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CORVETTE STING RAY



Corvette Sting Ray Sport Coupe







Corvette Sting Ray Convertible with removable hardtop*

Sport Coupe Convertible

Model Features

Black-accented body sill moldings • Windshield and rear window reveal moldings (windshield only with Convertible folding top) • Bright ventipane frames • Bright windshield pillar on Convertible • Wraparound bumpers • Ventilated wheel covers with simulated 3-lug knock-off hub • Front fender emblems • Front fender engine compartment air exhaust louvers • Chromed outside rearview mirror • Anodized aluminum grille • Circular parking and directional signal lights with bright bezels • Bright front license plate frame • Hood emblem • Power-operated retractable dual headlights • Special high-domed hood with 427-cu.-in. V8's • Fuel filler door emblem • Sting Ray nameplate • Bright rear license plate frame and license plate recess framing • Twin-unit taillights with bright bezels and built-in back-up lights • Twin stainless steel tailpipes with bright bezels • Luxurious all-vinyl trim . . . plus Corvette interior features and appointments.

*Optional at no extra cost in place of convertible folding top or in addition at extra cost

INTERIOR FEATURES & APPOINTMENTS

INSTRUMENT PANEL	Sport Coupe	Convertible
Special sports-styled three-spoke steering wheel with horn button	•	
Foam-padded instrument cluster and glove compartment hoods	•	
Black textured-finish instrument cluster and glove compartment hood facing	•	•
Instrument cluster and glove compartment hood trim moldings	•	
Brushed chrome glove compartment door trim panel with bright outline molding and nameplate	•	
Built-in passenger assist grip	•	
Bright control knobs	•	
Black painted instrument bezels with bright facing	•	
Tachometer, speedometer with odometer, plus separate trip odometer	•	
Ammeter, oil pressure, fuel and temperature gauges	•	
Cigarette lighter	•	
Bright parking brake handle	•	
Parking brake warning light	•	•
Glove compartment lock and light	•	•
Center console with electric clock and heater controls (also optional radio controls)		
Power-operated retractable headlight warning light		
DOORS & SIDE PANELS		
Textured vinyl-finish molded door trim panels with bright accents		
Combination textured vinyl and carpet rear compartment sidewall and wheelhouse trim		
Carpeted cowl side panels		
Bright ball-type door opening knobs		
Crank-operated ventipanes		
Molded-in door armrests and bright door pull handles		
SEATS		
All-vinyl seat trim (genuine leather seat trim optional at extra cost)		
Foam-cushioned bucket seats with formed seat back panel and bright seat back outline moldings		
Deluxe color-matched seat belts with retractors		
HEADLINING, FLOOR COVERING & INTERIOR FEATURES		
Vinyl-covered foam headlining		
Vinyl-covered padded sun visors	•	Carl and the second
Color-keyed deep-twist floor and luggage compartment carpeting	•	•
Chrome-backed rearview mirror	•	
Color-keyed painted windshield, door, and rear window garnish moldings	•	•
Bright windshield header	•	
LIGHTS, SWITCHES & POWER EQUIPMENT		•
Instrument panel interior light switch (in headlight switch)		
Center dome light with automatic door switches	•	•
Dual instrument panel courtesy lights with automatic door switches	•	
Power windows	•	•
	EC	EC
Power-operated retractable headlight instrument panel switch	•	EC-Extra c

SPECIFICATIONS

EXTERIOR DIMENSIONS	Sport Coupe	Convertible
Wheelbase	98	3.0
Length (overall)	175	5.1
Width (overall)	69	9.6
Height (loaded)	49.6	49.8
Front tread	56	5.8
Rear tread	. 57	7.6
Road clearance (min.)	5	5.0
INTERIOR ROOMINESS		1.
Torso room	37.0	38.5
Leg room	42	.7
Hip room	50).9
Shoulder room	48	3.4
Entrance height	31.4	30.2
LUGGAGE COMPARTMENT		
Total volume (cu. ft.)	19.1	15.3
Usable luggage space (cu. ft.)	10.6	8.1

GLASS AREA	Sport Coupe	Convertible	
Windshield glass area (sq. in.)	789	9.7	
Rear window glass area (sq. in.)	821.5	440.5	
Total glass area (sq. in.)	2231.3	1780.3	
TIRE SIZE & STEERING SPECIFICATIO	NS*	and the second	
Standard tire size	7.75	x 15	
Turning diameter-curb-to-curb (ft.)	39	9.9	
Turning diameter-wall-to-wall (ft.)	41.6		
Steering ratio-standard (overall)	20.2:1		
Steering ratio—special fast ratio (overall)	17.6:1		
Steering ratio—power (overall)	17.	6:1	
FUEL CAPACITY & WEIGHT			
Fuel tank capacity (gallons)	2	0	
Curb weight-standard V8 (lbs.)	3145	3160	
Shipping weight—standard V8 (lbs.)	2985	3005	

*For additional information, see Tires in Feature Details section.



Mag-style wheel covers-standard on all Corvettes



Special cast aluminum wheels with 6" rimsoptional for all Corvettes



Corvette 327-cu.-in. V8 front fender emblem



Corvette 427-cu.-in. V8 front fender emblem

Corvette Features & Specifications

1966 CORVETTE POWER TEAMS TRANSMISSIONS AXLE RATIOS

ENGINE	3-SPEED FULLY SYNCH. 2.54:1 LOW STANDARD	4-SPEED FULLY SYNCH. 2.52:1 LOW RPO M20	4-SPEED FULLY SYNCH. 2.20:1 LOW RPO M21	POWERGLIDE RPO M35
STANDARD ENGINE 300-HP 327-cuin. V8	STD3.36:1 (a) *OPT3.08:1 (b)	STD3.36:1 (a) *OPT3.08:1 (b)		STD3.36:1 (a)
RPO L79 350-HP 327-cuin. V8		STD3.36:1 (a) *OPT3.55:1 (c)	STD3.70:1 (a) *OPT4.11:1 (c)	
RPO L36 390-HP TURBO-JET V8 (427-CUIN.)		*STD.—3.08:1 (a) *OPT.—3.36:1 (c)	*STD3.36:1 (a) *OPT3.08:1 (b) *OPT3.70:1 (c) *OPT3.55:1 (d)	
RPO L72 425-HP TURBO-JET V8 (427-CUIN.)			*STD3.55:1 (a) *OPT3.36:1 (b) *OPT3.70:1 (c) *OPT4.11:1 (d)	
Note: Positraction rear axle ava * Available in Positraction ax		(a) General purpose axle (b) Economy cruise axle (c) Mountain axle	(d) Special purpose a (e) Purchaser to speci	kle fy axle choice

EQUIPMENT INCLUDED WITH OPTIONAL* V8 ENGINES

Important equipment is included with 327- and 427-cu.-in. V8 engines, supplementing or replacing equipment included with the standard 300-hp 327-cu.-in. V8 engine. Other specialized equipment is also available (see Options & Accessories Section).

	350-hp 327-cuin. V8 RPO L79	390-hp Turbo-Jet V8 RPO L36	425-hp Turbo-Jet V8 RPO L72
Heavier duty front stabilizer bar		•	•
Heavier duty drive shaft and universal joint assembly		•	•
Heavier duty rear wheel spindle support arms		•	•
Rear suspension stabilizer bar		•	•
Heavier duty clutch			•
Larger capacity radiator		•	•
Dual crankshaft, water pump and fan pulleys	•	•	•
Finned aluminum valve rocker covers	•		
Full-transistor ignition system			(a)
Closed-positive type engine ventilation	1		•
Chromed air cleaner cover			•
(a) Delcotronic Full-Transistor Ignition System (RPO K66) required added	equipment.	*Optional	at extra cost

CLUTCHES for Corvette 3- and 4-Speed Transmission Power Teams

Specifications	327-cuin. V8's	427-cuin. V8's
Туре	Semi-centrifugal diaphragm pearlitic or nodular	spring with single dry disc- r iron pressure plate
Spring Effective Plate Load—Ibs.	2100-2300	2300-2600
Disc Facing Material	Woven asbestos	-Premium grade
Disc Facing Outside Diameter (inches)	10.0	10.5
Disc Facing Total Area (square inches)	90.7	103.5

Corvette clutches are single dry disc design with a light alloy aluminum housing, and feature centrifugally assisted diaphragm spring engagement, special highload pressure plate, plus premiumquality woven asbestos disc facings. Clutch disc sizes and spring pressures are matched to each engine (see chart) for smooth shifting and long life.

REAR AXLE DETAILS

Semi-floating hypoid gear rear axle with frame-mounted welded steel housing and double universal jointed tubular axle shafts. Lubricant capacity—3.7 pints. General Purpose axle ratios offer best balance of performance and economy with each power team. For special requirements, other axle ratios are available with many power teams . . . see Power Teams chart. Extra-cost Positraction rear axle (RPO G81) available for all standard ratios; other ratios available only as Positraction.



Corvette Power Teams

1966 CORVETTE POWER TEAMS TRANSMISSIONS AXLE RATIOS

ENGINE	3-SPEED FULLY SYNCH. 2.54:1 LOW STANDARD	4-SPEED FULLY SYNCH. 2.52:1 LOW RPO M20	4-SPEED FULLY SYNCH. 2.20:1 LOW RPO M21	POWERGLIDE RPO M35
STANDARD ENGINE 300-HP 327-cuin. V8	STD3.36:1 (a) *OPT3.08:1 (b)	STD3.36:1 (a) *OPT3.08:1 (b)		STD.—3.36:1 (a)
RPO L79 350-HP 327-cuin. V8		STD3.36:1 (a) *OPT3.55:1 (c)	STD3.70:1 (a) *OPT4.11:1 (c)	
RPO L36 390-HP TURBO-JET V8 (427-CUIN.)		*STD.—3.08:1 (a) *OPT.—3.36:1 (c)	*STD.—3.36:1 (a) *OPT.—3.08:1 (b) *OPT.—3.70:1 (c) *OPT.—3.55:1 (d)	
RPO L72 425-HP TURBO-JET V8 (427-CUIN.)			*STD.—3.55:1 (a) *OPT.—3.36:1 (b) *OPT.—3.70:1 (c) *OPT.—4.11:1 (d)	
Note: Positraction rear axle av * Available in Positraction a		(a) General purpose axle (b) Economy cruise axle (c) Mountain axle	(d) Special purpose ax (e) Purchaser to specif	

EQUIPMENT INCLUDED WITH OPTIONAL* V8 ENGINES

Important equipment is included with 327- and 427-cu.-in. V8 engines, supplementing or replacing equipment included with the standard 300-hp 327-cu.-in. V8 engine. Other specialized equipment is also available (see Options & Accessories Section).

	350-hp 327-cuin, V8 RPO L79	390-hp Turbo-Jet V8 RPO L36	425-hp Turbo-Jet V8 RPO L72
Heavier duty front stabilizer bar			•
Heavier duty drive shaft and universal joint assembly		•	•
Heavier duty rear wheel spindle support arms		•	•
Rear suspension stabilizer bar		•	•
Heavier duty clutch		•	•
Larger capacity radiator		•	•
Dual crankshaft, water pump and fan pulleys	•	•	•
Finned aluminum valve rocker covers	•		
Full-transistor ignition system			(a)
Closed-positive type engine ventilation			•
Chromed air cleaner cover			•
(a) Delcotronic Full-Transistor Ignition System (RPO K66) required added	l equipment.	*Optional	at extra cost

CLUTCHES for Corvette 3- and 4-Speed Transmission Power Teams

Specifications	327-cuin. V8's	427-cuin. V8's
Туре	Semi-centrifugal diaphragm pearlitic or nodular	spring with single dry disc— iron pressure plate
Spring Effective Plate Load—Ibs.	2100-2300	2300-2600
Disc Facing Material	Woven asbestos-	-Premium grade
Disc Facing Outside Diameter (inches)	10.0	10.5
Disc Facing Total Area (square inches)	90.7	103.5

Corvette clutches are single dry disc design with a light alloy aluminum housing, and feature centrifugally assisted diaphragm spring engagement, special highload pressure plate, plus premiumquality woven asbestos disc facings. Clutch disc sizes and spring pressures are matched to each engine (see chart) for smooth shifting and long life.

REAR AXLE DETAILS

Semi-floating hypoid gear rear axle with frame-mounted welded steel housing and double universal jointed tubular axle shafts. Lubricant capacity—3.7 pints. General Purpose axle ratios offer best balance of performance and economy with each power team. For special requirements, other axle ratios are available with many power teams . . . see Power Teams chart. Extra-cost Positraction rear axle (RPO G81) available for all standard ratios; other ratios available only as Positraction.



Corvette Power Teams

Transmissions

3-SPEED FULLY SYNCHRONIZED – Standard with 300-hp engine only. Manually operated 3-speed transmission with full synchronization of all forward gears for smooth shifting when downshifting or accelerating. Basically similar in design and construction to regular Chevrolet 3-speed transmission, with special heavyduty, extra-durable clutch drive gear and mainshaft bearings for higher torque loadings. Floor-mounted shift lever in center console.

Ratios	300-hp 327 cuin. V8
First	2.54:1
Second	1.50:1
Third	1.00:1
Reverse	2.63:1



4-SPEED FULLY SYNCHRONIZED-RPO M20 AND

M21—Manually operated 4-speed transmissions with full synchronization of all forward gears for smooth shifting when downshifting or accelerating. Special ratio (2.52:1 low) 4-speed, RPO M20 available with 300-, 350-, and 390-hp V8's. Close-ratio (2.20:1 low) 4speed, RPO M21, available with 350-, 390- and 425-hp engines. Floor-mounted shift lever in center console.

Ratios	RPO M20 300-, 350- and 390-hp V8's	RPO M21 350-, 390- and 425-hp V8's
First	2.52:1	2.20:1
Second	1.88:1	1.64:1
Third	1.47:1	1.27:1
Fourth	1.00:1	1.00:1
Reverse	2.59:1	2.26:1



POWERGLIDE—**RPO M35**—Three-element torque converter automatic transmission with 2-speed planetary gearset. Basically similar in design and construction to regular Chevrolet Powerglide. Not offered with 350-, 390- and 425-hp engines. Floor-mounted selector lever in center console. Accelerator-actuated automatic downshift into low gear for extra passing power.

Torque Multiplication	300-hp 327-cuin. V8
Drive (maximum)	3.70:1 to 1:1 range
Low and reverse	3.70:1 to 1.76:1 range



Corvette Power Teams

300-hp Corvette V8 (STANDARD V8)

327 CU. IN.
4.0" x 3.25"
300 @ 5000
360 @ 3200
10.5:1
4-BARREL
AUTOMATIC CHOKE
PREMIUM
GENERAL PERFORMANCE
HYDRAULIC
DUAL



BASIC DESIGN Cast alloy iron block and cylinder heads with precision-cast wedge-type combustion chambers. Three-ring aluminum alloy pistons with offset piston pins and special steel struts to control expansion. Chrome-plated top ring, wear-resistant coated second ring with steel expander, three-piece oil control ring (two rails and one spacer-expander) with chromed rails. Forged steel connecting rods with piston pins clamped in upper end and replaceable lower bearings. Rugged forged alloy steel crankshaft with five replaceable main bearings. Premium quality aluminum main and connecting rod bearing inserts. Flywheel: machined cast alloy iron with manual transmissions, pressed steel with Powerglide. Power plant mounted on rubber cushions, two front, one rear.

FUEL AND INDUCTION SYSTEM Four-barrel carburetor with automatic choke and oil-wetted paper element air cleaner. Cast alloy iron 8-port double-deck intake manifold. Mechanical pulsator-type fuel pump driven by camshaft. Sintered bronze fuel filter in carburetor, fine-mesh fuel strainer in fuel tank. Electric fuel gauge. Fuel tank capacity 20 gallons. Recommended fuel: premium.

VALVE SYSTEM Valve-in-head, with independent operating mechanism for each valve. Formed steel valve rocker covers. Valve material: intake, alloy steel; exhaust, high alloy steel with aluminized face. Integral valve guides and seats machined in cylinder heads. Variable-pitch valve springs. Pressed steel rocker arms with ball and socket mounting. Tubular steel push rods actuated by quiet hydraulic valve lifters. Cast alloy iron camshaft with wear-resistant coating, mounted in five steel-backed babbitt bearings and driven from crankshaft by silent chain. **EXHAUST SYSTEM** Dual 2.5" system (2.0" with Powerglide) with oval reverse-flow mufflers. Precisioncast alloy iron exhaust manifolds of ram's horn design with balance pipe. Rolled lock seam muffler construction. Left side muffler: Asbestos-wrapped aluminized body and aluminized cover with heads and all interior parts completely aluminized on both sides. Right side muffler: Asbestos-wrapped stainless steel body with aluminized cover; stainless steel heads, front and rear outer baffles, and rear tube; all other interior parts completely aluminized. Stainless steel tailpipes.

ELECTRICAL SYSTEM 12-volt, with 61-ampere-hour battery and 9-37-ampere Delcotron diode-rectifying type generator protected by voltage regulator. Distributor: single-breaker, vacuum-centrifugal advance. Positive shift high-torque starter with solenoid-engaged drive pinion and overrunning clutch. Hermetically sealed ignition coil. Non-metallic high-tension spark cables with rubber spark plug boots. Spark plugs: AC 44. Positive tachometer drive from distributor shaft.

COOLING SYSTEM Pressurized liquid type with fulllength water jackets completely surrounding cylinder barrels. Centrifugal water pump with sealed doublerow bearing, capacity 57 gallons per minute at 4400 engine rpm. Aluminum cross-flow radiator, 315.4-sq.-in. frontal area. 15-lb. pressure cap and pellet-type thermostat for quick engine warm-up. Five-blade temperature-controlled viscous drive fan, 17.1" diameter with circular shroud. Single-belt water pump and fan drive.

LUBRICATION SYSTEM Controlled full-pressure type with full-flow replaceable element type oil filter. Refill capacity four quarts (five with filter replacement). Gear-type oil pump with fixed intake develops normal 40 p.s.i. oil pressure at 2000 engine rpm. Positivetype crankcase ventilation standard.

ENGINE TYPE	V8—VALVE-IN-HEAD
SPLACEMENT	327 CU. IN
BORE & STROKE	4.0" x 3.25"
HP @ RPM	350 @ 5800
FORQUE @ RPM (ftlbs.)	360 @ 3600
COMPRESSION RATIO	11.0:1
CARBURETION	4-BARREL
CARDURETION	AUTOMATIC CHOKE
FUEL REQUIREMENT	SPECIAL PREMIUM
CAMSHAFT TYPE	HIGH PERFORMANCE
VALVE LIFTERS	HYDRAULIC
EXHAUST SYSTEM	DUAL

BASIC DESIGN Cast alloy iron block and cylinder heads with precision-cast wedge-type combustion chambers. Three-ring impact-extruded domed aluminum alloy pistons with special steel struts to control expansion. Molybdenum-inlay top ring, chrome plated second ring and three-piece oil control ring (two rails and one spacer-expander) with chromed rails. Forged steel connecting rods with piston pins clamped in upper end and replaceable lower bearings. Rugged forged alloy steel crankshaft with five replaceable main bearings. Premium quality aluminum main and connecting rod bearing inserts. Flywheel: machined cast alloy iron with manual transmissions, pressed steel with Powerglide. Power plant mounted on rubber cushions, two front, one rear.

FUEL AND INDUCTION SYSTEM Four-barrel carburetor with automatic choke and oil-wetted paper element air cleaner. Extra-large 8-port double-deck aluminum intake manifold. Mechanical pulsator-type fuel pump driven by camshaft. Sintered bronze fuel filter in carburetor, fine-mesh strainer in fuel tank. Electric fuel gauge. Fuel capacity 20 gallons. Recommended fuel: special premium.

VALVE SYSTEM Valve-in-head, with independent operating mechanism for each valve. Finned aluminum valve rocker covers. Valve material: intake, alloy steel; exhaust, high alloy steel with aluminized head and face. Integral valve guides and seats machined in cylinder heads. Variable-pitch valve springs. Pressed steel rocker arms with ball and socket mounting. Tubular steel push rods actuated by quiet hydraulic lifters. Cast alloy iron camshaft with wear-resistant coating, mounted in five steel-backed babbitt bearings and chain-driven from crankshaft.

EXHAUST SYSTEM Dual 2.5" system with oval reverse-flow mufflers. Precision cast alloy iron exhaust manifolds of ram's horn design with balance pipe. Rolled lock seam muffler construction. Left side muffler: asbestos-wrapped aluminized body and aluminized cover with heads and all interior parts completely aluminized on both sides for extended durability. Right side muffler: asbestos-wrapped stainless steel body with aluminized cover; stainless steel heads, front and rear outer baffles, and rear tube; all other parts completely aluminized.

ELECTRICAL SYSTEM 12-volt with 61-ampere-hour battery and 9-37-ampere Delcotron diode-rectifying type generator protected by voltage regulator. Distributor: single-breaker, vacuum-centrifugal advance. Positive-shift high-torque starter with solenoid-engaged drive pinion and overrunning clutch. Hermetically sealed ignition coil. Non-metallic high-tension spark cables with rubber spark plug boots. Spark plugs: AC 44. Positive tachometer drive from distributor shaft. Delcotronic. full-transistor ignition system optional at extra cost (RPO K66).

COOLING SYSTEM Pressurized liquid type with fulllength water jackets completely surrounding cylinder barrels. Centrifugal water pump with sealed doublerow bearing, capacity 57 gallons per minute at 4400 engine rpm. Aluminum cross-flow radiator, 315.4-sq.-in. frontal area. 15-lb. pressure cap and pellet-type thermostat for quick engine warm-up. Five-blade temperature-controlled viscous drive fan, 17.1" diameter with circular shroud. Double-belt water pump and fan drive.

LUBRICATION SYSTEM Controlled full-pressure type with full-flow replaceable element type oil filter. Refill capacity five quarts (six with filter replacement). Gear-type oil pump with fixed intake develops normal 40 p.s.i. oil pressure at 2000 engine rpm. Positive-type crankcase ventilation standard.

390-hp	Tur	bo-Jet	427	(RPO L36)
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ENGINE TYPE	V8—VALVE-IN-HEAD	
DISPLACEMENT	427 CU. IN.	
BORE & STROKE	4.25" x 3.76"	
HP @ RPM	390 @ 5200	
TORQUE @ RPM (ftlbs.)	460 @ 3600	
COMPRESSION RATIO	10.25:1	
CARBURETION	4-BARREL	
	AUTOMATIC CHOKE	
FUEL REQUIREMENT	PREMIUM OR SPECIAL PREMIUM	
CAMSHAFT TYPE	HIGH PERFORMANCE	
VALVE LIFTERS	HYDRAULIC	
EXHAUST SYSTEM	DUAL	



BASIC DESIGN Cast alloy iron block with extra-thick bulkheads above each bearing support for greater strength and more rigid crankshaft support. Cylinder heads cast of alloy iron with alternately spaced inlet and exhaust valve ports and precision-formed modified-wedge combustion chambers. Three-ring precision-cast aluminum alloy pistons with centered chromium steel piston pins. Molybdenum-inlay top ring, wear-resistant coated second ring and three-piece oil control ring (two rails and one spacer-expander) with chromed rails. Forged high-alloy steel connecting rods with piston pins clamped in upper end and replaceable lower bearings. Forged alloy steel crankshaft with replaceable main bearings and special wide-base main bearing caps for firmer clamping. Premium aluminum main and connecting rod bearings. Machined cast alloy iron flywheel. Power plant mounted on rubber cushions, two front, one rear.

FUEL AND INDUCTION SYSTEM Four-barrel carburetor with automatic choke and oil-wetted paper-element air cleaner. Precision-cast alloy aluminum 8-port intake manifold with extra-large ports. Mechanical pulsator-type sealed fuel pump driven by camshaft. Paper element type fuel filter between carburetor and fuel pump. Fine-mesh strainer in tank. Electric fuel gauge. Fuel tank capacity 20 gallons. Recommended fuel: premium or special premium.

VALVE SYSTEM Valve-in-head, with independent operating mechanism for each valve. Formed steel rocker covers. Valve material: intake, alloy steel with aluminized face and head; exhaust, heat-treated highalloy steel with aluminized face and head. Pressed-in valve guides; valve seats machined in cylinder heads. Variable-pitch valve springs. Pressed steel rocker arms with ball and socket mountings. Tubular steel push rods with hardened steel ball tips actuated by quiet hydraulic valve lifters. High performance cast alloy iron camshaft with wear-resistant coating, mounted in five steel-backed babbitt bearings and driven from crankshaft by silent chain. **EXHAUST SYSTEM** Dual 2.5" system with oval reverse-flow mufflers. Precision-cast large free-flow alloy iron exhaust manifolds. Rolled lock seam muffler construction. Right side muffler: stainless steel heads, baffles 1-4 and outlet pipe, and asbestos-wrapped stainless steel body with aluminized cover. Left side muffler: aluminized heads and asbestos-wrapped aluminized body with aluminized interior and cover.

ELECTRICAL SYSTEM 12-volt, 61-ampere-hour battery and 9-37-ampere Delcotron diode-rectifying generator protected by voltage regulator. Positive-shift high-torque starter with solenoid-engaged drive pinion and overruning clutch. Hermetically sealed ignition coil. Single-breaker distributor with combination centrifugal and vacuum spark advance. Non-metallic hightension spark cables. Spark plugs: AC 43N normal service type with rubber boots. Delcotronic full-transistor ignition system optional at extra cost (RPO K66).

GOOLING SYSTEM Pressurized liquid type with fulllength water jackets completely surrounding cylinder barrels. Centrifugal high-capacity water pump with sealed double-row bearing, capacity 82 gallons per minute at 5200 engine rpm. Cross-flow radiator, 382 sq.-in. frontal area. 15-lb. pressure cap and pellet-type thermostat for quick warm-up. Five-blade temperaturecontrolled viscous drive fan, 17.1" diameter with circular shroud. Double-belt water pump and fan drive.

LUBRICATION SYSTEM Controlled full-pressure type with high-output oil pump and full-flow replaceable element oil filter. Refill capacity five quarts (six with filter replacement). Gear-type oil pump with fixed intake develops normal 50-75 p.s.i. oil pressure at 2000 engine rpm. Positive-type crankcase ventilation standard, closed positive-type ventilation optional at extra cost (RPO K24).

425-hp	Turbo-J	let 427	(RPO L72)
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ENGINE TYPE	V8-VALVE-IN-HEAD	
DISPLACEMENT	427 CU. IN.	
BORE & STROKE	4.25" x 3.76"	
HP @ RPM	425 @ 5600	
TORQUE @ RPM (ftlbs.)	460 @ 4000	
COMPRESSION RATIO	11.0:1	
CARRUPETION	LARGE 4-BARREL	
CARBURETION	AUTOMATIC CHOKE	
FUEL REQUIREMENT	SPECIAL PREMIUM	
CAMSHAFT TYPE	SPECIAL PERFORMANCE	
VALVE LIFTERS	MECHANICAL	
EXHAUST SYSTEM	DUAL	
	UUNE	



BASIC DESIGN Cast alloy iron block with extra-thick bulkheads above each bearing support for greater strength and more rigid crankshaft support. Cylinder heads cast of alloy iron with alternately spaced inlet and exhaust valve ports and precision-formed modified-wedge combustion chambers. Special high-strength three-ring impact-extruded domed aluminum alloy pistons with centered chromium steel piston pins. Molybdenum-inlay top ring, chrome plated second ring and three-piece oil control ring (two rails and one spacerexpander) with chromed rails. Forged high-alloy steel connecting rods with piston pins clamped in upper end and replaceable lower bearings. Forged alloy steel crankshaft with replaceable main bearings. Crankshaft main and connecting rod journals specially hardened for greater durability. Special wide-base main bearing caps with four-bolt attachment for firmer clamping. Premium aluminum main and connecting rod bearings. Machined cast alloy iron flywheel. Power plant mounted on rubber cushions, two front, one rear.

FUEL AND INDUCTION SYSTEM Special large fourbarrel carburetor with automatic choke and oil-wetted paper-element air cleaner. Precision-cast alloy aluminum 8-port intake manifold with extra-large ports. Mechanical pulsator-type sealed fuel pump driven by camshaft. Sintered bronze fuel filter in carburetor, fine-mesh strainer in tank. Electric fuel gauge. Fuel tank capacity 20 gallons. Recommended fuel: special premium.

VALVE SYSTEM Valve-in-head, with independent operating mechanism for each valve. Formed steel rocker covers. Valve material: intake, alloy steel with aluminized face and head; exhaust, heat-treated high-alloy steel with aluminized face and head. Intake and exhaust valve stems chrome-flashed. Pressed-in valve guides: valve seats machined in cylinder heads. Variable-pitch valve springs. Pressed steel rocker arms with ball and socket mountings. Tubular steel push rods with hardened steel ball tips actuated by mechanical valve lifters. Special performance cast alloy iron

camshaft with wear-resistant coating, mounted in five steel-backed babbitt bearings and driven from crankshaft by silent chain.

EXHAUST SYSTEM Dual 2.5" system with oval reverse-flow mufflers. Precision-cast large free-flow alloy iron exhaust manifolds. Rolled lock seam muffler construction. Right side muffler: stainless steel heads, one and four baffles and outlet pipe, and asbestos-wrapped stainless steel body with aluminized cover. Left side muffler: aluminized heads and asbestos-wrapped aluminized body with aluminized interior and cover.

ELECTRICAL SYSTEM 12-volt, 61-ampere-hour battery and 9-37-ampere Delcotron diode-rectifying generator protected by voltage regulator. Positive-shift high-torque starter wih solenoid-engaged drive pinion and overrunning clutch. Hermetically sealed ignition coil. Single-breaker distributor with combination centrifugal and vacuum spark advance. Non-metallic hightension spark cables. Spark plugs: AC 43N normal service type with rubber boots. Delcotronic full-transistor ignition system (RPO K66) required added equipment.

COOLING SYSTEM Pressurized liquid type with fulllength water jackets completely surrounding cylinder barrels. Centrifugal high-capacity water pumpwith sealed double-row bearing, capacity 82 gallons per minute at 5200 engine rpm. Cross-flow radiator, 382-sq.-in. frontal area. 15-lb. pressure cap and pellettype thermostat for quick warm-up. Five-blade temperature-controlled viscous drive fan, 17.1" diameter with circular shroud. Double-belt water pump and fan drive.

LUBRICATION SYSTEM Controlled full-pressure type with high-output oil pump and full-flow replaceable element oil filter. Refill capacity five quarts (six with filter replacement). Gear-type oil pump with fixed intake develops normal 50-75 p.s.i. oil pressure at 2000 engine rpm. Closed positive-type crankcase ventilation standard.





Spare tire stowage compartment with key lock located in underside of body.

Engine compartment air exhaust louvers in front fenders.





Sport Coupe carpeted interior luggage compartment. Convertible similar except for folding top stowage.

Special high-domed hood with optional 427-cu.-in. V8 engines.



Power-operated retractable dual headlights—control switches and flasher warning light in instrument panel.



CORVETTE CHASSIS SPECIFICATIONS

Corvette Sting Ray rugged sports car chassis design with full independent 4wheel suspension and rigid all-welded ladder-type sports car frame.



Frame

All-welded 5-crossmember ladder-type frame with trapezoidal-shaped sidemembers framing passenger area and extending forward forming engine support. Box-section design sidemembers from kickup rearward support axle and suspension.

Front Suspension

Independent coil spring spherical joint suspension with concentric springs and shock absorbers between upper and lower control arms. Built-in anti-dive control and rubber-bushed link-type stabilizer bar. Quiet, lowfriction non-metallic spherical joint liners. Spherical joints protected by special positive-sealing formedrubber boots.

Rear Suspension

Independent rear suspension with frame-mounted differential unit, double universal jointed tubular axles, and transverse multi-leaf spring. Differential carrier is mounted to frame by rubber-isolated crossmember. Nine element transverse leaf spring with hardened and tempered chrome carbon steel leaves bolts solidly to differential carrier and attaches to radius arms with rubber-isolated floating rods. Suspension design permits spring to function as springing member only. Lateral and longitudinal forces imposed by braking, acceleration, and cornering are absorbed by frame-mounted fixed differential and suspension control arms.

Shock Absorbers

Direct, double-acting, sealed-unit hydraulic shock absorbers with special aeration-preventing freon bag in fluid reservoir. Front shock absorbers concentrically located within coil springs and attached to lower control arms and frame crossmember. Rear shock absorbers mounted between wheel spindle supports and frame.

Steering System

Balanced system with relay-type linkage and low-friction Ball-Race steering gear. Rubber-insulated jointed steering column helps cushion road shock and vibration. Overall steering ratio: standard steering—20.2:1 (linkage may be adjusted for special fast overall steering ratio—17.6:1); power steering—17.6:1. Steering wheel diameter—16 inches. Steering wheel turns stop to stop: standard ratio—3.4, optional* power steering and special fast ratio—2.9.

*Optional at extra cost.

Body Structure

- Corrosion-proof steel-reinforced fiberglass body

 lightweight, high-strength, impact-resistant
 fiberglass construction; one-piece underbody struc ture with fabricated-in steel structural members.
- Integrally bonded cowl structure formed of air ventilation plenum chambers, dash panel and underbody.
- Steel-reinforced body sills, door hinge pillars and lock pillars, plus lateral steel crossmember integrating front pillars. Sport Coupe roof structure features supporting members to enclose the passenger compartment with protective steel framing.
- Double-panel door construction with steel door lock and hinge reinforcements. Wrap-over Sport Coupe doors extend well into roof panel for easy entrance.
- Convertible top folds for stowage beneath doublelocking spring-loaded cover panel.
- Double-panel reinforced front-hinged hood with telescoping automatic latch supports.
- Roomy inside luggage compartment behind front seats with concealed stowage space for tools and small valuables. Carpeted floor panel in forward end of compartment bridges drive-line tunnel forming flat load area. Vertical riser protects seat backs from possible luggage damage. Panel is easily removed for access to concealed stowage compartments.

Body Mounting

Sport Coupe body is securely attached to frame at six points with special bolts and double-cushioned rubber mounts. Convertible body is solidly attached to the frame at eight points with four rubber and four hard fiber-composition mounts and special bolts.

Weathersealing

- Weathertight formed rubber windshield seal.
- Flush-mounted adhesively bonded rear window on Sport Coupe.
- Door glass and ventipane formed rubber seals.
- Convertible hardtop rear window formed rubber seals.
- Positive-sealing formed rubber Convertible folding top and hardtop seals at windshield, door glass edges, and at body mounting surfaces.
- Double-sealing door weatherseals on Sport Coupe.
- Formed rubber Convertible door weatherseals.

PLUS ALL THESE QUALITY FEATURES

- Padded instrument panel hoods
- Padded sun visors
- Inside rearview mirror with shatter-resistant glass
- Windshield washer and 2-speed electric windshield wipers with glare-reducing matte-chrome arms and blades
- Outside rearview mirror
- Back-up lights
- High-level ventilation system
- Built-in blended-air heater and defroster
- Front fender engine compartment air louvers
- Magic-Mirror acrylic lacquer finish
- Windshield with double-thick plastic center
- Power-operated retractable dual headlights
- Precision crank-operated compound-curved ventipanes

- Roll-down compound-curved solid tempered safety plate door window glass
- Two-key lock system
- Solid tempered safety plate Sport Coupe rear window glass
- Keyless door locking
- · Pushbutton outside door handles
- · Weather-shielded key locks
- Luxurious color-keyed interior trim
- Color-matched seat belts—retractors for outside belts, mounting clip on console for stowing inside belts
- · Centrally located concealed fuel filler opening
- Full-view instrument panel with complete complement of instruments and controls, cigarette lighter, and locking glove compartment with automatic light



Relay type steering linkage and low-friction Ball-Race steering gear with rubber-cushioned jointed steering column.

Self-adjusting Sport-Master caliper-type disc brake.



Corvette independent coil spring spherical joint front suspension with stabilizer bar.

Corvette independent rear suspension with frame-mounted differential unit and special nine element transverse leaf spring.





Drive Shaft

Balanced single-unit tubular steel drive shaft with universal joints joining shaft ends to transmission and axle.

Rear Axle

Hypoid gear design with cast iron housing. Lubricant capacity -3.7 pints. For specific details see Power Teams or Feature Details section.

Brakes

Self-adjusting 4-wheel caliper-type disc brake system. Brake disc diameter—11.75''. Lining size (length x width x thickness)— $5.96'' \ge 2.21'' \ge .41''$. Total lining area—86.3 sq. in. Braking distribution—front: 65%, rear: 35%. Woven asbestos composition lining bonded to brake shoes. Cast iron brake discs with radial internal fins for rapid heat dissipation. Independent mechanical parking brake system—6.5'' diameter internal drum with two shoes and riveted linings at each rear wheel. Parking brake operation by T-handle control to left of steering column.

Mufflers

Long-life dual reverse-flow type mufflers fabricated of highly corrosion resistant materials. For specific information see Power Teams section—Engine Specifications, or Feature Details section.

Wheels and Tires

Welded steel short-spoke spider type 15'' wheels with special cooling slots to circulate air around brakes. Rim width—5.5''. Black sidewall highway rayon 7.75 x 15 2-ply (4-ply rating) tires standard . . . white sidewall tires available. All wheels and tires statically balanced for smoother, quieter operation and longer tire life. For additional information, see Tires in Feature Details section; other tires listed in Options and Accessories section.

SPECIAL CHASSIS EQUIPMENT—For complete list of special options see Options and Accessories section.

CORVETTE FACTORY-INSTALLED OPTIONAL* EQUIPMENT

RPO

AIR CONDITIONING, FOUR-SEASON-Not available with 425-hp V8 engine. Includes 61-ampere	
Delcotron Generator	C60
AXLE, POSITRACTION REAR—See Power Teams, page 4, for available axle ratios	G81
BRAKES, HEAVY-DUTY – 425-hp V8 engine and Power Brakes required	J56
BRAKES, POWER	J50
ENGINES:	
350-hp 327-cuin. V8	L79
390-hp Turbo-Jet 427 V8 — Positraction axle re- quired	L36
425-hp Turbo-Jet 427 V8 – Positraction axle and Full Transistor Ignition system required	L72
EXHAUST SYSTEM — Off-road service. Available with 3- or 4-Speed transmissions	N11
EXHAUST SYSTEM, DUAL SIDE MOUNTED-Off- road service only	N14
GLASS, SOFT-RAY TINTED-All windows	A01
GLASS, SOFT-RAY TINTED-Windshield only	A02
GM AIR INJECTION REACTOR —California registered vehicles only. Not required with 425-hp V8 engine	K19
	K15
HARDTOP, REMOVABLE—Fiber glass hardtop op- tional at no extra cost in place of convertible folding top, or in addition at extra cost	C07
HEADRESTS, STRATO-EASE	A82
HEATER AND DEFROSTER DELETION - Credit	
option. Not available with Air Conditioning	C48
IGNITION SYSTEM, FULL-TRANSISTOR-Available with 350-, 390- and 425-hp V8 engines	K66
LEATHER SEAT TRIM —Available in Black, Red, Dark Blue, Bright Blue, Saddle and Silver. See Sales Album, Colors and Fabrics section.	

	RPO
RADIO AND POWER ANTENNA, AM-FM	U69
STEERING COLUMN, TELESCOPIC	N36
STEERING, POWER	N40
STEERING WHEEL, GENUINE TEAKWOOD	N32
SUSPENSION, SPECIAL-PURPOSE FRONT AND REAR —Includes special springs, matching shock ab- sorbers, and special front and rear stabilizer bars. Available with 425-hp V8 only	F41
TANK, FUEL—36-gal. For Sport Coupe only. In- cludes wheelhouse filler panel	N03
TIRES: For additional information, see Tires in Feature Details section.	
7.75 x 15–Blackwall, highway rayon 2-ply (4-ply rating) tubeless	ndard
7.75 x 15 —Whitewall, highway rayon 2-ply (4-ply rating) tubeless	P92
7.75 x 15 —Gold Stripe, special nylon 2-ply (4-ply rating) tubeless	T01
TOP, CONVERTIBLE —Choice of white, black, or beige. See Sales Album, Colors and Fabrics section	C05
TRAFFIC HAZARD WARNING SYSTEM	V74
TRANSMISSIONS:	
Powerglide-With 300-hp V8 engine only	M35
4-Speed Fully Synchronized – (Wide-Range). Available with 300-, 350- and 390-hp V8 engines	M20
4-Speed Fully Synchronized – (Close-Ratio). Available with 350-, 390- and 425-hp V8 engines	M21
WHEELS, SPECIAL CAST ALUMINUM-Set of five 15 x 6L wheels. Includes four adapters, four 3-	
lug knock-off hubs, and special knock-off ham- mer	P48
WINDOWS, POWER	A31

CORVETTE DEALER-INSTALLED CUSTOM FEATURE ACCESSORIES*

	Part No.
ANTENNA, ELECTRIC-Left Rear	986305
CAP, LOCKING GAS FILLER	985919
CARRIER, DECK LID-Sport Coupe only	986469
CARRIER ADAPTER, DECK LID	986451
COMPASS	986298
EMERGENCY ROAD KIT	986792
EXTINGUISHER, FIRE-23/4-lb. dry chemical	985592
EXTINGUISHER, FIRE-5-lb. dry chemical	986276
EXTINGUISHER, REFILL KIT	985593
FLOOR MAT, FRONT CONTOUR-Clear Vinyl	985882
LAMP, PORTABLE SPOT	987112

LITTER CONTAINER—Saddle Type Black	986602 986603
MIRROR, INSIDE-Non-Glare	986600
RADIO AND POWER ANTENNA, AM-FM 327-cubic-inch engine 427-cubic-inch engine	986476 986478
TISSUE DISPENSER—Instrument panel mount (Not available with Air Conditioning)	ed 986408
TISSUE DISPENSER—Saddle type Black 986609 Blue 986604 Red	
TOOL KIT	988032
TRAFFIC HAZARD FLASHER SYSTEM	986639
*E	xtra cost

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Part No.