



TWO SHELBY GT 350s

Shelby Mustangs, cool and hot



CARROLL SHELBY'S GT 350 has come a long way. It was introduced in 1965 and started out as a much-modified, light (2800 lb), hot (306 bhp from 289 cu in.), hairy-chested version of the Mustang fastback and listed for a little over \$4500. In 1967 Shelby backed off a bit on the trim items and lowered the price to more like \$4100, and as the production Mustang grew in size so did the Shelby. The GT 500 version came along in 1967 too, with the heavy 428-cu-in. engine dropped in.

In 1968 the cycle is almost complete. The GT 350 now carries a mild, hydraulic-lifter version of the newly enlarged 289, or 302, and in its standard form is almost undistinguishable from the regular production Mustang 302 in per-

formance and handling. No longer are alloy wheels standard, and last year's standard inertia-reel safety harnesses are now optional. The GT 350 now weighs over 3300 lb, requires power steering for parking and, in basic form, should be considered a Mustang with a racy-looking trim package. For really hot performance one must move on, past the hydraulic-lifter 428 GT 500 to the full-house 427 version.

All the external identifying marks are still there, to be sure. The front end is extended many inches by the distinctive fiberglass hood and frontispiece; the hood is full of scoops and vents, both real and imagined; the sides are adorned with false scoops; and the rear end has a "spoiler" →



TWO SHELBY GT 350s ATA GLANCE

Price as tested.....	\$5368
Engine.....	V-8, ohv, 4949 cc, 315 bhp
Curb weight, lb.....	3335
Top speed, mph.....	119
Acceleration, 0-1/4 mi, sec.....	14.9
Average fuel consumption, mpg.....	13.5
Summary: high-output hydraulic lifter engine is strong & quiet but very expensive . . . good emergency braking but lots of fade . . . high hood makes traffic maneuvering difficult . . . the best passenger restraint system available for production car.	



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in the Detroit sense. But the original idea of the GT 350—that of making the Mustang as nearly as possible a sports car—has clearly faded into the dim past. And if it can be argued that the GT 500s are faster, it is also true that they are still further away from the original idea.

Why the evolution? Well, this is the way Ford does things. And now Ford, not Shelby, is producing the "Shelby" cars. Hardly had the ink dried on the 1968 press releases for the Shelby cars before Ford was offering several of the Shelby figerglass trim pieces in a trim package for the Mustang called GT/CS (California Special). Ford seems to have two principles of operation exemplified by all this: (1) if you've got a good thing, make it bigger and it'll be still better, and (2) if you hit upon a look that's popular, make all your cars look that way.

But Shelby still retains some control over the cars that bear his name, and to try to recapture some of the distinctiveness the name did imply—and to counter that high performance item from Chevrolet, the Camaro Z-28 (see p. 69)—has persuaded Ford to offer a new high-performance package for the GT 350. This package is the subject of this test, although we also tried a regular 350 complete with automatic transmission and air conditioning to see what the basic car is like these days.

The GT 350's standard engine is a hydraulic-lifter 302, developing 250 bhp @ 4800 rpm and featuring smooth, torquey performance with a smooth, slow idle. To the basic price of \$4287 for the cooler version, the high performance package adds \$692 and includes these items: special cylinder heads with larger valves (intake 1.875 in., exhaust 1.600 vs. 1.773 and 1.442), higher compression ratio (11.0 vs. 10.5), an aluminum high-riser intake manifold with a 715-cu-ft/min Holley 4-barrel carburetor (vs. an Autolite rated at about 650 cfm), a camshaft that still works with hydraulic valve lifters but gives greater duration (6° greater intake, 8° greater exhaust), limited-slip differential, stiffer rear

springs and supplementary anti-windup leaves added to the front underside of the rear springs. No changes are made to the front suspension. Official figures weren't available at the time we tested it but the factory people estimated it as having 315 bhp @ 5000 rpm and 333 lb-ft torque @ 3800.

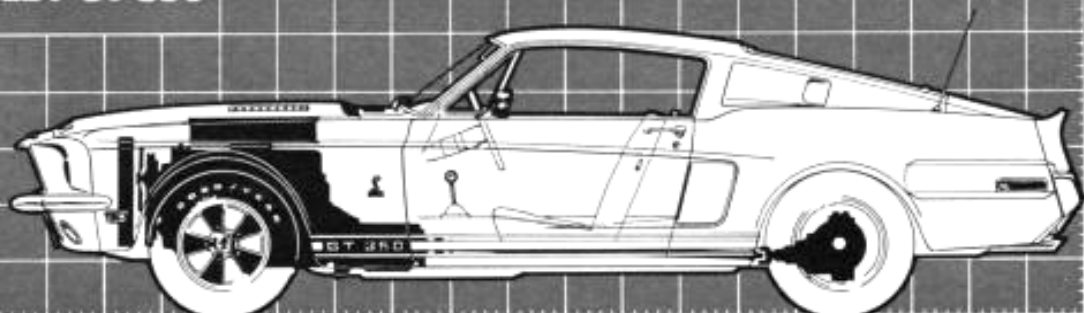
In operation the tweaked 302 is very little noisier than the mild one; with hydraulic lifters there's no valve clatter and the pleasant exhaust note (achieved with silencer nodes rather than the usual mufflers) is just a bit throatier. Instead of the smooth 600-rpm idle there's a rather lumpy 800-rpm speed but otherwise the engine is thoroughly tractable and without a sign of temperament. It has a useful rev range up to 6000 rpm and will touch 6400 before the valves float—in contrast to the standard engine's top limit of 5100. Hydraulic lifters have, indeed, come a long way.

Through the 1/4-mile the hot GT 350 is a close match for the Z-28. It gets off the line in a much stronger manner and thus jumps well ahead of said Chevrolet; the Z-28 is just passing the 350 at the 1/4-mi mark and going 6 mph faster—demonstrating that it is developing more power. The Ford is then limited by engine speed to a top of 119 mph (6400 rpm) whereas the Z-28 goes on to 132 mph (7100 rpm). Both the Z-28 and the hot 350 had 4.1:1 final drives.

Ford's own 4-speed manual transmission is standard in the 350. Its 10.5-in. clutch transmits the torque without slip or chatter and with reasonable pedal efforts, and it caused no problems in shifting at the peak engine speed. Shift linkage is precise but a little stiff and long of travel; synchromesh is unbeatable but slightly obstructive.

Power-assisted steering and brakes in the 350 follow expected U.S. practice: too much assistance, not enough feel. The 350 is a reasonably neutral, flat-cornering car but driving it fast over winding roads is a tricky proposition until one learns to steer and brake without the benefit of feedback information from the tires. Steering is reasonably quick at 20.3:1 overall, and brake performance isn't bad with the standard disc/drum setup; but all the fun is taken out by the dumb, numb power assists—both of which must be considered mandatory options because of the car's weight.

For the driver, the GT 350 (and any Mustang, of course)



SCALE: 1/4" = 1" OVERALL

PRICE

Basic list	\$4287
As tested	\$5368

ENGINE

Type	V-8, ohv
Bore x stroke, mm	101.6 x 76.3
Equivalent in	4.00 x 3.00
Displacement, cc/cu in	4949/302
Compression ratio	11.0:1
Bhp @ rpm	315 @ 5000
Equivalent mph	93
Torque @ rpm, lb-ft.	333 @ 3800
Equivalent mph	78
Carburetion	one Holley 4V
Type fuel required	premium

DRIVE TRAIN

Clutch diameter, in	10.5
Gear ratios: 4th (1.00)	4.11:1
3rd (1.29)	5.30:1
2nd (1.69)	6.94:1
1st (2.32)	9.53:1
Synchromesh	on all 4
Final drive ratio	4.11:1

CHASSIS & BODY

Body/frame: unit steel construction	
Brake type: 11.3-in. vented disc front, 10 x 2.25-in. drum rear; power assisted	
Swept area, sq in	325
Wheel	steel disc, 15 x 6JJ
Tires	Goodyear Speedway E70-15
Steering type	recirculating ball
Overall ratio	20.3:1
Turns, lock-to-lock	3.7
Turning circle, ft	37.6
Front suspension: unequal-length A-arms, high coil springs, tube shocks, anti-roll bar	
Rear suspension: live axle on multi-leaf springs, adjustable tube shocks	

OPTIONAL EQUIPMENT

Included in "as tested" price: performance & handling package, power steering & brakes, AM radio, inertia-reel harnesses, folding rear seat, tilt steering wheel

Other: supercharger, alloy wheels

ACCOMMODATION

Seating capacity, persons	4
Seat width, front/rear	2 x 21.0/2x16.0
Head room, front/rear	40.0/35.0
Seat back adjustment, deg	0
Driver comfort rating (scale of 100):	
Driver 69 in. tall	80
Driver 72 in. tall	80
Driver 75 in. tall	75

INSTRUMENTATION

Instruments: 140-mph speedometer, 8000-rpm tachometer, oil pressure, ammeter, fuel level, water temp, clock

Warning lights: high beam, directional, alternator, brake fluid loss, emergency flasher

MAINTENANCE

Crankcase capacity, qt	5.0
Change interval, mi	6000
Filter change interval, mi	6000
Chassis lube interval, mi	36,000
Tire pressures, psi	24/24

MISCELLANEOUS

Body styles available: coupe as tested; convertible

Warranty period, mo/mi: 60/50,000

GENERAL

Curb weight, lb	3335
Test weight	3640
Weight distribution (with driver), front/rear, %	55/45
Wheelbase, in	108.0
Track, front/rear	58.1/58.1
Overall length	186.8
Width	70.9
Height	51.8
Frontal area, sq ft	20.4
Ground clearance, in	4.9
Overhang, front/rear	33.2/40.5
Usable trunk space, cu ft	5.6
Fuel tank capacity, gal	16.0

CALCULATED DATA

Lb/hp (test wt)	11.6
Mph/1000 rpm (4th gear)	18.4
Engine revs./mi (60 mph)	3260
Piston travel, ft/mi	1630
Rpm @ 2500 ft./min.	5000
Equivalent mph	93
Cu ft/ton mi	155
R&T wear index	53
Brake swept area sq in/ton	183

ROAD TEST RESULTS

ACCELERATION

Time to distance, sec:	
0-100 ft	2.7
0-250 ft	5.5
0-500 ft	8.4
0-750 ft	10.4
0-1000 ft	12.4
0-1320 ft (1/4 mi)	14.9
Speed at end of 1/4 mi, mph	94
Time to speed, sec:	
0-30 mph	2.8
0-40 mph	3.7
0-50 mph	4.9
0-60 mph	6.3
0-70 mph	8.6
0-80 mph	10.6
0-100 mph	17.1
Passing exposure time, sec:	
To pass car going 50 mph	3.8

FUEL CONSUMPTION

Normal driving, mpg	11-15
Cruising range, mi	190-240

SPEEDS IN GEARS

4th gear (6400 rpm), mph	119
3rd (6400)	92
2nd (6400)	70
1st (6400)	51

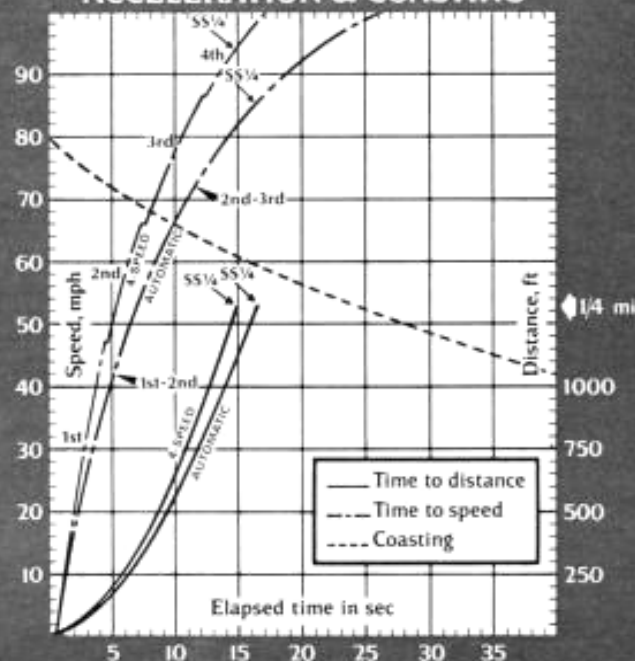
BRAKES

Panic stop from 80 mph:	
Deceleration, % g	81
Control	good
Fade test: percent of increase in pedal effort required to maintain 50%-g deceleration rate in six stops from 60 mph	88
Parking brake: hold 30% grade yes	
Overall brake rating	good

SPEEDOMETER ERROR

30 mph indicated	actual 26.4
40 mph	36.2
60 mph	55.7
80 mph	75.1
100 mph	94.3
Odometer, 10.0 mi	actual 9.52

ACCELERATION & COASTING





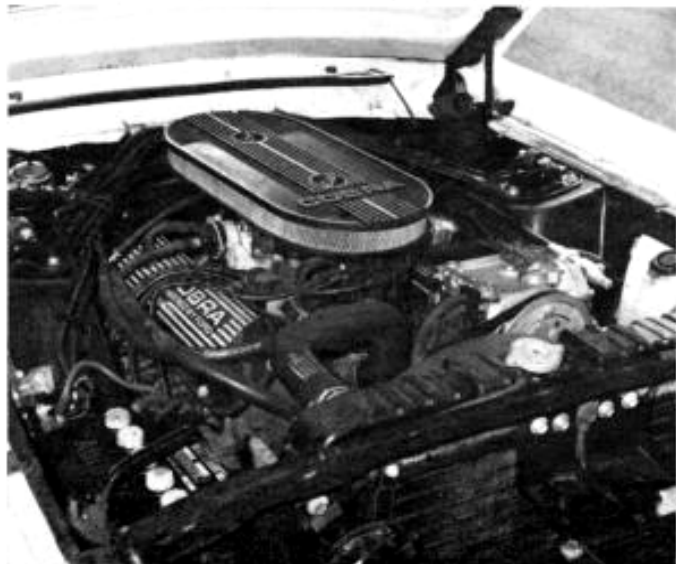
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has a far less than perfect seating position. The seatback is too vertical, not adjustable (except by an owner modification of the stops) and the wheel is too close to the chest. On the other hand, the inertia-reel Y-shaped harnesses that come down from the excellent built-in rollbar are probably the best body restraint system now used in a production car. These are, incidentally, intended for use in conjunction with regular lap belts. All controls are easy to reach and would be even without the freedom of movement afforded by the inertia reels; but it isn't possible to roll down the right-side window without much stretching in this wide car. Vision to the front is impeded by the oppressively high hood and to the rear it's really poor because of large blind pillars. One nice item in the "visibility" category is the sequential brake lights (from the inside, symmetrically, zoop-zoop-zoop)—a safety item, we feel sure.

Instrumentation in front of the driver is readable if overstyled, but the supplementary oil-pressure gauge and ammeter installed in the central console are too far away, too low, not angled and poorly lighted at night.


Interior finish, slightly modified from standard Mustang materials and design, is pleasant and fairly restrained for an American car. The "+2" seat in the rear is pretty cramped but, when made folding by an extra \$65, supplements the small trunk with extra luggage space. In short, however, this Mustang body is—like most American bodies—grossly large on the outside for the amount of passenger and luggage space it encloses.

Standard GT 350 engine has special valve covers and air cleaner but is essentially a stock Mustang 302 engine.



OUR SECOND test car was a standard-engined, automatic-transmissioned, air-conditioned rent-a-car from the Hertz fleet that set us back \$15/day and 15¢/mile. We found it to be almost pure Mustang in performance and handling—just a hair stiffer and faster than the 230-bhp 302 Mustang *Car Life's Ponycar* book reported on. Its 3-speed automatic transmission, though smooth and efficient, is not nearly as "manually controllable" as the ad writers would have us believe: "2" gets 2nd gear at most any speed, but "1" doesn't get 1st gear until the speed drops below 20 mph—and upshifts are accomplished only after considerable delay from the time the lever is moved. In this car the customer is getting the Shelby look combined with most of the luxury trim items, disc front brakes, big tires and styled wheel covers that the go-for-broke Mustang customer would order anyway, and it costs roughly \$500 more than the comparably equipped Mustang.

PERHAPS THE FAIREST summary of these cars would be to say that IF they're the sort of cars to which you are attracted, they do the job well enough. We know from long experience with cars of this general type that it is well-nigh impossible to take a heavy, bulky car with an unsophisticated chassis and feel-less power assists and turn it into a truly sporting, responsive piece of machinery. In the early days of Shelby Mustangs the GT-350 seemed a serious and partially successful attempt to make a sporting car out of the Mustang; but now if anything it accentuates most of the Mustang's inherent shortcomings. And, what's worse, the Camaro Z-28 is a better example of the same sort of car—for less money.

We understand that Ford plans to put the mid-engine Mach II into production. Now *that* would be more like it. 

Optional engine features aluminum "high-rise" intake manifold, large Holley carburetor and more radical valve timing.

