front and one rear combination compression and shear type		
Measurements	Fan to rear of flywheel housing Front cylinder block to rear of flywheel housing Length of cylinder block Exhaust manifold to G generator (width) Top air cleaner to bottom oil pan	38.23 29.92 23.63 25.57 28.90	33.82 25.51

V - 11.25:1 on 340 & 350 HP, special camshaft, engines

ADVERTISED MAXIMUM ENGINE PERFORMANCE

ENGINE	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special		Super Turbo-Thrust Special
Option	RPO 576	RPO 573A	RPO 572	RPO 590	RPO 573B
Carburetor	4-Barrel	3x2-Barrel		4-Barrel (AFB)	3x2-Barrel
Camshaft		Standard			Special
Brake	Gross 250 @ 4400	280 @ 4800	305 @ 5200	340 @ 5800	350 @ 6000
Horsepower	Net 210 @ 4400	235 @ 4800			
Torque	Gross (Lb-Ft) 355 @ 2800	355 @ 3200	355 @ 3400	362 @ 3600	364 @ 3600
	Net 320 @ 2600	320 @ 2800			

ENGINE SPEED AND PISTON TRAVEL

Transmission	3-speed (production)		4-speed RPO 685		Powerglide RPO 313* (HD)	Turboglide RPO 302
Rear Axle Ratio	3.36:1	3.70:1	3.08:1	3.36:1	3.70:1	3.55:1
Tire Size				7.50 x 14-4 Pr		
Crankshaft Revs./mile	2651.0	2919.3	2430.1	2651.0	2913.3	2801.0
Crankshaft RPM @ 1 MPH	Low Second Third Direct N/V Reverse	109.2 67.6 61.2 44.2 123.8	120.3 74.5 40.5 48.7 136.4	102.9 77.8 66.7 44.2 105.7	112.3 84.9 73.5 48.7 115.4	123.7 93.5 46.7 40.5 127.1
Piston Travel (Ft /mile)	1434.2	1579.3	1314.7	1434.2	1579.3	1515.3

* - Data computed assuming zero slippage in torque converter.

**ADVERTISED VEHICLE PERFORMANCE FACTORS
(MODEL 1669)**

ENGINE - 348 Cu In V-8	Turbo-Thrust	Super Turbo-Thrust	Turbo-Thrust Special	Turbo-Thrust Special	Super Turbo-Thrust Special
	250 HP	280 HP	305 HP	340 HP	350 HP

3-Speed Transmission

Performance Weight (pounds)	4430	4445	4435	4435	4445
Pounds per Gross HP	17.7	15.9	14.8	13.0	12.7
Pounds per Cu In (Displ)	12.7	12.8	12.7	12.7	12.8
Gross HP per Cu In (Displ)	.718	.805	.897	.977	1.01
Power Displ (Cu Ft/Mile)	266.9	266.9	266.9	293.7	293.7
Displ Factor (Cu Ft/Ton Mile)	121.0	120.1	120.8	132.5	132.2

4-Speed Transmission

Performance Weight (pounds)	4450	4460	4455	4455	4460
Pounds per Gross HP	17.8	15.9	14.6	13.1	12.7
Pounds per Cu In (Displ)	12.8	12.8	12.7	12.8	12.8
Gross HP per Cu In (Displ)	.718	.805	.897	.977	1.01
Power Displ (Cu Ft/Mile)	244.6	266.9	266.9	293.7	293.7
Displ Factor (Cu Ft/Ton Mile)	109.9	119.7	119.8	132.3	131.7

Powerglide Transmission*

Performance Weight (pounds)			4535		
Pounds per Gross HP			14.9		
Pounds per Cu In (Displ)			13.0		
Gross HP per Cu In (Displ)			.876		
Power Displ (Cu Ft/Mile)			281.9		
Displ Factor (Cu Ft/Ton Mile)			124.3		

Turboglide Transmission*

Performance Weight (pounds)	4450	4460			
Pounds per Gross HP	17.8	15.9			
Pounds per Cu In (Displ)	12.8	12.8			
Gross HP per Cu In (Displ)	.718	.805			
Power Displ (Cu Ft/Mile)	244.6	244.7			
Displ Factor (Cu Ft/Ton Mile)	109.9	109.7			

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 = $\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

409 CUBIC INCH V-8 ENGINE

GENERAL DATA

		3-Speed	4-Speed
Engine		409	
Piston Displacement (cu. in.)		409	
Type		Valve-in-head	
Number of Cylinders		8	
Bore and Stroke (Nominal)		4.3125 x 3.50	
Compression Ratio		11.0:1	
Taxable (SAE) Horsepower		59.5	
Idling Speed (RPM)		600	
Compression Press. psi @ crank speed, engine hot		150	
Dry Weight (lbs)	Engine and Clutch	NA	NA
	With Transmission	NA	NA
Lubrication		Full Pressure	
Power Plant Mounting		Three point mounting, two front and one rear combination compression and shear type	
Measurements	Fan to rear of flywheel housing	38.23	
	Front cylinder block to rear of flywheel housing	29.92	
	Length of cylinder block	23.63	
	Width of engine, manifold to manifold	27.02	
	Top of air cleaner to bottom of oilpan	28.90	

ADVERTISED MAXIMUM ENGINE PERFORMANCE

Engine	360 H.P. V-8
Option	RPO 580
Carburetor	4-Barrel (AFB)
Camshaft	Special
Brake Gross Horsepower	360 @ 5800
Brake Gross Torque	409 @ 3600

ENGINE SPEED AND PISTON TRAVEL

		3-Speed	4-Speed
Transmission		3.36:1	3.36:1
Rear Axle Ratio		7.50 x 14-4 Ply	
Tire Size			
Crankshaft Revs/Mile		2651.0	2651.0
Crankshaft rpm @ 1 mph	Low	109.2	97.2
	Second	67.6	73.3
	Third		57.9
	Direct N/V	44.2	44.2
	Reverse	123.8	99.9
Piston Travel (Ft/Mile)		1434.2	1434.2

**ADVERTISED VEHICLE PERFORMANCE FACTORS
(MODEL 1669)**

Engine 409 Cu. In. V-8

360 H.P.

3-Speed Transmission

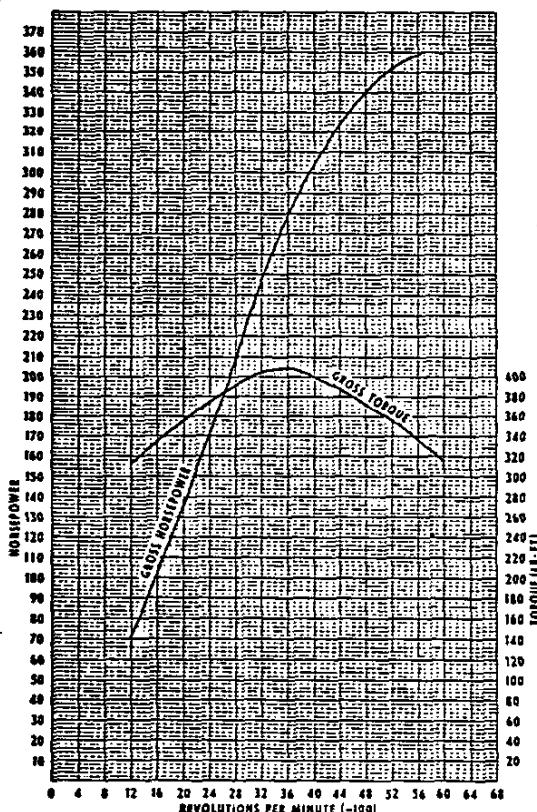
Performance Weight (pounds)	4435
Pounds per Gross H. P.	12.3
Pounds per Cu. In. (Displ.)	10.8
Gross H. P. per Cu. In. (Displ.)	.880
Power Displ (Cu. Ft./Mile)	313.7
Displ Factor (Cu. Ft./Ton Mile)	141.5

4-Speed Transmission

Performance Weight (pounds)	4450
Pounds per Gross H. P.	12.4
Pounds per Cu. In. (Displ.)	10.9
Gross H. P. per Cu. In. (Displ.)	.880
Power Displ (Cu. Ft./Mile)	313.7
Displ Factor (Cu. Ft./Ton Mile)	141.0

360 H. P. V-8 409 CUBIC INCH

Special Camshaft



GLOSSARY

Performance = $\frac{\text{Curb Weight plus } 600 \text{ lb}}{\text{Weight}}$
Weight = (Weight of four 150 lb passengers)

Power = $\frac{\text{Crankshaft Rev/Mi} \times \text{Piston Disp}}{2 \times 1728}$
Displacement

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°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 & optimum fuel setting.

• Revised February 1961

October 1960

POWER TRAINS -37

