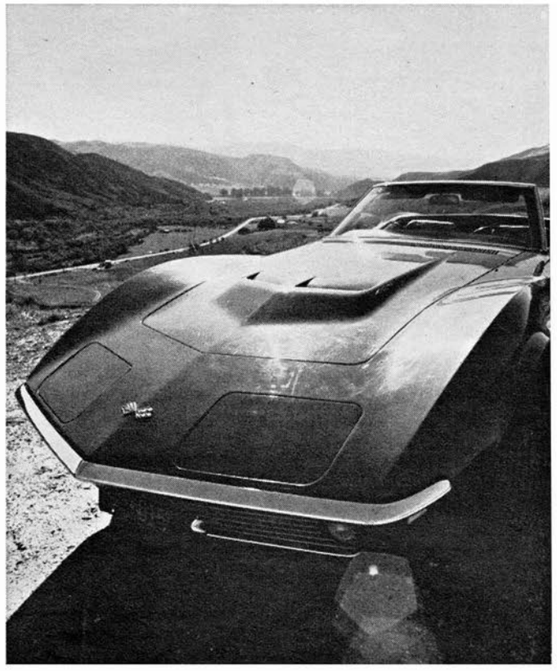
SPORTS CAR TOURNAMENT: COBRA vs. CORVETTE

By Steve Kelly



Comparison shows Shelby car has much to do before overwhelming well-established 'Vette.

Just on a subjective basis, comparison between these two is scant. Appearance is vastly different, and on that basis alone, there'd be no stacking them against one another. But they do hit "head on" in the marketplace, and no matter how much either maker likes or dislikes it, they have to meet somewhere. If not in the showroom, then it might as well be here.

The Cobra costs less. Very few options are listed, so a full list Cobra adds up to fewer dollars than a full list Corvette with near-comparable equipment. Resale value may show a higher rate of depreciation, and the Corvette has more in the way of standard equipment goodies. Things like lamp-monitors, 4-wheel disc brakes, flow-through ventilation, forward opening hood, and independent rear suspension are standard Corvette items not even available for the Cobra.

Maintenance will show up as being less on a 428 Cobra than a 427 Corvette. This applies to only the biggest engined cars, and based on the smallest engined versions, it is about a draw. The Cobra, using the Mustang for a birthplace, is more readily acceptable in the average garage, but anyone who kicks out $4500 or so for *any* car isn't going to trust the "average" garage for service. He'll go to a specialist, where he will most likely find a Corvette. A draw here too.

Insurance rates are way over in the Cobra's favor. Being mostly steel, body repair costs are significantly lower than for the 'glass Corvette. There's also a reputation factor involved. In its 16-year life, 'Vettes have managed to become unwanted merchandise around many insurance offices. The feeling is — and justifiably so in lots of cases — that the Corvette driver is more likely to become engaged in an accident than if he were driving a more domesticated vehicle.

More people can fit in the Cobra, but judging from letters submitted in response to our '67 article comparing the two, not many people care. About the last thing either car is bought for is carrying the gang around town. Luggage though, is a more acceptable item in the Cobra. The small space behind the Corvette seats will take one or two suitcases, while the trunk and rear seat of the Cobra can hold many more.

Comfort-wise, the Corvette is nicer for drive. The seats don't wear you out on a long trip, nor give you bad aches where they most hurt. Entry and exit are easier in the Cobra since it's higher.

To park the Corvette takes some expertise in deciding where the nose ends. It drops down out of sight long before it ends. This problem exists to a much lesser degree in the Cobra.

True handling and acceleration are best handled by the Corvette. The wide-pattern tires (new, optionally for '68) make it superior to anything made in quantity production in the U.S. And that 427 "rat motor" is an engine which has left every other maker envious. Of course, a MoPar Hemi 426 seems to get the job done a bit better, but at more cost, and besides, you can't get it in the Cobra.

The comparison is here, and in a good number of instances it is straight across. Each has good and bad points, and each has distinctiveness all its own.

One of our office experts claims Shelby-American's last "good" Mustang based car was the '66. We go along with him — almost. The '66 was much more of a sports car than the '67 and '68, but finding a market for it was harder. Performance was there for the real hard-core rough-riding enthusiast, but their number is vastly overwhelmed by the buying group preferring both power and comfort. For Shelby-American and Ford's sake, the last two years have proved better cars, sales and acceptance being the criteria.

In a sense, Shelby has sold out to the add-on and chrome-it establishment. The new cars are more decorated than the old and show strains of having too much ornamentation. The convertible model seems especially so, with too many lines going too many ways.

Because of the now historic Ford assembly line strike, we were only able to obtain a GT 500 for instrumented testing. However, at the preview last summer of '68 Shelby products, we lived with the GT 350, 302-cu.-in. V-8 powered car for a brief session. It lacks substantially in power when compared to its earlier mates, but then has less horsepower. A hydraulic cam and cast iron exhaust manifolds are used, and they tend to tame the power and noise. It is many degrees quieter than the old 306-hp "street" combination on '67s, but is likely to please more than it will offend by this virtue.

Our GT 500 convertible came with the standard 428-cu.-in. V-8, and endeared itself to us by exhibiting calm behavior. It likes to eat gas, but otherwise seems no different from a 390-cu.-in. Mustang. Performance is substantially better than a 390, but not as much as you'd expect. This is more of an engine for "I want power" advocates than anything else. We doubt it'll beat any 427 Corvette for acceleration, and it falls in a bad class for drag racing, per NHRA specs. The size puts it out of contention for sedan racing, so the 428 is relegated to street duties primarily. At that, it is fine.

Slow speed operation isn't cause for trouble. Response from idle or sub 20-mph speeds is quite good. We had a Cruise-O-Matic transmission in our test GT, and prefer it for normal use. Shifting is crisp, and happens at reasonable speeds. Kickdown is easy, and you can usually reach passing-gear at all maximum speed limits.

The gear selector is of the "sport-shift" type, making for manual control throughout. Second gear has a high-speed monitor preventing over-revving on downshifts. The driver is responsible for this on upshifts. Gear changing on full throttle runs requires a 200-300 rpm anticipation. In other words, if you want to shift at 5500 rpm, better move the lever at 5200.

The 428 will live at 6000 rpm, but better times will come about shifting at 5500. Torque is hefty enough to slip the tires between 1st and 2nd, as well as from standstill.

Handling, Steering & Stopping

Suspension is less of a "springless" proposition than exhibited in '65-'66 GTs, but still firm. Relocation of the upper front control arms as was done in the early models isn't needed in the new Cobras. Expense and ride harshness rose with this move, and few people understood its value. The overall suspension is very close to Ford's own performance-handling option, yet the Shelbys have an edge. High-speed straight-line driving isn't at all abusive, and the cornering work is a safe proposition. We like cars with firm control, and found this in the Shelby Cobras.

Steering is right out of Mustang land. At least the feeling of "plasticity" is. Response is not at all like the Corvette's, and there just seems to be unwanted lag in the unit. The steering wheel is not up to sports car standards. We've a good idea Shelby folks agree here, but the standard wheel meets Federal specs for impact absorption, and a wood rimmed steel-spoke flat disc doesn't (such as the '67 item). It protrudes closer to the driver's chest than is comfortable, causing us to "kink" our arms even with the seat at full travel. We're not positive of the ruling for or against owner installation of the old-style wheel, but we'll bet it will be done often.

continued

Photos: Bob D'Olivo, Pat Brollier

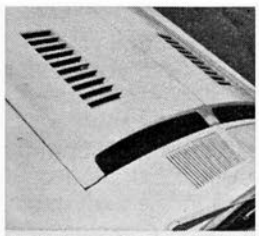
Shelby-American has sold-out to the "chrome-it" and "add-on" establishment. Ungainly roll-bar is best kept covered by the convertible top. Mustang interior has been added to, but not improved. Imitation mag wheel covers add final, phony touch.

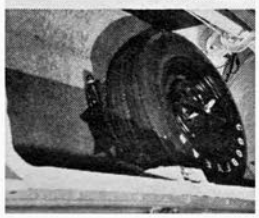
Big Ford 428-cu.-in. V-8 is overly generous with torque, and acceleration is a roller-coaster thrill with Cobra. Louvers are functional and useful, but placed directly over spark plugs.

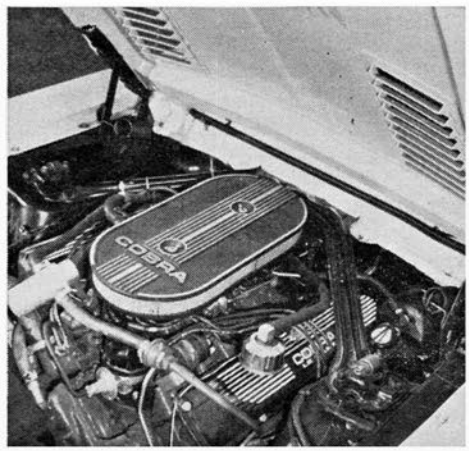
COBRA POWERTEAMS

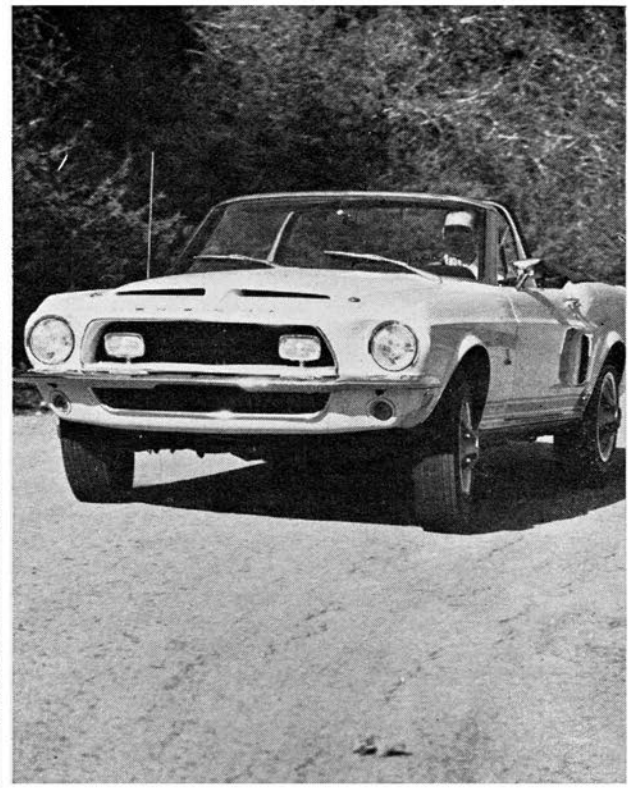
Displacement	Carburetion	Horsepower-Torque	Transmission
V-8 302[1]	4-bbl.	250 @ 4800 rpm	310 lbs.-ft. @ 3200 rpm	4-speed Cruise-O-Matic*
V-8 428[2]	4-bbl.	360 @ 5400 rpm	459 lbs.-ft. @ 3200 rpm	4-speed Cruise-O-Matic*
V-8 427*	4-bbl.	400 @ 5600 rpm	460 lbs.-ft. @ 3200 rpm	4-speed Cruise-O-Matic*

1. Std. 6T350 engine 2. Std. GT500 engine *optional









Stopping GTs is about like stopping Corvettes; no trouble at all. The front disc/rear drum setup is power assisted, using FoMoCo's "floating" caliper front brake. The rear drum is revised over the standard Mustang with a 10-inch diameter x 2¼-inch wide drum. High-performance lining material is used.

Braking is straight, quick and free from serious fade. Use of the Goodyear E70x15 high-speed tires contributes heavily by planting lots of rubber on the asphalt.

Comfort, Convenience & Ride

We'd like to see better front bucket seats in the Cobras. While those in use are fairly comfortable, they get tiresome after 90 minutes driving, or more. They are deluxe Mustang units, with good construction but a need for more seat padding for all-out comfort. The seatback is too straight, and could be neatly reclined a degree or two. Our test convertible had a crooked seatback, and though repairable, it is really a nuisance.

Addition of a center console to all '68 Cobras is a great idea, though decorating it with paper woodgrain applique is not. It's easily identifiable as paper and shows less class than vinyl covering. The just-right height armrest hides a huge storage bin. Because of the near-nothing capacity of Mustang gloveboxes, Cobra owners really make out. If the door armrest were as comfortable as the console pad, things would really be looking good.

Rear seat entry in either coupe or convertible is worthy of study. Some prefer stooping and diving under the roll bar in the convertible and through the shoulder harnesses on the fastback. Others manage to delicately thread their way in, turn around facing forward, then sit down contentedly. We never did set a pattern, but somehow managed the manuever. It's not all that bad, but a long way from having the convenience of a sedan.

Ride is, of necessity, stiff. Bounce is somewhat hard, but we didn't once incur loss of rear wheel traction over hard dips. The best description might be that you know it is stiff, but nothing more. The cars handle the job of plain riding in good style. This new ride-pattern is about halfway between stock Mustang and that of the "rough rider" '66 GT.

Plus & Minus Features

It might be a good idea to further separate the fog light switch from the convertible top button. They're right next to each other, and at night, without lights, it'd be easy to rip the top right off its anchors.

Another "better idea" would be to soften the trunk torsion bars. After removing the stock sheetmetal panel and replacing it with fiberglass, the hinges have much less weight to carry, and consequently spring the trunk up like a flag in a shooting gallery.

That great big "hatch" type hood interferes with forward vision, cutting off several feet of right-in-front sight.

The hood pins used to release the panel are neat, taking only a turn to undo them. They stay with the hood when raised so theft or loss is discounted. Functional louvers on each side allow air to escape, but we noticed the openings are right over the plug wires, with no deflectors for water being included. We louvered a hood once and put an aluminum panel below the louvers angled down and to the side of the engine compartment. If we can do it, anyone can!

Shelby's integrated roll bar idea deserves high praise. It also deserves to be copied. Any convertible is potentially more dangerous than a hardtop, and occupants lives are worth more than an additional few dollars of tubing.

Cobra shoulder belts are the best yet. The hardtop uses suspender type restraints, stemming from a single strap into an inertia reel harness, allowing slow body movement but locking up on sharp impact. The convertible restraint is housed in the rear quarter panel, pulling out and fitting against the front occupant's chest, and fastening to a center tunnel mounted buckle strap. The inertia reel is featured here also.

The "establishment" has had its impact on Shelby-American, and they've succumbed and resisted. Styling reflects the adoption of the "great" philosophy, but performance and safety still are Shelby's own exclusives.

Getting emotionally "hung up" on the Corvette styling takes somewhat longer than becoming enthused over its great driving characteristics — but not much. Getting in and out is more of a chore than on earlier models, but like styling and ride, is only a matter of accommodating one's particular personality.

From the looks of things, it appears that Corvette assembly line workers are taking time getting used to putting the new model together. Rough panels and ill-fitting sections, highly evident on early-run cars, indicate some practice is needed before perfection could be neared.

Our test cars were both convertibles. One came with a 327-cu.-in., 350-hp V-8, the other with a 427-cu.-in., 435-hp "semi-hemi" head engine. Compression on both is 11.0:1, and only 4-speed transmissions are offered here.

The 327 engine uses a single 4-bbl. Rochester carb and quiet running hydraulic cam and lifters. Lift is .4472-inch on intake and exhaust, with 306-degree opening duration on each. Valve opening overlap is 78 degrees, and valve head diameter is 2.02 inches for intake, and 1.60 inches on the exhaust.

Noise out of the engine room doesn't herald an "over-one-hp-per-cubic-inch" engine lurking there. A 3.70:1 final drive gear kept our top speed down to an exacted 117.15 mph at 5500 rpm. The 0-60 mph times and quarter-mile runs could be greatly improved by a stronger clutch and drag tires, but we weren't all that disappointed with the cars' recordings. City traffic operation was so near-perfect that we accepted the semi-compromise between "rump-rump" idling and reliability with praise. Some experimenting with tires and tuning will drop the 350-hp 'Vette into the mid 13-second bracket without difficulty.

The 435-hp test machine had Chevy's L88 aluminum head option, and frankly we thought it'd go quicker than it did. Tuning time was shortened by inclement weather, so we had to settle for 14-second quarter-mile times. But our earlier 427 cars ('66 & '67) both hit the 13s right off the bat. The '68 in proper tune should be high 12s in proper tune. The majority of drag-strip disciplined Corvettes hit the low 12-second mark, with a good many in the 11-second bracket. The potential is undoubtedly there.

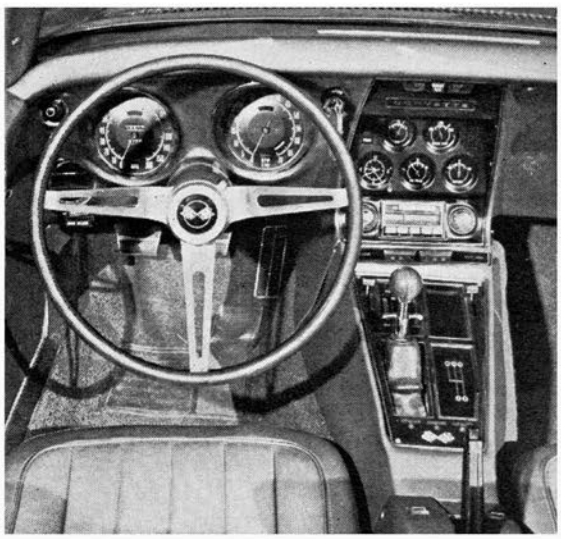
We encountered trouble getting the triple carburetion to work in unison. Several times, the front and rear Holley 2-bbls. refused to work. Some jerry-rigging on the vacuum linkage helps, but there's no substitute for mechanical actuation — available at most speed or specialty shops.

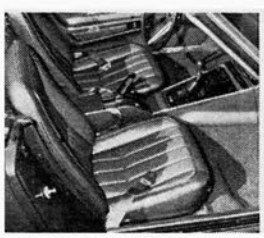
This big engine objects to long idling periods, but cleans out quickly once on the move, with only a small amount of plug fouling. Clutch action is stiff, allowing the driver to object to idling time also. The throw is much shorter than on the 350-hp engine, negating much worry about the pedal hanging-up between power shifts.

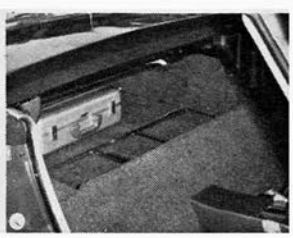
Solid lifters are used on all 435-hp engines. Valve diameter is 2.190-inch intake, and 1.720-inch exhaust. Lift is .5197-inch on both, intake opening duration is 316 degrees and exhaust is 302 degrees with overlap being 80 degrees.

Handling, Steering & Stopping

Handling, both on twisting roads and straight-arrow







Corvetter interior is well laid out; all gauges are easily visible. Seats are extremely comfortable, but when driver seat is in full rear position, safety latch is impossible to reach. Handling and steering are excellent.

CORVETTE POWERTEAMS

1. Std. GT350 engine	2. Std. GT500 engine	*optional
V-8 327 4-bbl. 300 @ 5000 rpm	360 lbs.-ft. @ 3400 rpm	3-speed 4-speed* Turbo-Hydra Matic
V-8 327* 4-bbl. 350 @ 5800 rpm	360 lbs.-ft. @ 3600 rpm	4-speed* (close or wide ratio)
V-8 427* 4-bbl. 390 @ 5400 rpm	460 lbs.-ft. @ 3600 rpm	4-speed* (close or wide ratio) Turbo-Hydra Matic
V-8 427* 3 2-bbl. 400 @ 5400 rpm	460 lbs.-ft. @ 3600 rpm	4-speed* (close or wide ratio) Turbo-Hydra Matic

stretches is improved over '67 by at least 100%. Introduction of wide-pattern tires — 7-inch wide wheels — as standard gets most of the credit. Also making big contributions are the reduced height (approx. 2 inches), wider rear track (.7-inch). Terming it a truly stable road car is far from exaggeration.

Manual and power steering units are quick to react. Power can't be had with the 435-hp engine, but we didn't mind. Only 3.4 turns of the 16-inch diameter wheel takes it from lock-to-lock, and only 2.92 are needed with power. Overall ratio on manual is 20.2:1, and 17.6:1 with power. Suspension feedback and/or sloppiness is not a problem here. It just doesn't exist.

Understeer is fairly inherent, but constant adjusting of the wheel isn't required while rounding curves. Once set — it stays. Oversteer is only a problem, or condition, encountered with the rear end braking loose.

Since '65, poor stopping Corvettes haven't been produced. With disc brakes at all 4-corners, they just plant themselves to the ground and come to rest straight and quick. Less than 120 feet from 60 to 0 mph (a distance we repeatedly accomplished) is something to write home about.

The 'Vette's 4-wheel disc brakes remind us of the auto company spokesman who recently defended his company's non-use of them by explaining difficulites in adapting a suitable parking brake to the system. Hmm? Wonder how Mercedes, Porsche, Volvo, Chevrolet, etc. did it? Gee!

Comfort, Convenience & Ride

Stetson wearers will find ample space for their headgear — behind the front seat. Rooflines are low, negating hat wearing.

Otherwise, headroom is not a problem. Nor is legroom a limiting factor. We did find that a 6-footer, or thereabouts, develops a tired leg on all but full throttle runs. Moderate gas pedal application causes the driver's knee to bend without having adequate thigh support. A large, softly upholstered roll, à la hot-rodders technique on channeled cars, would do away with the annoying non-support.

The semi-reclining seatbacks are enjoyable. We found ourselves hunching forward at first, but then learned to settle back, giving us plenty of comfort and also a just-right distance to the wheel.

Ride qualities of all but the biggest engined car are surprising. Bounce and rebound are relatively calm, especially for a sports car. The inside quietness is something we never expected in a 2-placer, though a good many imported sporty cars have this. The flow-through ventilation works, making for windows-up driving in all but the hottest weather.

Difficulty in entry and exit — for the average person — is just something sports car owners should expect. Considering this car is short of four feet in height, we'd have to rate it good.

Plus & Minus Features

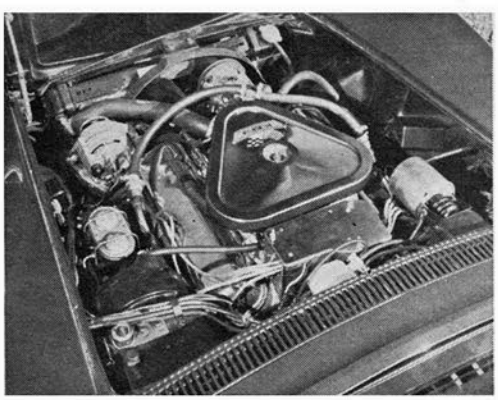
"Rain, Rain, go away." We sang that song for a solid week. The Corvette handles admirably in the wet, but passengers didn't fare too well in our test convertible. The 350-hp car came with the removable hardtop, and oddly enough it leaked, and the soft top didn't. We found the major source of water-fill at the rear corners of the side windows, but weren't able to fix it on our own. A couple of comments on this have drifted in from '68 owners, and though they've cured the ill, it was a nuisance.

The hidden wipers should help prolong blade life, and they undoubtedly benefit appearance. We had a difficult time explaining this to the gas station attendant who gashed his finger on the non-flush fitting door edge corner. Seems something was keeping the cover from going flush to the cowl, and he found out about it the hard way.

The glove compartment is behind the seat, along with the other identical-looking hatches. One holds the jack, and the other — right behind the driver contains the battery. Be careful which one you reach for.

Using the press-type door handles is easy, but a couple of drawbacks were illustrated to us. Ladies are prone to breaking fingernails in the spring-acted door-top grip, and closing the door and locking it GM-style takes some deft hand movement.

Regardless of its few distinct minus points, the Corvette still holds the position of one of the world's all-out "class" vehicles, and justifiably so. Kinda wish we had one.



Raw power is Corvette symbolism, and five different engines are available for '68 in 327- and 427-cu.-in. sizes. Road handling is much improved over '67 models. Suspension got stiffer.

PERFORMANCE

	Cobra 428	Corvette 327	Corvette 427
Acceleraton (2 aboard)			
0-30 mph	3.0 secs.	3.2 secs.	2.7 secs.
0-45 mph	4.3 secs.	4.8 secs.	4.0 secs.
0-60 mph	6.5 secs.	7.1 secs.	6.3 secs.
0-75 mph	9.4 secs.	10.0 secs.	8.3 secs.
Passing Speeds			
40-60 mph	2.5 secs.	3.1 secs.	2.7 secs.
	183.0 ft.	227 ft.	197 ft.
50-70 mph	3.0 secs.	3.6 secs.	2.9 secs.
	264 ft.	316 ft.	255 ft.
Standing Start	14.75 secs.	15.0 secs.	14.1 secs.
Quarter-mile	98 mph	92 mph	103 mph
Speeds in Gears			
1st . . . MPH @ RPM	47 @ 5500	53 @ 5500	66 @ 6500
2nd . . .	79 @ 5500	71 @ 5500	88 @ 6500
3rd . . .	116 @ 5500	92 @ 5500	116 @ 6500
4th . . .		117 @ 5500	160 @ 6500
MPH per 1000 RPM	21.1	21.2	24.7
Stopping Distances			
from 30 mph	39 ft.	27 ft.	29 ft.
from 60 mph	151 ft.	117 ft.	119 ft.
Speedometer Error			
at 60 mph	5% fast	6% fast	none
Mileage Range	9.0-15.0 mpg	10.6-20.0 mpg	7.8-17.5 mpg
Average Mileage	12.8 mpg	15.7 mpg	13.6 mpg

TEST CAR SPECIFICATIONS

Engine	OHV V-8	OHV V-8	OHV V-8
Bore & Stroke	4.13 x 3.984 ins.	4.0 x 3.25 ins.	4.25 x 3.76 ins.
Displacement-cu. in.	428	327	427
HP @ RPM	360 @ 5400	350 @ 5800	435 @ 5800
Torque: lbs.-ft. @ RPM	459 @ 3200	360 @ 3600	460 @ 4000
Compression Ratio	10.5:1	11.0:1	11.0:1
Carburetion	1 4-bbl	1 4-bbl	3 2-bbl
Transmission	Automatic; 3-speed	Manual; 4-speed	Manual; 4-speed
Final Drive Ratio	3.50:1	3.70:1	3.55:1
Steering	Recirculating ball & nut w/power assist	Recirculating ball & nut w/power	Recirculating ball & nut. Manual
Overall Steering Ratio	2.03	17.6:1	20.2:1
Turning Dia. — curb-to-curb	39.4 ft.	39.9 ft.	39.9 ft.
Wheel turns — lock-to-lock	3.6	2.92	3.4
Tires	E70 x 15 hi-speed	F70 x 15	F70 x 15
Brakes	front disc/ rear drum with power assist	4-wheel disc with integral power	4-wheel disc with integral power
Fuel Capacity	17 gal.	20 gals.	20 gals.
Curb Weight — lbs.	3665	3445	3425
Body Frame Construction	Steel unit	Ladder frame	Ladder frame
Wheelbase — Ins.	108	98	98
Front Track — Ins.	58.1	58.3	58.3
Rear Track — Ins.	58.1	59.0	59.0
Overall Length — Ins.	186.81	182.1	182.1
Width — Ins.	70.9	69.2	69.2
Height — Ins.	51.8	47.8	47.8
Front Suspension	Independent with coil spring	Independent with coil spring	Independent with coil spring
Rear Suspension	Hotchkiss type w/semi-elliptic multi leaf spring	Independent with fixed differential and multi-leaf transverse spring	

COMMENTS

	Cobra	Corvette
Handling	Better than most domestic cars – firm with plenty of control – just slightly below that of all-out sports car.	Best of all U.S. cars, and one of the upper echelon of sports "handlers."
Ride	Stiff but not abusive.	Good on all but the big-engined. 435-hp cars are abusive to passengers.
Comfort	Not bad, but seats could stand refinement. Rear seat room is very marginal.	Very good on long trips as well as in-town. Interior access is difficult for all but the very agile.
Quality	Surprising. Vast improvement over '67s.	Needs upgrading, but is progressively getting better.
Performance	Adequate for car's intended use.	Good, and better than its competitor. Has the best potential.
We like	Most of the styling – ease of operation – shoulder harnesses and roll bar.	Style – instrumentation – lamp monitors – 4-wheel disc brakes – good tractability.
We don't like	Phony "mag" hubcaps that ruin looks – too light trunk lid and too-open hood louvers – obstructed forward vision – lack of greater distinction from Mustang.	Leaky bodies – front ends that end past line of vision – unreachable left seat-back release – absence of control lighting and good interior illumination.

OPTIONS & PRICES

	428 Cobra	427 Corvette
Mfg's Suggested Price	$4317.39 Coupe	$4636.00 Coupe
	$4438.91 Converitble	$4320.00 Convertible
Engine Options		105.35 350 hp
		200.15 390 hp
		305.50 400 hp
		437.00 435 hp
4-Speed Trans.	Standard	184.35
Auto Trans.	50.08	237.00
Limited-Slip Diff.		46.35
Hi-Perf. Tires	Standard	31.30
Special Susp.	Standard	36.90
HD Ignition	N.A.	73.75
Adj. Steer. Col.	66.14	42.15
Power Steering	84.47	94.80
Power Disc Brakes	64.77	42.15
Power Windows	N.A.	57.95
Air Conditioning	356.10	412.90
AM Radio	57.59	N.A.
AM/FM Radio	181.36 (Stereo)	172.75
Fold-Down Rear Seat	64.78	N.A.