

1968 Chevrolet Corvette



Factory Information

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MODEL IDENTIFICATION

CORVETTE 19437 SPORT COUPE

MODEL 19437 2-DOOR SPORT COUPE, 2-PASSENGER

CORVETTE 19467 CONVERTIBLE

MODEL 19467 2-DOOR CONVERTIBLE, 2-PASSENGER

SERIAL NUMBERS AND IDENTIFICATION

ONLY BASIC DESIGNATIONS SHOWN

VEHICLE SERIAL NUMBER

8-Cylinder Example:

Model	Model Year	Assembly Plant	Unit Number
19437	1968	(St. Louis)	(25th unit)
19437	8	S	100025

Thus: The 25th model built at St. Louis would be serial number 194378S100025

ASSEMBLY PLANTS

S - St. Louis

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: RJS8E01D

Type	Source	Model Year	Production*
Designation	Designation	1968	Month & Date
RJ	S (Saginaw)	8	E01D*
RJ	3-Speed	V-8 engine	S - Saginaw
WM	4-Speed	V-8 engine	R - Saginaw
--	Turbo Hydra-Matic	V-8 engine	P - Muncie
			CC - Ypsilanti

Location:
3-Speed & 4-speed ----- Stamped on
right hand side of the case in the upper forward corner.
4-Speed ----- Stamped on
the top right side of the case.
Turbo Hydra-Matic ----- Nameplate
tag on right hand side of the case.

o-Month: E denotes May; (see below) 01 denotes 1st day
Alpha Characters used in identifying the Calendar Month
A - January D - April K - July R - October
B - February E - May M - August S - November
C - March H - June P - September T - December

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

ENGINE IDENTIFICATION

Example: F1210HE

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

327 Cubic Inch 8-Cylinder

HE - Regular engine, 3 or 4-speed, 4-bbl. carb.
HO - Regular engine, Turbo Hydra-Matic

327 Cubic Inch 8-Cylinder (RPO L79)

HT - Optional engine, 4-speed, 4-bbl. carb.

427 Cubic Inch 8-Cylinder (RPO L36)

IL - Optional engine, 4-speed, 4-bbl. carb.
IQ - Optional engine, Turbo Hydra-Matic

427 Cubic Inch 8-Cylinder (RPO L68)

IM - Optional engine, 4-speed, 3 x 2-bbl. carbs.
IO - Optional engine, Turbo Hydra-Matic

427 Cubic Inch 8-Cylinder (RPO L71)

IR - Optional engine, 4-speed, 3 x 2-bbl. carbs.
Mechanical Lifters.

Location:

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

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

REAR AXLE IDENTIFICATION

Example: AK0212W

Type	Production*	Source†
Designation	Month & Date	Designation
AK	0212	W (Warren)

Regular axles

AK ----- 3.36 ----- 3-speed, 4-speed transmission
AS ----- 3.70 ----- 4-speed transmission

Positraction axles

AL ----- 3.08 ----- 3-speed, 4-speed, & Turbo Hydra-Matic
AM ----- 3.36 ----- 3-speed, 4-speed transmission
AN ----- 3.55 ----- 4-speed transmission
AO ----- 3.70 ----- 4-speed transmission
AP ----- 4.11 ----- 4-speed transmission
AY ----- 2.73 ----- Turbo Hydra-Matic transmission

Location ----- Bottom left or right of
axle tube adjacent to carrier housing

* - Month: February, 02; 12th day of February, 12
† - G-Gear & Axle, B-Buffalo, W-Warren.

REGULAR EQUIPMENT—EXTERIOR

		CORVETTE	
		1966	1967
Bright Trim And Ornamentation	Front and rear bumper guards (integral)	X	X
	Windshield reveal moldings	X	X
	License plate frames, front and rear	X	X
	Parking lamp bezels (clear lens, amber bulb)	X	X
	Radiator grille horizontal bars (silver paint)	X	X
	Hood header emblem (crossed flags)	X	X
	Front and rear side marker lamp bezels	X	X
	Roof drip molding	X	
	Press-flap door handles and push-button key locks	X	X
	Wheel hub caps and trim rings	X	X
	Rear body nameplate (Corvette)	X	X
	Gas filler door emblem	X	X
	Rear license compartment bezel	X	X
	Tail and stop lamp bezels	X	X
	Exhaust pipe extensions and bezels	X	X
	Windshield upper and side garnish moldings		X
	Outside rear view mirror	X	X
	Vacuum operated retractable headlamps	X	X
	Concealed 2-speed electric windshield wipers (under vacuum operated cowl panel)	X	X
	Front fender louvers (3-functional)	X	X
	Wide body rocker molding (black with bright bead)	X	X
	Removable roof panels (bright center brake moldings and latches)	X	
	Folding top (manual; vinyl rear window)		X
	Removable rear window (solid plate with bright frame)	X	
	Full-glass front door windows (with "Astro-Ventilation" script)	X	X
	Dual tail lamps	X	X
	Back-up lamps (in lower body panel)	X	X
	Concealed spare tire compartment with key lock	X	X

REGULAR EQUIPMENT—INTERIOR

		CORVETTE 19400	
		19437	19467
Height Trim And Ornamentation	Hood release lever	X	X
	Body sill plates (black fill)	X	X
	Top header release latches	X	X
	Rear view mirror support	X	X
	Seat back hinge	X	X
	Stowage compartment door trim rings	X	X
	Window and door remote control handles	X	X
	Door locking knobs	X	X
	Directional signal control lever	X	X
	Transmission shift lever and pattern plate lettering	X	X
	Parking brake lever	X	X
	Door trim moldings	X	X
	Console nameplate "Corvette"	X	X
	Heater thumb wheel controls	X	X
	Instrument panel and console control knobs	X	X
	Instrument panel air outlets	X	X
	Console vent controls	X	X
	Deluxe seat belt buckles	X	X
	Removable rear window frame	X	X
	Seat adjuster handle	X	X
Instrument Panel And Console	Electric clock	X	X
	Ammeter, temperature, fuel and oil gauges	X	X
	Tachometer and speedometer with trip odometer	X	X
	Windshield washer and wiper control	X	X
	Cigarette lighter (in ash tray)	X	X
	Parking brake and brake system failure indicator	X	X
	Front and rear lamp monitoring indicators	X	X
Lamps And Switches	Seat belt and door ajar indicators	X	X
	Ignition lock and starter switch, "4-position"	X	X
	Main light and headlamp rotation switch	X	X
	Glove box and lamp (in rear compartment)	X	X
	Luggage lamps	X	X
Bucket seats	Instrument panel courtesy	X	X
	Full-glass door windows with "Astro-Ventilation" script	X	X
	Dual padded sunshades	X	X
	Wood-grain plastic steering wheel, padded horn button with "crossed flags"	X	X
	Carpeted floor and luggage area	X	X
	Padded headlining	X	X
	Molded door panels with built-in armrests	X	X
	Roof panels and rear window stowage shelf	X	X
	Center console trim plates (black with crossed flags)	X	X
		X	X

REGULAR PRODUCTION OPTIONS AND DEALER INSTALLED ACCESSORIES

Equipment	RPO/ACC	Models
Air conditioner, Four-Season	C60	19400
Axis ratios		
2.73 ratio	*	19400
3.08 ratio	*	19400
3.36 ratio	*	19400
3.55 ratio	*	19400
3.70 ratio	*	19400
4.11 ratio	*	19400
Positraction (all ratios)	G81	19400
Brakes, heavy duty	J56	19400
Brakes, power	J50	19400
Carrier, deck lid luggage		ACC 19467
Carrier, ski (deck lid)		ACC 19467
Compass		ACC 19400
Emergency road kit		ACC 19400
Engines		
Aluminum cylinder heads	L89	19400
390 hp Turbo-Jet 427 Cu.in. V-8	L36	19400
400 hp Turbo-Jet 427 Cu.in. V-8	L68	19400
430 hp Turbo-Jet 427 Cu.in. V-8	L88	19400
435 hp Turbo-Jet 427 Cu.in. V-8	L71	19400
350 hp Turbo-Fire 327 Cu.in. V-8	L79	19400
Exhaust system, off-road service	N11	19400
Fire extinguisher (2-3/4 lb. dry chemical)		ACC 19400
Fire extinguisher refill cartridge		ACC 19400
Floor mats, clear vinyl twin		ACC 19400
Glass, tinted window	A01	19400
Glass, tinted windshield	A02	19400
Head restraint, standard	A82	19400
Ignition, full-transistor	K66	19400
Lock, gas cap		ACC 19400
Mirror, visor vanity		ACC 19400
Radio and rear antenna, push-button AM-FM	U69	ACC 19400
Radio antenna, rear fixed height		ACC 19400
Roof cover, vinyl	C08	19467
Seat, child restraint		ACC 19400
Seat pad, ventilated		ACC 19400
Shoulder harness, deluxe	A85	19400
Speed warning indicator	U13	19400
Spotlight, hand portable		ACC 19400
Steering, power	N40	19400
Steering shaft, telescopic	N36	19400
Stereo-multiplex	U79	19400
Suspension, special performance front and rear	F41	19400
Tires		
P70-13-4 pr tire-special nylon-red stripe	PT6	19400
P70-13-4 pr tire-special nylon-white stripe	PT7	19400
Tissue dispenser, instrument panel mounted		ACC 19400
Top, auxiliary	C07	19467
Top, folding convertible	C05	19467
Transmissions		
4-speed (2.52 low)	M20	19400
4-speed close ratio (2.20 low)	M21	19400
3-speed automatic, Turbo Hydra-Matic	M40	19400
Wheel covers	P01	19400
Windows, power	A31	19400

* Positraction only.

AIR CONDITIONING EQUIPMENT

FOUR-SEASON (RPO C60)

Heater integrated; manually controlled by knobs on instrument control panel, that operate bowden cables to activate various doors and switches to operate system.

BASIC COMPONENTS

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

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

CHASSIS

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

POWER TRAINS

Fan Blade ----- 7 blade
Crankshaft Pulley ----- Dual
Water Pump & Fan Pulley ----- Dual
Compressor & Crankshaft Belt ----- One*
Generator ----- 63 Ampere

* Additional equipment; also brackets, supports, braces, hoses, etc. as required for installation.

Heavy duty cooling equipment must be used on V-8 powered vehicles. It is recommended that this equipment also be used on all other vehicles for securing maximum air conditioning performance.

CHASSIS

FRAME AND FRONT SUSPENSION	2
STEERING, DRIVELINE, WHEELS AND TIRES	3
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FRAME AND FRONT SUSPENSION

FRAME

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

FRONT SUSPENSION

Description ----- Independent, SLA type, coil springs with center mounted shock absorbers, spherical joint steering knuckle pivots.
 Wheel travel (design)
 Total ----- 7.84
 Jounce ----- 3.86
 Rebound ----- 3.98
 Wheel to spring, travel ratio ----- 1.63

CONTROL ARMS

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

STEERING KNUCKLES

Description ----- Forged steel, with integral brake caliper mounting pads and detachable steering knuckle arm
 Spindle diameters
 Inner bearing ----- 1.2493-1.2498
 Outer bearing ----- .7492-.7497
 Spindle thread size ----- 3/4-20 NEF-3 (modified)
 Wheel bearings
 Type ----- Taper roller

SPHERICAL JOINTS

Type ----- Ball stud
 Upper ----- Compression
 Lower ----- Compression
 Bearing surfaces
 Upper ----- Teflon-coated phenolic
 Lower ----- Teflon-coated phenolic

SHOCK ABSORBERS

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

STABILIZER BAR

Type ----- Link
 Material ----- HR steel
 Diameter ----- 327 V-8, .750; 427 V-8, .9375
 Bushing material ----- Rubber

FRONT WHEEL ALIGNMENT (CURB)

Camber (degrees) ----- P1/4 to P1-1/4
 Caster (degrees) ----- P1/2 to P1-1/2
 Toe-in (total) ----- 3/32 to 5/32
 Steering Axis Inclination (degrees) ----- 6-1/2 to 7-1/2

GENERAL SUSPENSION PROVISIONS

Car leveling ----- Front stabilizer bar
 Anti-dive control --- Angle of front upper control arm

FRONT SPRINGS

Part Number	Ref.	Type	Material	Cut-off Length	Wire Dia.	Inside Dia.	Heights	Deflection Rate (lbs per inch)	
							Working (In. @ lbs)	@ Spring	@ Wheel
3931823	A	Coil, R.H. helix	Steel alloy	138.25	.600	3.80	9.99 @ 1395	250	
3931825	B			138.75	.618	3.80	9.99 @ 1540	284	

Engine	327 Cu.In. V-8	427 Cu.In. V-8
Model	19400	19400
Reference	A	B

STEERING, DRIVELINE, WHEELS AND TIRES

MANUAL STEERING, regular production

Description ----- Semi-reversible, recirculating bearing ball nut steering gear, energy absorbing steering column, steering damper attached to relay rod; two-position steering knuckle arm attachment for street and fast ratio steering. Telescoping steering wheel available optionally.

System ratios

Steering gear ----- 16:1

Overall ratio

Street ----- 20.2:1

Fast ----- 17.6:1

Turning diameters (ft)

Outside front, wall to wall -----

Outside front, curb to curb -----

Inside rear, wall to wall -----

Inside rear, curb to curb -----

Number of wheel turns, lock to lock

Street ----- 3.4

Fast ----- 2.92

Outside wheel angle with inside wheel

@ 15 degrees ----- 14.25

@ 20 Degrees ----- 18.47

@ 34 degrees (limit of turn) ----- 27.34

Linkage ----- Parallelogram type, rear of front wheels

Steering wheel

Standard and optional telescoping wheel ----- Deep dished, 16.0 diameter

POWER STEERING, RPO N40

(Same as standard manual steering except as shown)

Description ----- Hydraulic; pump powered cylinder assisting linkage

Ratios ----- Gear, 16:1; overall, 17.6:1

Number of wheel turns, lock to lock ----- 2.92

DRIVELINE

Type ----- Tubular

Number used ----- One

Diameter (OD) Manual ----- 1.995-2.003

Turbo Hydra-Matic ----- 2.250

Length (C/L of U-joints) Manual ----- 29.90

Turbo Hydra-Matic --- 29.50

Wall thickness ----- .092-.097

Universal joints

Type ----- Cross

Number used ----- Two

Bearings ----- Prepack, anti-friction

Drive and torque forces ----- Through rear suspension control arms

WHEELS (Regular Production)

Type ----- Short spoke spider

Attachment to hub ----- 5 hex nuts, 7/16-20 UNF 2-B, arranged on a 4.75 diameter bolt circle

Offset ----- N.28

Rim size ----- 15 x 7.00

TIRES

Construction ----- 2 ply

Size and ply rating ----- F70-15-4PR

Specifications

Static Loaded Radius ----- 12.6

Loaded rev/mi @ 50 MPH ----- 776

Capacity (lb @ psi) ----- 1280 @ 24

Recommended inflation, all tires, psi ----- 24

REAR AXLE AND SUSPENSION

REAR AXLE

Description ----- Fixed differential housing
hypoid ring and pinion gear set, tubular
articulating inner axle shafts and short
solid outer shafts with integral drive
flange, independently sprung rear wheels

Pinion offset ----- 1.5
Pinion bearing adjustment ----- Shim
Hypoid gear PD all except 2.73:1 ratio ----- 8.375
2.73:1 ratio ----- 8.125

Type ----- Military Spec. MIL-L-2105-B
Viscosity ----- SAE80
Filler plug ----- 1-3/8 hex, 1-20 AN thread
Capacity (pts) ----- 3.7

RING AND PINION GEARS

Ratio	Combination
2.73	41,15
3.08	37,12
3.36	37,11
3.55	32,9
3.70	37,10
4.11	37,9

AXLE SHAFTS

Inner ----- Welded steel
tubing with universal joint attach-
ments to short shafts at each end.

Outer ----- Short, splined high-alloy steel
with integral wheel mounting flange

Axle bearings
Type ----- Inner and outer tapered
roller, steel encased rubber bearing seals

REAR WHEEL

Description ----- Brake disc
flange integral with axle which is universally-
joined (thru splined axle flange) to axle shaft;
torque control arm bolted to axle support.
Axle supported by two taper roller bearings

REAR SUSPENSION

Description ----- Full independent
with frame-anchored differential. Position of
each wheel established by 3 links: tubular axle
drive shafts, transverse strut rods, torque
control arms. Vertical suspension loads taken
by transverse leaf spring. Built-in camber
adjustment at strut rod inner ends.

Wheel travel (design height)

	Coupe	Conv.
Total	6.86	6.86
Jounce	2.87	2.76
Rebound	3.99	4.10

Wheel to spring, travel ratio ----- 0.90:1

SHOCK ABSORBERS

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

STRUT

Material ----- Forged steel
Diameter ----- .75

STABILIZER BAR (427 V-8)

Diameter ----- .562

REAR WHEEL ALIGNMENT

Curb
Camber (degrees) ----- N1-3/8 to N 3/8
Toe-in (total) ----- 1/32 to 3/32

TORQUE CONTROL ARMS

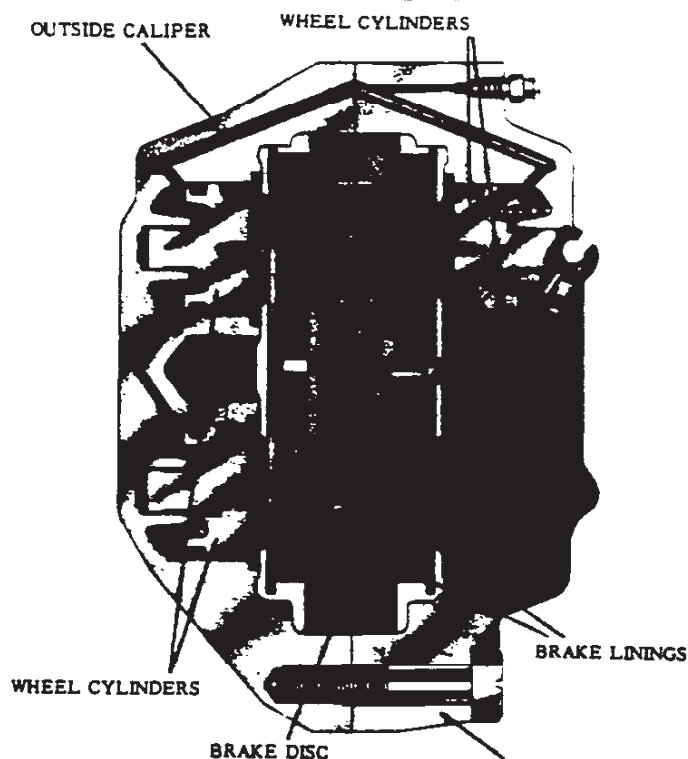
Description ----- Welded steel box construction

REAR SPRING

Type ----- Variable rate, 9-leaf
Material ----- Chrome carbon steel, heat treated
Length (developed) between eye centers ----- 46.36
Width ----- 2.25
Design load, lb @ -camber ----- 1360 @ .352
Deflection rate, lb per inch, @ design load
@ Spring ----- 140
@ Wheel (wheel rate) ----- 123

Spring liners
Number ----- 7
Location ----- Between all leaves
except numbers 6 and 7
Material ----- Polyethylene with graphite

BRAKES



SERVICE BRAKES (Regular Production)

Type	Dual-circuit brake system, pressure differential and parking brake warning light, 4 wheel hydraulic caliper disc brakes
Line pressure, psi, @ 100 lb pedal load	576
Braking ratios	
Pedal	4.52
Hydraulic	43.3
Overall	196.0
Distribution of braking effort	Front 65.0
Brake disc	
Construction	Double faced disc spaced by integrally cast radial cooling passages
Material	Cast iron
Diameter, front & rear	11.75
Swept drum area (sq.in.)	461.2
Brake lining	
Material	Woven asbestos
Size, all segments (L x W x T)	5.96 x 2.21 x .41
Method of attachment	Riveted
Total effective area (sq.in.)	78.1
Gross lining area (sq.in.)	86.3
Master cylinder	
Piston diameter	1.00
Piston travel (with available pedal travel)	1.10
Wheel cylinders	
Number	4 per wheel
Piston diameter	
Front	1.875
Rear	1.375
Foot pedal travel	5.75

PARKING BRAKE

Type	Drum; cast integral with each rear rotor. Internal ex- panding shoe, mechanically actuated
Control	Lever; floor mounted in center console
Drum diameter	6.5
Brake lining	
Number	2 shoes per each rear wheel
Size (L x W x T)	6.78 x 1.25 x .175
Gross lining area (sq.in.)	33.9



PARKING BRAKE

BULBS AND LAMPS

BULBS AND LAMPS	NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
Air conditioning	2-1891	2
Back-up	2-1156	32
Cigarette lighter	1-1445	1
Clock	1-1895	2
Courtesy		
Instrument panel	2-631	6
Rear compartment	1-631	6
Direction signal indicator	2-1895	2
Dome	1-212	6
Glove compartment	1-1895	2
Headlamp		
Outer	2-4002	High beam 37.5W Low beam 55.0W
Inner	2-4001	High beam 37.5W
Headlamp hi-beam indicator	1-1895	2
Headlamp warning indicator	1-257	2
Heater	1-1895	2
Ignition switch	1-1895	2
Instrument cluster	12-1895	2
License plate rear	1-67	4
Parking		
Park		4
Turn	2-1157	32
Parking brake alarm & warning light	1-1895	2
Radio	1-1893	2
Seat separator box	1-1895	2
Side Marker - Front	2-194A	2
Side Marker - Rear	2-194	2
Spot lamp, portable	1-4416	30W
Tail		
Stop and turn		32
Tail	4-1157	4
Underhood	1-93	15

FUSES AND CIRCUIT BREAKERS

CIRCUIT	TYPE OF PROTECTION	LOCATION AND CIRCUIT*
Air conditioning	AGC 25 fuse	In line
Air conditioning lamp	AGC 25 fuse	Fuse panel (f)
Back-up lamps	AGC 4 fuse	Fuse panel (d)
Cigarette lighter	AGC 20 fuse	Fuse panel (b)
Cigarette lighter lamp	AGC 20 fuse	Fuse panel (c)
Clock	AGC 4 fuse	Fuse panel (d)
Clock lamps	AGC 20 fuse	Fuse panel (c)
Courtesy lamps	AGC 4 fuse	Fuse panel (d)
Defogger, rear window	AGC 20 fuse	Fuse panel (c)
Direction signal indicator lamp	AGC 20 fuse	Fuse panel (d)
Dome lamp	AGC 20 fuse	Fuse panel (c)
Fuel gage	AGC 10 fuse	Fuse panel (b) -
Glove compartment lamp	AGC 20 fuse	Fuse panel (c)
Headlamp hi-beam indicator lamp	15 amp CB	Light switch (g)
Headlamp warning indicator lamp	40 amp CB	Hinge pillar (h)
Headlamps	15 amp CB	Light switch (g)
Heater	AGC 25 fuse	Fuse panel (f)
Heater lamp	AGC 4 fuse	Fuse panel (d)
Ignition switch lamp	AGC 4 fuse	Fuse panel (d)
Instrument cluster lamps	AGC 4 fuse	Fuse panel (d)
License plate, rear	AGC 20 fuse	Fuse panel (a)
Brake warning lamp	AGC 10 fuse	Fuse panel (b)
Parking lamps	15 amp CB	Light switch (g)
Power windows	40 amp CB	Hinge pillar (i)
Radio	AGC 10 fuse	Fuse panel (e)
Radio antenna	AGC 20 fuse	Fuse panel (c)
Radio lamp	AGC 4 fuse	Fuse panel (d)
Rear compartment vent motor	AGC 10 fuse	Fuse panel (f)
Speed warning device	AGC 20 fuse	Fuse panel (c)
Side Marker lamp - Front	AGC 20 fuse	Light switch
Side Marker lamp - Rear	AGC 20 fuse	Light switch
Spot lamp, portable	AGC 20 fuse	Fuse panel (c)
Stop lamps	AGC 20 fuse	Fuse panel (d)
Tail lamps	AGC 20 fuse	Fuse panel (a)
Temperature gage	AGC 10 fuse	Fuse panel (b)
Traffic hazard indicator	AGC 20 fuse	Fuse panel (c)
Windshield wiper	14 amp CB	Switch (j)

* Letter suffix indicates same circuit

DIMENSIONS AND WEIGHTS

INTERIOR DIMENSIONS	2
EXTERIOR DIMENSIONS	3
VEHICLE WEIGHTS	4

INTERIOR DIMENSIONS

FRONT COMPARTMENT

CODE	DESCRIPTION	19437 COUPE	19467	
			SOFT TOP	HARDTOP
H5	H point to ground		14,6	
H30	H point to heel point		6,5	
H37	Headlining to roof height	0,7	---	0,9
H54	D point to tunnel		2,9	
H58	H point rise		0,4	
H61	Effective headroom	36,2	37,1	36,0
H65	D point differential, side to center			
H67	Depressed floor covering thickness		0,3	
H70	Body zero line to H point (vert.)		7,0	
L17	H point travel		4,5	
L31	Body zero line to H point (horiz.)		44,7	
L34	Maximum effective leg room - accelerator		43,0	
L40	Back angle (degrees)		33	
L42	Hip angle (degrees)		107	
L44	Knee angle (degrees)		138	
L46	Foot angle (degrees)		88	
L53	H point to accelerator floor point		36,0	

SEAT AND ENTRANCE

H3	Seat chair height		8,8	
H11	Entrance height		29,0	
H26	Interior body height, M/M @ car centerline	33,4	33,6	33,4
H27	Interior body, M/M @ C/LO	40,0	40,2	40,0
H32	Seat cushion deflection		2,2	
H50	Upper body opening to ground		43,6	
W1	Hat room		45,5	
W3	Shoulder room		46,9	
W5	Hip room		48,8	
W16	Seat width (each seat)		20,0	
L14	Seat back thickness		3,5	
L18	Entrance foot clearance		13,2	

VISION AND CONTROL

H6	H point to W/S bottom DLO		19,8	
H13	Steering wheel thigh clearance		4,2	
H18	Steering column angle (degrees) horizontal		14	
H25	Belt height		17,4	
H49	H point to top of steering wheel		22,5	
H64	H point to W/S upper DLO		29,1	
W7	Steering wheel center to car centerline		12,9	
W9	Steering wheel maximum O.D.		16,0	
W122	Tumble-home (degrees)		26,0	
L7	Steering wheel torso clearance		12,4	
L13	Brake pedal knee clearance		24,5	
L49	H point to W/S upper DLO		12,4	
L52	Brake pedal to accelerator		4,0	

EXTERIOR DIMENSIONS

LENGTHS

CODE	DESCRIPTION	19437	19467	
		COUPE	SOFT TOP	HARDTOP
L101	Wheelbase		98.0	
L102	Tire size (standard)		F70-15	
L103	Overall length		182.1	
L104	Overhang - front		40.2	
L105	Overhang - rear		43.9	
----	Overall length - less bumpers		179.2	
L123	Body upper structure length at car C/L	54.7		
L127	Body O line to C/L of rear wheels		72.0	
L128	Hood length at centerline		54.4	
L129	Deck length @ car C/L	45.6		48.2
L130	Body zero line to W/S cowl point		11.6	

WIDTHS

W101	Tread - front	58.3
W102	Tread - rear	59.0
W103	Maximum overall width of car (W106)	69.2
W106	Front fender overall width	69.2
W107	Rear fender overall width	68.6
W120	Overall car width, front doors open	130.8
W122	Tumble-home (degrees)	26.5

HEIGHTS

H101	Overall height (design)	47.8
----	Overall height (curb)	
H102	Front bumper to ground	9.2
H104	Rear bumper to ground	12.3
H111	Rocker panel to ground - rear	7.6
H112	Rocker panel to ground - front	7.6
H114	Hood at rear to ground	26.6
H115	Step height - front (design)	13.1
H122	W/S slope angle (degrees)	57
H125	Headlamp to ground	17.5
H126	Tail lamp to ground	25.7
H130	Step height - front (curb)	13.1
H132	Bottom of door to ground - open	
H133	Bottom of door to ground - closed	10.0
H136	Body O line to ground - front	7.6
H137	Body O line to ground - rear	7.6
H158	Roof thickness	3.3 4.0 3.8
H159	DLO height	11.5 11.9
H160	Body thickness	25.3

CLEARANCES

H106	Angle of approach (degrees)	22
H107	Angle of departure (degrees)	21
H147	Ramp breakover angle (degrees)	22
H148	Front suspension to ground	3.7
H149	Oil pan to ground	4.8
H150	Flywheel housing to ground	5.2
H151	Frame to ground	5.4
H152	Exhaust system to ground	4.9
H153	Rear axle to ground	
H154	Fuel tank to ground	Mounted over tire well
H155	Tire well to ground	5.1
H156	Minimum ground clearance (H152)	4.9

VEHICLE WEIGHTS

CORVETTE

Model Symbol	VEHICLE TYPE Description	SHIPPING WEIGHT			CURB WEIGHT		
		Front	Rear	Total	Front	Rear	Total
19437	2-Door Sport Coupe	1570	1485	3055	1570	1640	3210
19467	2-Door Convertible	1570	1495	3065	1565	1655	3220

SHIPPING WEIGHT: Weight of basic vehicle with regular equipment and grease and oil. Weight of gasoline and water not included.

CURB WEIGHT: Weight of empty vehicle ready to drive. Shipping weight plus the weight of gasoline and water.

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

RPO	Option	Weight
A31	Power Windows	+ 5
C07	Auxiliary Top	+ 48
C60	Air Conditioning	+ 95
J50	Power Brakes	+ 10
J56	Heavy Duty Brakes	+ 6
L36	427 Cu.in. V-8	+178
L68	427 Cu.in. V-8	+ 4
L71	427 Cu.in. V-8	+149
L79	327 Cu.in. V-8	+ 12
L89	Aluminum Cylinder Heads	- 73
M20	4-Speed Transmission	- 6
M40	3-Speed Automatic Transmission	+ 63
N40	Power Steering	+ 21
U69	Radio - AM/FM Push-Button	+ 16
U79	Radio Stereo Equipment	+ 11

BODY

EXTERIOR PAINT PROCESS	2
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BODY CONSTRUCTION AND GLASS AREA	4

EXTERIOR PAINT PROCESS

1. **PRIMARY SANDING.** All body panels and bonded joints that receive acrylic lacquer are dry sanded to prepare surfaces for painting. A filler material, called putty rub, is applied to the entire body to fill minor imperfections.
2. **PRIMER.** Two coats of primer are applied -- the first red and the second gray -- and are oven baked for 60 minutes at 280 degrees F.
3. **WET SANDING.** The body is wet sanded to provide a smooth surface for the sealers. Most of the gray primer coat is removed with the red primer acting as a depth signal for the sanding operation. The body is dried to remove all moisture.
4. **SEALER.** One coat of sealer and one coat of color acrylic lacquer are applied and baked.
5. **DRY SANDING.** The body is dry sanded to prepare surfaces for the final acrylic lacquer.
6. **LACQUERING.** Three coats of acrylic lacquer are sprayed on the body to build up the required paint thickness. The paint is "rested" for eight minutes to permit it to partially set up and to remove excess volatile paint vehicle.
7. **INITIAL BAKING.** The body is oven baked for 30 minutes at 140 degrees F to harden the paint which permits the subsequent operation. Small interior and exterior parts are painted to complete the body paint schedule.
8. **FINAL BAKING.** To assure a durable, hard, high luster finish the lacquer is oven baked for 45 minutes at 250 degrees F. Reheating the lacquer permits the paint film to soften and allows surface blemishes and sanding scratches to disappear during the thermo-reflow process.
9. **FINAL SANDING AND POLISHING.** The body is lightly oil sanded and polished to bring painted surfaces to a high luster finish.

EXTERIOR-INTERIOR COLORS

CORVETTE

MODELS		TRIM	INTERIOR COLORS AND RPO NUMBERS						
37	67		Black	Red	Med. Blue	Dark Blue	Dark Orange	Tobacco	Gun Metal
X	X	Vinyl	Prod.	407	414	411	425	435	442
X	X	Leather	402	408	415	--	426	436	--
RPO	EXTERIOR COLOR								
900	Black	X	X	X	X	X	X	X	X
972	White	X	X	X	X	X	X	X	X
974	Red	X	X	--	--	--	--	--	--
976	Medium Blue	X	--	X	X	--	--	--	--
978	Dark Blue	X	--	X	X	--	--	--	--
983	Dark Green	X	--	--	--	--	--	--	--
984	Yellow	X	--	--	--	--	--	--	--
986	Silver	X	--	--	X	--	--	--	X
988	Maroon	X	--	--	--	--	--	--	--
992	Copper Bronze	X	--	--	--	X	X	--	--

Convertible top: Black (regular production) - Beige or white (RPO C05) with any exterior color.

Vinyl top (RPO C08): Black with any exterior color for removable hardtop models.

BODY CONSTRUCTION AND GLASS AREA

GENERAL

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

DOORS AND LOCKS

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

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

HOOD

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

VENTILATION

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

SEATS

Type and construction ----- Bucket; leather grained vinyl covering over polyurethane padding.

WINDSHIELD WIPERS

Type ----- Concealed, dual, two-speed, electric vacuum operated cowl panel; washer provided.

Linkage ----- Parallel acting

HEADLIGHTS

Type ----- Vacuum operated, retractable

SPARE TIRE

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

TOOLS

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

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

BODY GLASS VISIBILITY AREA

LOCATION	MODELS	
	37	67
Windshield		
Front door window		
Rear quarter window		
Back window		
Total area (sq.in.)		

POWER TRAINS

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POWER TEAM COMBINATIONS

ENGINE	TRANSMISSION	MODEL APPLICATION	AXLE RATIOS (A)					
			2.73:1	3.08:1	3.36:1	3.55:1	3.70:1	4.11:1
327 Cu.In. V-8 Turbo-Fire 327 300 HP Standard	3-Spd (2.54:1 low) & 4-Spd (2.52:1 low)	All Models		Econ.#	Std.*			
	Turbo Hydra-Matic			Std.#				
327 Cu.In. V-8 Turbo-Fire 327 350 HP RPO L79	4-Spd (2.52:1 low)	All Models			Std.*	Perf.#		
	4-Spd (2.20:1 low)						Std.*	Perf.#
427 Cu.In. V-8 Turbo-Jet 427 390 HP RPO L36	4-Spd (2.52:1 low)	All Models		Std.#	Perf.#			
	4-Spd (2.20:1 low)			Econ.#	Std.#	Perf.#	Spcl.#	
	Turbo Hydra-Matic			Econ.#	Std.#			
427 Cu.In. V-8 Turbo-Jet 427 400 HP RPO L68	4-Spd (2.52:1 low)	All Models		Std.#	Perf.#			
	4-Spd (2.20:1 low)			Econ.#	Std.#	Perf.#	Spcl.#	
	Turbo Hydra-Matic			Econ.#	Std.#			
427 Cu.In. V-8 Turbo-Jet 427 435 HP RPO L71	4-Spd (2.20:1 low)	All Models			Econ.#	Std.#	Perf.#	Spcl.#

(A) Air conditioning available with the same engine, -transmission, axle combinations except RPO L71.

* Positraction axles available optionally.

Available as positraction only.

Std. - Standard

Econ. - Economy (optional)

Perf. - Performance (optional)

Spcl. - Special (optional)

MULTIPLICATION FACTORS

WITH MANUAL TRANSMISSIONS

ENGINE	CARBURETION	TRANSMISSION	TOTAL GEAR REDUCTION					AXLE RATIO
			1st	2nd	3rd	4th	Rev	
327 Cu.In. V-8 300 HP Standard	4-Barrel	3-Speed (2.54:1)	8.53	5.04	3.36		8.84	3.36
		4-Speed (2.52:1)	8.47	6.32	4.91	3.36	8.70	
327 Cu.In. V-8 350 HP RPO L79	4-Barrel	4-Speed (2.52:1)	8.47	6.32	4.91	3.36	8.70	3.36
		4-Speed (2.20:1)	8.14	6.07	4.70	3.70	8.36	3.70
427 Cu.In. V-8 390 HP RPO L36	4-Barrel	4-Speed (2.52:1)	7.76	5.79	4.50	3.08	7.98	3.08
		4-Speed (2.20:1)	7.39	5.51	4.27	3.36	7.59	3.35
427 Cu.In. V-8 400 HP RPO L68	3 x 2-Barrel	4-Speed (2.52:1)	7.76	5.79	4.50	3.08	7.98	3.08
		4-Speed (2.20:1)	7.39	5.51	4.27	3.36	7.59	3.36
427 Cu.In. V-8 435 HP RPO L71	3 x 2-Barrel	4-Speed (2.20:1)	7.81	5.82	4.51	3.55	8.02	3.55

WITH AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE MULTIPLICATION	AXLE RATIO
327 Cu.In. V-8 Standard and 427 Cu.In. V-8 RPO L36 & L68	Turbo Hydra-Matic	Drive	17.56:1 - 3.08:1	3.08:1
		Low	17.56:1 - 7.64:1	
		Second	17.56:1 - 4.56:1	
		Reverse	14.72:1 - 6.41:1	

ENGINE DATA AND RATINGS

GENERAL DATA

Engine Type	V-8 OHV				
Piston Displacement (Cu. In.)	327		427		
Availability	Standard	RPO L79	RPO L36	RPO L68	RPO L71
Number of Cylinders	Eight				
Bore and Stroke (nominal)	4.00x3.25		4.251x3.76		
Compression Ratio	10.0:1	11.0:1	10.25:1		11.0:1
Taxable (SAE) Horsepower	51.2		57.8		
Firing Order	1-8-4-3-6-5-7-2				
Idling Speed (RPM) (In neutral)	700(a)	750	700(a)	750(a)	750
Compression Press. (PSI) @ Cranking Speed, Engine Hot	160		160		170
Lubrication	Full pressure				
Power Plant Mounting	Two front and one rear, compression type				
Measurements	Fan to rear of engine block	30.64	30.78	32.14	
	Top air cleaner to bottom oil pan	26.27		27.81	
	Exhaust manifold to generator (width)	29.71		31.04	

(a) 600 for Automatic in drive

ADVERTISED ENGINE RATING

Engine	327 Cu. In.		427 Cu. In.		
	300 HP	350 HP	390 HP	400 HP	435 HP
Availability	Standard	RPO L79	RPO L36	RPO L68	RPO L71
Gross Brake HP @ RPM	300 @ 5000	350 @ 5800	390 @ 5400	400 @ 5400	435 @ 5800
Gross Torque @ RPM (lb-ft)	360 @ 3400	360 @ 3600	460 @ 3600	460 @ 3600	460 @ 4000

ENGINE SPEED AND PISTON TRAVEL

Transmission	327 Cu. In.			427 Cu. In.			
	3-Speed (a)	4-Speed		4-Speed		Trb/Hd (f)	
Rear Axle Ratio	3.36:1	3.36:1	3.70:1 (b)	3.08:1	3.08:1 (c)	3.36:1 (d)	3.55:1 (e)
Tire Size	F70 x 15						
Crankshaft Revolutions per Mile	2573.8	2834.2	2539.3	2359.3	2573.8	2719.3	2359.3
Crankshaft RPM @ MPH	Low	108.9	108.1	103.9	97.5	99.1	94.4
	Second	64.3	80.6	77.5	1.48	73.9	70.3
	Third	42.9	62.6	59.9	39.3	57.4	54.5
	Fourth		42.9	47.2		39.3	42.9
	Reverse	112.8	111.1	106.7	81.8	101.8	96.9
Piston Travel (Ft/Mile)	1394.1	1535.2	1277.9	1479.0	1612.9	1704.1	1479.0

(a) Available with 300 HP (Base) engine only

(b) Standard ratio for 350 HP (L79) engine with 2.20:1 low transmission

(c) Standard ratio for 390 HP (L36) & 400 HP (L68) engines with 2.52:1 low transmission

(d) Standard ratio for 390 HP (L36) & 400 HP (L68) engines with 2.20:1 low transmission

(e) Standard ratio for 435 HP (L71) engine with 2.20:1 low transmission

(f) Available only with 390 HP (L36) & 400 HP (L68) engines

VEHICLE PERFORMANCE FACTORS

ENGINE	BASE 327 CU.IN. 300 HP	RPO L79 327 CU.IN. 350 HP	RPO L36 427 CU.IN. 390 HP	RPO L68 427 CU.IN. 400 HP	RPO L71 427 CU.IN. 435 HP
--------	------------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------------

3-SPEED TRANSMISSION

Performance Weight (pounds)	3510				
Pounds per Gross Horsepower	11.70				
Pounds per Cu.in. Displacement	10.73				
Gross HP per Cu.in. Displacement	.917				
Power Displacement (cu.ft./mile)	243.52				
Displacement Factor (cu.ft./ton mile)	138.76				

4-SPEED TRANSMISSION

Performance Weight (pounds)	3504	3516	3682	3686	3653
Pounds per Gross Horsepower	11.68	10.05	9.44	9.21	8.40
Pounds per Cu.in. Displacement	10.72	10.75	8.62	8.63	8.55
Gross HP per Cu.in. Displacement	.917	1.070	.913	.937	1.019
Power Displacement (cu.ft./mile)	243.52	243.52	291.50	291.50	335.98
Displacement Factor (cu.ft./ton mile)	139.00	138.52	158.34	158.16	184.00

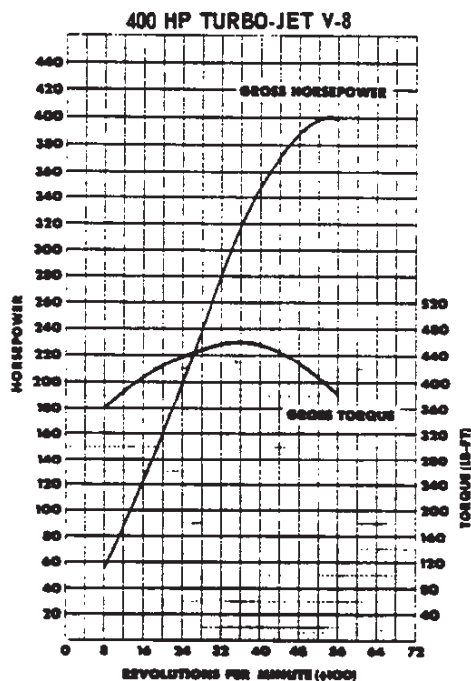
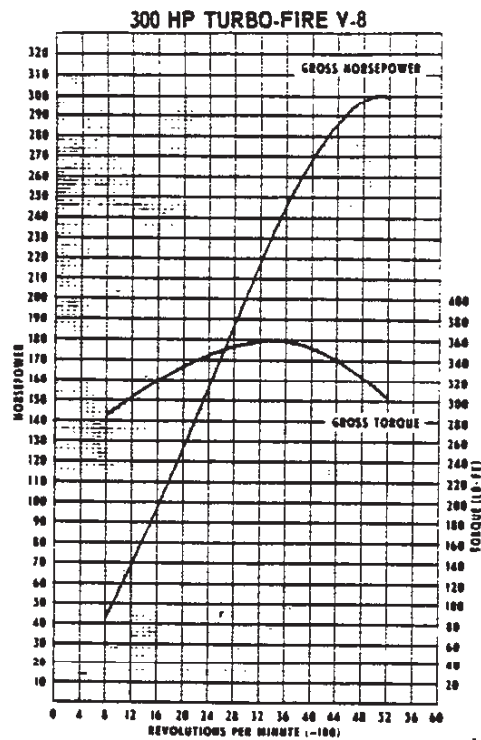
TURBO HYDRA-MATIC

Performance Weight (pounds)	3573		3751	3755	
Pounds per Gross Horsepower	11.91		9.62	9.38	
Pounds per Cu.in. Displacement	10.93		8.78	8.79	
Gross HP per Cu.in. Displacement	.917		.913	.937	
Power Displacement (cu.ft./mile)	223.23		291.50	291.50	
Displacement Factor (cu.ft./ton mile)	124.99		155.46	155.30	

GLOSSARY

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

ENGINE OUTPUT CURVES

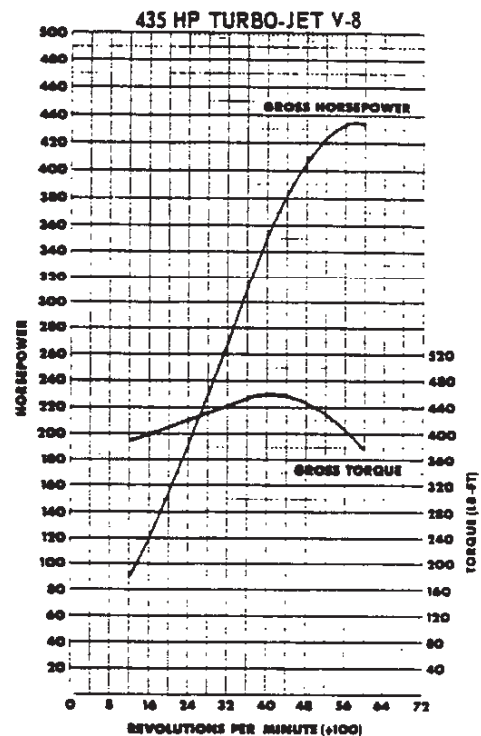


The engine output curves represent full throttle performance as obtained from dynamometer test data corrected to standard barometric pressure 29.92 inches of mercury and standard temperature of 60 degrees F.

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

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

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



PRINCIPAL COMPONENTS

CYLINDER BLOCK

Material	Cast alloy iron
Bore Diameter	
V8-327 Cu.In.	3.9995-4.0025
V8-427 Cu.In.	4.2495-4.2525
Bore Spacing (Centerline to Centerline)	
V8-327 Cu.In.	4.4
V8-427 Cu.In.	4.84
Number of Bulkheads	5
Water Jackets	Full length around each cylinder
Cylinder Numbering Arrangement (Front to Rear)	
Left Bank	1-3-5-7
Right Bank	2-4-6-8

CYLINDER HEAD

Material	High chrome cast alloy iron
Bolt Number	34 (327 Cu.In.); 32 (427 Cu.In.)
Bolt Size	.4375 dia.; 14 threads/inch

COMBUSTION CHAMBER VOLUME

(Total chamber volume of assembled engine with piston at top center)	
V8-327 Cu.In. (Base)	4.69 Cu.In.
V8-327 Cu.In. (RPO L79)	4.25 Cu.In.
V8-427 Cu.In. (RPO L36 & L68)	5.94 Cu.In.
V8-427 Cu.In. (RPO L71)	5.08 Cu.In.

INLET MANIFOLD

Material	
V8-327 Cu.In. (Base & RPO L79)	Cast alloy iron
V8-427 (L36, L68 & L71)	Cast aluminum alloy
Heat Provision	Exhaust gas crossover at carburetor mounting pad

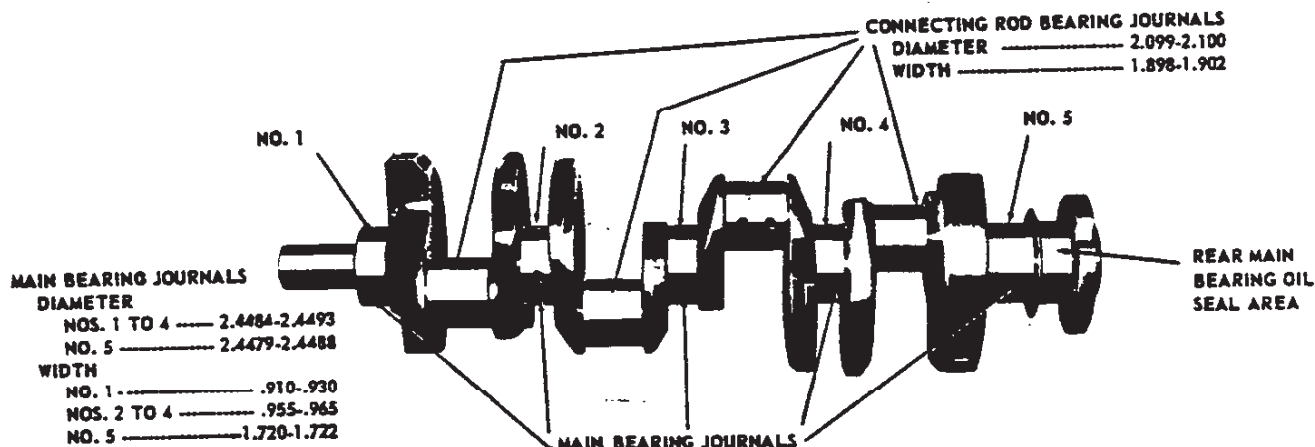
EXHAUST MANIFOLD

Material	Cast alloy iron
Type	
V8-327 Cu.In.	Dual, 4 port, exhaust emission to a single runner with center takedown collector
V8-427 Cu.In.	Dual, 4 port, extended runners from each port converging to a rear takedown collector
Outlet Diameter (Nominal)	2.50

CRANKSHAFT

Material	
V8-327 Cu.In. (RPO L30)	Nodular iron
V8-327 (RPO L79) & 427 Cu.In.	Forged steel
	Hardened journals on RPO L71
End Play	
V8-327 Cu.In.	.002-.006
V8-427 Cu.In.	.006-.010
Counter Weights	6
Crank Arm Length	
V8-327 Cu.In.	1.625
V8-427 Cu.In.	1.88
Torsional Damper	Rubber mounted inertia
Timing Gear	Steel; sprocket & chain
Pulley Pitch Diameter	6.64

CRANKSHAFT 327 CUBIC INCH V-8 ENGINE



MAIN BEARINGS

Material ----- Premium aluminum except No. 5
sintered copper nickel backed babbit
Type ----- Precision removable
Thrust Against Bearing No. ----- 5
Clearance
V8-327 Cu.In. ----- (#1) .0008-.0020;
(#2, 3 & 4) .0008-.0024; (#5) .0015-.0031
V8-427 Cu.In. (RPO L36 & L68) -- (#1 & 2) .0010-.0020;
(#3 & 4) .0013-.0025; (#5) .0015-.0031
V8-427 Cu.In. (RPO L71) ----- (#1-4) .0013-.0025;
(#5) .0015-.0031

Dimensions	Theoretical Inner Dia.	Effective Length	Projected Area
V8-327 Cu.In.			
Bearing #1	2.4502	.752	1.8425
Bearing #2-4	2.4505	.752	1.8428
Bearing #5	2.4507	1.177	2.8844
V8-427 Cu.In. (RPO L36 & L68)			
Bearing #1-2	2.7507	.992	2.7287
Bearing #3-4	2.7505	.992	2.7285
Bearing #5	2.7506	1.2525	3.4451
V8-427 Cu.In. (RPO L71)			
Bearing #1-4	2.7505	.992	2.7285
Bearing #5	2.7506	1.2525	3.4451

CAMSHAFT

Material ----- Cast alloy iron
Drive ----- Sprocket & chain; steel
Lobe Lift
V8-327 Cu.In. (Base) ----- .2600 Inlet; .2733 Exhaust
V8-327 Cu.In. (RPO L79) ----- .2981 Inlet & Exhaust
V8-427 Cu.In. (RPO L36 & L68) ----- .2714 Inlet;
.2824 Exhaust
V8-427 Cu.In. (RPO L71) ----- .3057 Inlet & Exhaust
Bearings ----- 5; steel backed babbit

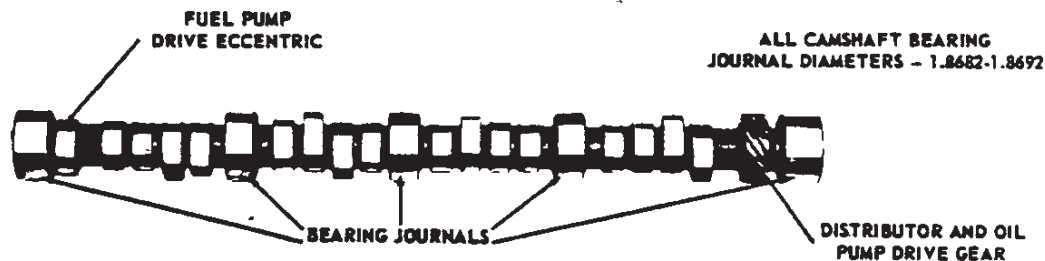
VALVE TRAIN

Type ----- Individually mounted
overhead rocker arms, push rod actuated
Lifters ----- Hydraulic
V8-427 Cu.In. (RPO L71) - Mechanical
Push Rods
Type ----- Hollow steel
Ends
V8-327 (Base) ----- Hardened
V8-327 Cu.In. (RPO L79) ----- Hardened steel
insert on rocker arm ends
V8-427 Cu.In. ----- Hardened steel inserts
Rocker Arms
Material ----- Stamped steel
Ratio
V8-327 Cu.In. ----- 1.50:1
V8-427 Cu.In. ----- 1.70:1

VALVE SPRINGS

Diameter (I.D.)
V8-327 Cu.In. ----- .868-.884
V8-427 Cu.In. ----- 1.082-1.098
Installed Length (lb. @ in.)
Valves Closed
V8-327 Cu.In. ----- 76-84 @ 1.70
V8-427 Cu.In. ----- 94-106 @ 1.88
Valves Opened
V8-327 Cu.In. ----- 194-206 @ 1.25
V8-427 Cu.In. ----- 303-327 @ 1.38
Free Length
V8-327 Cu.In. ----- 2.03
V8-427 Cu.In. ----- 2.09
Valve Spring Damper
V8-327 Cu.In. ----- Flat steel, 4 coils
V8-427 Cu.In. ----- Flat steel, 3.62 coils

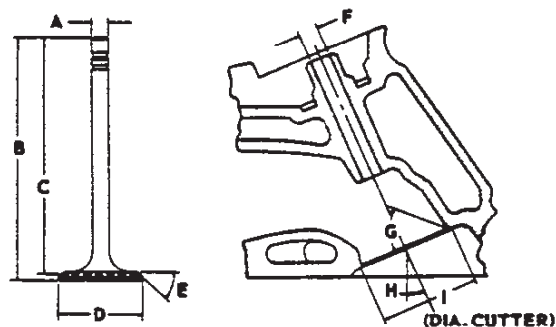
CAMSHAFT 327 CUBIC INCH V-8 ENGINE



PRINCIPAL COMPONENTS—Cont'd.

VALVES - INLET

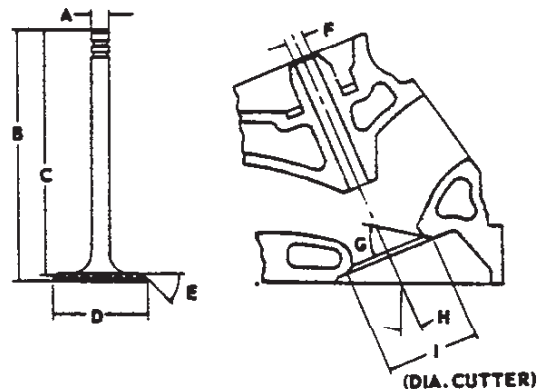
Material	Alloy steel
Coating	
V8-327 Cu.In. (RPO L30)	None
V8-327 (RPO L79) & 427 Cu.In.	Face & head aluminized, also chrome flash stem on V8-327 (RPO L79) & 427 (RPO L71) Cu.In.
Valve Guide Inserts (V8-427)	Cast alloy iron



A - Stem Diameter	
V8-327 Cu.In.	.3410-.3417
V8-427 Cu.In.	.3715-.3722
B - Overall Length	
V8-327 Cu.In.	4.870-4.889
V8-427 Cu.In. (RPO L36 & L68)	5.215-5.235
V8-427 Cu.In. (RPO L71)	5.204-5.224
C - Gage Length	
V8-327 Cu.In.	4.785-4.795
V8-427 Cu.In.	5.115-5.125
D - Overall Head Diameter	
V8-327 Cu.In. (Base)	1.935-1.945
V8-327 Cu.In. (RPO L79)	2.017-2.023
V8-427 Cu.In. (RPO L36 & L68)	2.060-2.070
V8-427 Cu.In. (RPO L72)	2.185-2.195
E - Angle of Face	45°
F - Guide Diameter	
V8-327 Cu.In.	.3427-.3437
V8-427 Cu.In.	.3732-.3742
G - Angle of Seat	46°
H - Valve Angle	
V8-327 Cu.In.	23°
V8-427 Cu.In.	4°
I - Valve Seat (Cutter) Diameter	
V8-327 Cu.In. (Base)	1.990-2.010
V8-327 Cu.In. (RPO L79)	2.020
V8-427 Cu.In.	2.150

VALVE - EXHAUST

Material	High alloy steel
Coating	
V8-327 Cu.In.	Aluminum face
V8-427 Cu.In.	Face & head aluminized, also chrome flash stem on V8-327 (RPO L79) & 427 (RPO L71) Cu.In.
Valve Guide Inserts (V8-427)	Cast alloy iron



A - Stem Diameter	
V8-327 Cu.In.	.3410-.3417
V8-427 Cu.In.	.3713-.3720
B - Overall Length	
V8-327 Cu.In. (Base)	4.913-4.933
V8-327 Cu.In. (RPO L79)	4.891-4.910
V8-427 Cu.In.	5.345-5.365
C - Gage Length	
V8-327 Cu.In.	4.781-4.791
V8-427 Cu.In.	5.235-5.245
D - Overall Head Diameter	
V8-327 Cu.In. (Base)	1.495-1.505
V8-327 Cu.In. (RPO L79)	1.595-1.605
V8-427 Cu.In.	1.715-1.725
E - Angle of Face	45°
F - Guide Diameter	
V8-327 Cu.In.	.3427-.3437
V8-427 Cu.In.	.3732-.3742
G - Angle of Seat	46°
H - Valve Angle	
V8-327 Cu.In.	23°
V8-427 Cu.In.	4°
I - Valve Seat (Cutter) Diameter	
V8-327 Cu.In. (Base)	1.550-1.570
V8-327 Cu.In. (RPO L79)	1.600
V8-427 Cu.In.	1.625

PISTONS

Material

V8-327 Cu.In. (Base) ----- Cast aluminum alloy
 V8-327 Cu.In. (RPO L79) - Aluminum impact extruded
 V8-427 Cu.In. (RPO L36 & L68) -- Cast aluminum alloy
 V8-427 Cu.In. (RPO L71) - Aluminum impact extruded

Head Type

V8-327 Cu.In. (Base) ----- Flat, notched
 V8-327 Cu.In. (RPO L79) ----- Domed
 V8-427 Cu.In. ----- Domed

Skirt Type

----- Slipper

Top Land Clearance

V8-327 Cu.In. (Base) ----- .0365-.0455
 V8-427 Cu.In. (RPO L36 & L68) ----- .0305-.0375
 V8-427 Cu.In. (RPO L71) ----- .0265-.0335

Skirt Clearance

V8-327 Cu.In. (Base) ----- .0005-.0011
 V8-327 Cu.In. (RPO L79) ----- .0024-.0030
 V8-427 Cu.In. (RPO L36 & L68) ----- .0012-.0018
 V8-427 Cu.In. (RPO L71) ----- .0040-.0046

Compression Ring Groove Depth

V8-327 Cu.In. ----- .2217-.2283
 V8-427 Cu.In. ----- .2348-.2413

Oil Ring Groove Depth

V8-327 Cu.In. ----- .2038-.2103
 V8-427 Cu.In. (RPO L36 & L68) ----- .2183-.2248
 V8-427 Cu.In. (RPO L71) ----- .2133-.2148

Pin Bore Offset

V8-327 (Base) & 427 (RPO L36 & L68) ----- .055-.065
 V8-327 (RPO L79) & 427 (RPO L71) ----- On center

Compression Height

V8-327 Cu.In. (Base) ----- 1.674-1.676
 V8-327 Cu.In. (RPO L79) ----- 1.673-1.677
 V8-427 Cu.In. (RPO L36 & L68) ----- 1.908-1.912
 V8-427 Cu.In. (RPO L71) ----- 2.068-2.072

PISTON PINS

Material ----- Chromium steel

Length

V8-327 Cu.In. ----- 2.990-3.010
 V8-427 Cu.In. ----- 2.930-2.950

Diameter

V8-327 Cu.In. ----- .9270-.9273
 V8-427 Cu.In. ----- .9895-.9898

Clearance in Piston

V8-327 Cu.In. (Base) ----- .00015-.00025
 V8-327 Cu.In. (RPO L79) ----- .00045-.00055
 V8-427 Cu.In. (RPO L36 & L68) ----- .00025-.00035
 V8-427 Cu.In. (RPO L71) ----- .00030-.00040

Pin Mounting ----- Locked in rod by shrink fit

VALVE LIFT

V8-327 Cu.In. (Base) ----- .3900 Inlet & .4100 Exhaust
 V8-327 Cu.In. (RPO L79) ----- .4472 Inlet & Exhaust
 V8-427 Cu.In. (RPO L36 & L68) ----- .4614 Inlet;
 .4800 Exhaust
 V8-427 Cu.In. (RPO L71) ----- .5197 Inlet & Exhaust

VALVE TIMING (Crankshaft Degrees)

V8-327 Cu.In. - Base	Excluding Ramps	Including Ramps
Inlet Valve (Zero lash)		
Opens - BTC	28°	38°
Closes - ABC	72°	92°
Duration	280°	310°
Exhaust Valve (Zero lash)		
Opens - BBC	78°	88°
Closes - ATC	30°	52°
Duration	288°	320°

V8-327 Cu.In. - RPO L79	Excluding Ramps	Including Ramps
Inlet Valve (Zero lash)		
Opens - BTC	40°	54°
Closes - ABC	86°	108°
Duration	306°	342°
Exhaust Valve (Zero lash)		
Opens - BBC	88°	102°
Closes - ATC	38°	60°
Duration	306°	342°

V8-427 Cu.In. - RPO L36 & L68	Excluding Ramps	Including Ramps
Inlet Valve (Zero lash)		
Opens - BTC	40°	56°
Closes - ABC	80°	114°
Duration	300°	350°
Exhaust Valve (Zero lash)		
Opens - BBC	88°	110°
Closes - ATC	32°	62°
Duration	300°	352°

V8-427 Cu.In. - RPO L71

Inlet Valve (opens with .024 lash)		
Opens - BTC		44°
Closes - ABC		92°
Duration		316°
Exhaust Valve (closes with .028 lash)		
Opens - BBC		86°
Closes - ATC		36°
Duration		302°

Material	Cast alloy iron
Type	Straight edge inside of ring
Face	Barrel
Coating	
V8-327 Cu.In. (Base)	Chrome plate
V8-327 Cu.In. (RPO L79)	Molybdenum inlay
V8-427 Cu.In.	Molybdenum inlay
Width	
V8-327 Cu.In. (Base)	.0775-.0780
V8-327 Cu.In. (RPO L79)	.0770-.0775
V8-427 Cu.In.	.0770-.0775
Wall Thickness	
V8-327 Cu.In.	.190-.200
V8-427 Cu.In.	.202-.212
Gap	.010-.020

Material	Cast alloy iron
Type	Inside bevel (top of ring 30 degrees to piston vertical axis for V8-327; 28°-52° for V8-427)
Face	Tapered
Coating	
V8-327 Cu.In. (Base)	Wear resistant
V8-327 Cu.In. (RPO L79)	Chrome plate
V8-427 Cu.In. (RPO L36 & L68)	Wear resistant
V8-427 Cu.In. (RPO L71)	Chrome plate
Width	
V8-327 Cu.In. (Base)	.0770-.0775
V8-327 Cu.In. (RPO L79)	.0775-.0780
V8-427 Cu.In.	.0770-.0775
Wall Thickness	
V8-327 Cu.In.	.190-.200
V8-427 Cu.In.	.202-.212
Gap	
V8-327 Cu.In. (Base)	.013-.025
V8-327 Cu.In. (RPO L79)	.013-.023
V8-427 Cu.In.	.010-.020

Type	Multi-piece (two rails and one spacer)
Material	
Rails	Steel
Spacer	Alloy steel
Width (assembled)	
V8-327 Cu.In.	.1870-.1890
V8-427 Cu.In.	.1870-.1890
Wall Thickness	
V8-327 Cu.In.	.150-.156
V8-427 Cu.In.	.137-.143
Gap	
V8-327 Cu.In.	.015-.055
V8-427 Cu.In.	.010-.030
Rail Coatings	Chrome plated

Material	Drop forged steel
V8-427 (RPO L71)	High alloy steel
Length (center to center)	
V8-327 Cu.In.	5.699-5.701
V8-427 Cu.In.	6.130-6.140

Material	Premium aluminum
Type	Precision removable
Clearance	
V8-327 Cu.In.	.0007-.0027
V8-427 Cu.In. (RPO L36 & L68)	.0009-.0029
V8-427 Cu.In. (RPO L71)	.0014-.0034
Theoretical I. D.	
V8-327 Cu.In.	2.1017
V8-427 Cu.In. (RPO L36 & L68)	2.2014
V8-427 Cu.In. (RPO L71)	2.2019
Effective Length	
V8-327 Cu.In.	.797
V8-427 Cu.In.	.857
End Play	
V8-327 Cu.In.	.009-.013
V8-427 Cu.In.	.016-.020

FUEL-EXHAUST AND VENTILATION SYSTEM

FUEL SYSTEM.

FUEL TANK

Capacity (Gal) ----- 20 (approximately)
Location ----- In body cavity at rear of deck area
Filler Location ----- Center of rear deck lid

FUEL FILTERS, DUAL

In Fuel Tank ----- Mesh strainer
Carburetor Inlet ----- Paper

FUEL PUMP

```

Type ----- Diaphragm
Drive ----- Camshaft eccentric
Location ----- Lower right front of engine
Pressure Range ----- 5.00-6.50 PSI

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AIR CLEANER

Type	
V8-327 & 427 (RPO L36)	----- Full circle imake, chrome plated
V8-427 (RPO L68 & L71)	----- Triangular shaped, chrome plated
Filter Element	----- Oil-wetted paper
V8-427 (RPO L68 & 71)	----- Polyurethane

CARBURETORS

Make & Type	
V8-327 Cu.In.	----- Rochester, Quadrajet
V8-427 Cu.In. (RPO L36)	----- Rochester, Quadrajet
V8-427 Cu.In. (RPO L68 & L71)	----- Holley, 3 x 2
SAE Flange Size	----- 1.50
Throttle Bore	
V8-327 & 427 Cu.In. (RPO L36)	
Primary	----- 1.38
Secondary	----- 2.25
V8-427 Cu.In. (RPO L68 & L71)	
Primary (No. 1)	----- 1.50
Secondary (No. 2 & 3)	----- 1.75
Venturi Diameter	
V8-327 & 427 Cu.In. (RPO L36)	
Primary	----- 1.09
Secondary	----- Air valve
V8-427 Cu.In. (RPO L68 & L71)	
Primary (No. 1)	----- 1.188
Secondary (No. 2 & 3)	----- 1.375
Secondary Throttle Actuation	----- By linkage
approximately when primary valves are	
opened half between closed and open	

CHOKE

Type ----- Automatic

EXHAUST AND VENTILATION SYSTEM

EXHAUST SYSTEM

Type ----- Dual with no resonators

MUFFLERS

Type ----- Dual, reverse flow
Construction ----- Heads and body joined
by rolled lock seam construction

Shell

Right Hand ----- 036 stainless steel

Left Hand ----- 036 sheet steel aluminum coating

WRAP ----- 030 Indented asbestos sheet

Cover 018 = heat steel aluminum coating

-----, 010 sheet steel minimum coating
Heads

Right Hand ----- 018 stainless steel

Right Hand 0.04% stainless steel
Left Hand 0.1% brass metal aluminum coating

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

[illegible]

Right Hand ----- 4; #1 & #4, .036 stainless steel;

#2 & #3, .036 sheet steel aluminum coating

Left Hand ----- 4; .036 sheet steel aluminum coating

Length, Body ----- 17.00

Width (I.D.) ----- 9.25

Height (L.D.) ----- 5.00

EXHAUST PIPES

Type	Two piece; front and rear assemblies
Material	Seamless steel tubing
Dimensions (O.D.)	2.50
Wall Thickness	
Front Pipes	.072-.092
Rear Pipes	.084-.104 laminated

TAIL PIPES

Material	Stainless steel
Dimensions (O.D.)	2.62
Wall Thickness	.062 - .072

ENGINE VENTILATION

Type ----- Closed-positive

AIR INJECTION REACTOR EQUIPMENT (AIR)

Type ----- Air injected
into exhaust ports crankshaft driven pump

LUBRICATION SYSTEM

GENERAL

Type	Controlled full pressure
Main Bearings	Pressure
Connecting Rods	Pressure
Piston Pins	Splash
Cylinder Walls	Pressure, jet cross sprayed
Camshaft Bearings	Pressure
Valve Lifters	Pressure
Rocker Arms	Pressure
Timing Gears	Centrifugally oiled from front camshaft bearing
Oil Pressure Sending Unit	Electric
Oil Filler	
Cap	Positive seal
Location	
V8-327 Cu.In.	Left front of intake manifold
V8-427 Cu.In.	Top center of right rocker cover

OIL PUMP

Type	Gear
Normal Oil Pressure (Bench test-no flow conditions)	
V8-327 Cu.In.	30-45 PSI @ 1500 RPM
V8-427 Cu.In.	50-75 PSI @ 2000 RPM
Intake Type	Fixed
Capacity (GPM @ Eng. RPM)	
V8-327 Cu.In.	4.3 @ 2000
V8-427 Cu.In.	6 @ 2000
Regulator Valve	Opens between 40-45 lbs

OIL DIP STICK - LOCATION

V8-327 Cu.In.	Left side, rear of engine block
V8-427 Cu.In.	Right side, center, direct to oil pan

OIL PAN CAPACITY (Quarts)

Refill	
V8-327 Cu.In. (Base)	4.0
V8-327 Cu.In. (RPO L79)	5.0
V8-427 Cu.In.	5.0
Refill with Filter Change	
V8-327 Cu.In. (Base)	5.0
V8-327 Cu.In. (RPO L79)	5.0
V8-427 Cu.In.	6.0

OIL FILTER

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

LUBRICANT GRADES AND TEMPERATURES

32° F and Above	SAE20W or SAE10W-30
0° F to 32° F	SAE10W or SAE10W-30
Below 0° F	SAE5W or SAE5W-20
Alternate	SAE3W-30 can be used at temperatures below freezing

OIL PAN

Type of Drain Plug	Hex head
Location	Lower rear face of oil pan sump
Size Hex Head	.860-.875
Thread	1/2-20 UNF 2A
Length	.081
Diameter	.410-.430

COOLING SYSTEM

GENERAL

Type	Liquid, pressurized
V8-327 Cu,In. (Base)	Internal by-pass
V8-327 Cu,In. (RPO L79)	External by-pass
V8-427 Cu,In.	External by-pass
Capacity (with Heater)	
V8-327 Cu,In.	15 Qts
V8-427 Cu,In.	22 Qts

RADIATOR

Type	
V8-327 Cu,In.	Aluminum, cross-flow
V8-427 Cu,In.	Copper-brass, cross-flow
Core Constant	
Distance between Fins	
V8-327 Cu,In.	.18
V8-427 Cu,In.	.16
Distance between Tubes	.55
Thickness of Core	
V8-327 Cu,In.	2.88
V8-427 Cu,In.	2.70
Frontal Area (Sq. In.)	
V8-327 Cu,In.	315
V8-427 Cu,In.	382

SURGE TANK (327 Cu,In. Only)

Location	Right side engine compartment connected by hose to top of radiator
Capacity	2.3 Qts
Fill Requirements	Half full when weather is cold

RADIATOR CAP RELIEF VALVE

Opens at	Approximately 15 PSI
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FAN

Number of Blades	5, staggered
Diameter	
V8-327 Cu,In.	17.12
V8-427 Cu,In.	17.50
Fan Pulley Pitch Diameter	7.00
Drive	
Type	Thermomodulated fluid coupling
Performance at 4000 RPM Input	At 135°-155°F
fan speed 3200 to 3500 RPM; at 120° F	
and below, fan speed 800-1800 RPM	

THERMOSTAT

Type	Pellet
Begins to Open at	192°-198°F
Fully Opened at	217°F

RADIATOR HOSE

Outlet, Lower (Radiator to Water Pump)	
V8-327 Cu,In.	1.75 I. D.
V8-427 Cu,In.	1.88 I. D.
Inlet, Upper (Thermostat Housing to Radiator)	
V8-327 Cu,In.	1.56 I. D.
V8-427 Cu,In.	1.50 I. D.

BY-PASS THERMOSTAT HOSE

V8-327 Cu,In. (RPO L79)	.725-.765 I.D.
V8-427 Cu,In.	.725-.765 I.D.

BELTS; CRANKSHAFT, FAN AND GENERATOR

Number Used	
V8-327 Cu,In. (Base)	One
V8-327 Cu,In. (RPO L79)	Two
V8-427 Cu,In.	Two
Angle of "V"	38°-42°
Pitch Line	
Fan, Generator and Water Pump Belt	
V8-327 Cu,In. (Base)	53.25
V8-327 Cu,In. (RPO L79)	54.00
V8-427 Cu,In.	56.00
Fan and Water Pump Belt	
V8-327 Cu,In. (RPO L79)	34.40
V8-427 Cu,In.	34.40
Width	.380

WATER PUMP

Type	Centrifugal
Capacity (GPM @ Engine RPM)	
V8-327 Cu,In.	57 @ 4400
V8-427 Cu,In.	82 @ 5200
Bearing	Permanently lubricated double row ball
Drive	Fan belt
Ratio (Pump to Engine RPM)	.949:1

DRAIN LOCATIONS AND TYPE

Radiator	Left hand, rear lower face
Engine Block	Plug; right and left center

ELECTRICAL SYSTEM

SUPPLY SYSTEM

BATTERY

Voltage ----- 12
 Cranking Power @ 0° F ----- 3250 watts
 Total Number of Plates ----- 78
 Number of Cells ----- 6
 Terminal Grounded ----- Negative
 Location ----- In passenger compartment
 behind driver

GENERATOR

Type ----- Diode rectified
 Rating
 Amps ----- 9-37
 Volts ----- 10-15
 Drive ----- By fan belt
 Pulley Pitch Diameter ----- 2.70
 Ratio (Gen to Engine Speed) ----- 2.46:1

REGULATOR

Type ----- Two unit; vibrator
 Voltage Regulator
 Voltage ----- 13.8-14.8 @ 85° F
 Field Relay (Combination Light & Field Relay)
 Closing Voltage ----- 1-3 Volts @ 80° F
 Location ----- Right side front engine compartment

STARTING SYSTEM

STARTING MOTOR

Rotation (Drive End View) ----- Clockwise
 Test Conditions ----- Engine at operating temperature
 No Load Test
 Amps ----- 65-100 (327); 70-99 (427)
 Volts ----- 10.6
 RPM ----- 3600-5100 (327); 7800-12000 (427)

Motor Drive

Engagement ----- Solenoid
 Pinion Meshes at ----- Rear
 Pinion Tooth No. ----- 9
 Flywheel Tooth No. ----- 153; V8-427 -- 168
 Mounting ----- Bolted to clutch housing

IGNITION SYSTEM

DISTRIBUTORS ----- Refer to chart below

COIL

Type ----- 12 Volt
 Amperes Drawn
 Engine Stopped ----- 4.0
 Engine Idling ----- 1.8

SPARK PLUGS

Make & Type
 V8-327 Cu.In. ----- AC44
 V8-427 Cu.In. ----- AC43N
 Thread Size (mm) ----- 14
 Gap ----- .033-.038
 Torque ----- 25 lb ft

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

DISTRIBUTORS	V-8 327 Cu.In. Base 300 HP	V-8 327 Cu.In. RPO L79 350 HP	V-8 427 Cu.In. RPO L36 390 HP	V-8 427 Cu.In. RPO L68 400 HP	V-8 427 Cu.In. RPO L71 435 HP
Model	1111194	1111438	1111293		1111296
Type	Single Breaker				Transistorized
Cam Angle	28° - 32°				Magnetic Pulse
Breaker Gap	.019 (new)				
Breaker Arm Tension	19 - 23 oz		28 - 32 oz		
Centrifugal Advance Begins (RPM)	900	950	900	900	900
Max Degrees @ RPM	30 @ 5100	30 @ 4700	32 @ 5000	30 @ 3800	
Vacuum Advance Begins (In. Hg)	6.00	6.00	7.00	8.00	
Max Degrees @ In. Hg	15 @ 12	15 @ 15.5	12 @ 12	15 @ 15.5	
Timing (Initial Design Setting)	4 BTC @	4 BTC @	4 BTC @	4 BTC @	4 BTC @
Cranksaft Degrees @ RPM (with vacuum spark line disconnected)	700 manual 600 auto	750 manual only	700 manual 600 auto	750 manual 600 auto	750 manual only
Timing Mark Location	Torsional Damper				

CLUTCHES AND TRANSMISSIONS

CLUTCHES

Engine	Type	V-8 327 Cubic Inch		V-8 427 Cubic Inch	
	Availability	Regular Production	RPO L79	RPO L36 & L68	RPO L72
Clutch for		3-Speed & 4-Speed	4-Speed	4-Speed	
Type		Single dry disc, centrifugal			
Clutch cover & pressure plate	Eff. plate load, lbs.	2100-2300	2300-2600	2450-2750	2600-2800
	Press. plate matl.	Nodular iron			
	Clutch spring type	Circular plate diaphragm, bent finger design			
	Clutch spring matl.	Heat treated spring steel			
Driven plate	Type	Single disc with two friction surfaces			
	Cushions	Flat spring steel between friction rings			
	Dampers	10 coil springs (5 sets of two)			
	Friction rings	OD	10.34		11.00
		ID	6.50		6.50
		Total area sq. in.	101.54		123.70
		Material	Woven type asbestos		
Flywheel	Ring gear	Material	Heat treated HR steel		
		No. of teeth	133		168
		PD	12.75		14.00
		Attachment	Shrink fit		
Bearings	Release	Type	Single row ball		
		Lubrication	None, prepacked		
	Pilot	Type	Bronze bushing		
		Lubrication	None, sintered and oil impregnated		
Controls	Clutch fork	Drop forged steel, pivot mounted on ball			
	Pedal mounting	Pendant, from brace on dash			
Clutch housing material	Lubrication	Crossover shaft			
		Aluminum alloy			

3-SPEED AND 4-SPEED TRANSMISSIONS

Transmission Type		3-Speed	4-Speed RPO M20		4-Speed RPO M21	
Engine	Type	V8-327 Cu. In.	V8-327 Cu. In.	V8-427 Cu. In.	V8-327 Cu. In.	V8-327 Cu. In.
Application	Availability	Standard	Standard	RPO L79	L36, L68	RPO L79
Case material		Cast iron	Aluminum			
Gear Shift	Type	Remote				
	Control	Lever				
	Location	Floor, mounted between seats				
Gears	Type	Helical				
	Material	Forged steel, hardened				
	Synchronization	All forward gears				
	Constant mesh gear	All gears	All forward gears			
	Sliding gears	None	Reverse			
	Ratios	First	2.54	2.52	2.20	
		Second	1.50	1.88	1.64	
		Third	1.00	1.47	1.27	
		Fourth		1.00	1.00	
		Reverse	2.63	2.59	2.26	
Lubricant	Type	Meeting Military Specification MIL-L-2105-B				
	Capacity (oz.)	3				
Extension	Material	Cast iron	Aluminum			
	Oil seal	Steel encased double seal of spring loaded rubber or felt				

TRANSMISSIONS—Cont'd.

TURBO HYDRA-MATIC TRANSMISSION (RPO M40)

GENERAL DATA

Type ----- Three
 element automatic hydraulic torque converter
 with a compound planetary gear set that
 produces three forward speeds and reverse

Selector Lever
 Location ----- Floor mounted

Operation ----- Actuates automatic
 controls by a hydraulic system
 from a pressurized gear type pump

Quadrant Pattern ----- Six positions: P-R-N-3-2-1

External Control Connections

Manual Linkage ----- Selects desired operating
 range by means of selector lever

Vacuum Modulator ----- Senses change
 in the torque input to the trans-
 mission and assures smooth shifts

Detent Solenoid ----- Actuated by electric switch or
 the carburetor causing the transmission
 to downshift under full throttle conditions
 at car speeds below 70 miles per hour

Parking Lock
 Type ----- Locking pawl

Operation ----- Applied by selector
 lever through manual linkage

Method of Cooling ----- Water

TORQUE CONVERTER

Driving Member (Pump) ----- Multivane
 type, sheet metal blade, spot welded
 to steel pump housing that is an
 integral part of the converter housing

Driven Member (Turbine) ----- Steel axial
 flowblades assembled between
 inner and outer steel shells

Stator Assembly ----- Aluminum multivane type
 blades mounted on a one way roller clutch

Stall Ratio ----- 2.04

Stall Speed (RPM) ----- 2100

Diameter (Nominal) ----- 12.83

CLUTCHES

Type ----- Three, multiple disk

Material

Drive plates ----- Waved steel
 with bonded organic facings

Driven plates ----- Flat steel

Forward clutch ----- Five each
 drive and driven plates

Direct clutch ----- Five each
 drive and driven plates

Intermediate clutch ----- Three each
 drive and driven plates

Release spring ----- Radial row steel coil

PLANETARY GEAR UNIT

Front	Reaction carrier assy	Four steel pinion gears
Rear	Output carrier assy	Four steel pinion gears
Gear Ratios		
"3"	2.48:1, 1.48:1, 1.00:1	
"2"	2.48:1, 1.48:1	
"1"	2.48:1	
R (Reverse)	2.08:1	
Front Band		
Type	One, circular steel with organic lining	
Function	Provides engine braking in 2nd gear with selector lever in "2" and "1" range	
Rear Band		
Type	Double wrap circular steel with organic lining	
Function	Provides engine braking Lo range 1st gear; also in reverse range the band holds the reaction carrier to apply reverse gear ratio	
Servo units	Piston with release spring and inner cushion spring that activates the bands	

LUBRICANT

Type	A suffix A
Capacity	22 pts
Refill	8 pts
Oil cooler	Integral with radiator assembly and connected to transmission by inlet and outlet pipes

HYDRAULIC SYSTEM

Oil pressure pump	Supplies hydraulic pressure by gear type pump which is engine driven
Pump pressure (450 RPM input @ 25 in. Hg vacuum)	
Park	70 PSI
Neutral	70 PSI
"3" (First, second, third)	70 PSI
"2" (First, second)	150 PSI
"1"	150 PSI
Reverse	107.5 PSI
Valves	
Type	Steel spool
Manual	Establishes range at transmission operation
Pressure regulator	Controls main line pressure
Shift (1-3)	Controls oil pressure for trans. shift from 1-2 or 2-1
Shift (2-3)	Controls oil pressure for trans. shift from 2-3 or 3-2
Modulator	Regulates line pressure with modulator oil pressure that varies with torque to transmission
Accumulator	To obtain greater flexibility in attaining desired shift curve for various engine requirements
Governor	
Type	Cross-axis centrifugal
Operation	Regulates a pressure proportional to car speed which acts upon the (1-2) (2-3) shift valves and modulator valve

TORQUE MULTIPLICATION

"3" (maximum)	5.06:1 to 1.00
"2"	5.06:1 to 1.48
"1"	5.06:1 to 2.48
Reverse	4.24:1 to 2.08