

CAR and DRIVER

MARCH 1968 / 60 CENTS

AMX: American Motors' answer to the Corvette
First Test: Porsche Sportomatic

WE TEST THE 390 COUGAR • 390 JAVELIN 396 CAMARO • 400 FIREBIRD • 340 BARRACUDA • 390 MUSTANG

SPORTS CARS



Available at: <http://FirstGenFirebird.org>

little problem. The 400 HO (High Output) engine is the top of the Firebird line (with the exception of the ultra-exotic, drag strip oriented Ram-Air version), being a notch above the staid Firebird 400 and worlds apart from the 350 and 350 HO models. When coming off the line, the big V-8 winds up so quickly that it's almost impossible to hit the 5100 rpm optimum shift point. Our test car was equipped with

the standard T-handle shift lever rather than the Hurst set-up preferred by street racers.

In the braking tests, the car always stopped in a straight line. But there was fade and the actual stopping rate was mediocre (only the Javelin was poorer).

Ride comfort was not exactly the velvet-smooth Detroit ideal, moreover, on wash-board pavement, the rear axle seemed to

have a mind of its own. Contributing to the otherwise fine handling characteristics was a soon-to-be-released variable ratio power steering. Only 2.4 turns were required from lock-to-lock, yet the variable ratio feature allowed straight ahead steering to be reasonably insensitive to small movements. It's an excellent idea that has been used on European cars (Mercedes-Benz, Jaguar) for some years now, but leave it to Pontiac to offer it first on a domestic sporty car.

One of the major changes from last year's Firebird is the elimination of side vent windows, and we don't like that. Visibility and appearance are improved, somewhat, but all at the expense of driver comfort. Flow-through ventilation systems just aren't efficient enough to prevent stale air from building up when the windows are closed, and, on humid days, a rear window defogger is a mandatory option.

While the Firebird is primarily a fun car, the utilitarian aspects haven't been completely overlooked. There is a collapsible spare in the trunk which means that at least one suitcase can be fitted inside (as opposed to the Camaro's identical trunk with a standard-size spare that made it virtually unusable). The Firebird's seats are comfortable and offer plenty of fore-and-aft adjustment so that the driver can arrange the seating position to suit himself (the optional adjustable steering wheel is a good idea as the standard steering wheel position is too high and is too sharply angled to suit most drivers).

Pontiac's penchant for making hairy-looking cars has led to phony hood scoops and erotic power bulges all over the hood. Compounding the front's lumpy appearance was a hood-mounted tach. Its novelty effect wore off quickly (particularly at night when you'd swear the thing is illuminated by a pair of overworked fireflies) and life would be a whole lot simpler with a decent dash-mounted unit.

All in all, however, the Firebird was everybody's favorite sporty car.

PLYMOUTH BARRACUDA 340 FORMULA S

We were surprised when the Barracuda showed up second in the tests, we looked again, drove again, argued again—and decided Plymouth showed up second in the tests.

The crux of the problem was whether the Barracuda (a notchback) really deserved to be classified as a sporty car or whether it was a super-powered compact—like its sister Dodge Dart GTS. It was the longest car tested at 192.8 inches (9.2 inches longer than the Mustang) and also the tallest. As a result, in most of the check list items dealing with comfort and convenience, the Barracuda scored heavily. Additionally, the car's overall styling is not in the current sporty car idiom—the Barracuda has a far more symmetrical profile (without the long-hood, short-deck appearance that is synonymous with sporty cars).

SPORTY CAR CHECK LIST MECHANICAL RATING

Check List (Cars rated numerically, with 6 as maximum)	Barracuda Formula S	Camaro SS 396	Cougar XR-7	Firebird 400 HO	Mustang 2+2 GT	Javelin SST
Engine and Drive Train						
Starting	5	1	4	6	2	3
Response	4	3	1	6	5	2
Smoothness	5	1	4	6	4	2
Noise	1	2	4	6	3	5
Service accessibility	4	3	1	5	1	6
Steering						
Effort	5	4	2	6	1	3
Response	1	5	3	6	2	4
Suspension						
Ride comfort	5	4	6	1	3	2
Roll resistance	6	2	1	3	4	5
Cornering ability	5	1	2	6	3	4
Predictability	4	5	1	3	2	6
Brakes						
Fade resistance	6	3	1	4	2	5
Directional stability	2	3	5	6	4	1
TOTAL MECHANICAL RATING	53	37	35	64	36	48

NON-MECHANICAL RATING

Interior						
Ease of entry/exit	5	3	1	3	1	6
Front seating comfort	1	3	2	6	4	5
Rear seating comfort	3	5	4	5	1	2
Driver controls	5	1	4	6	2	3
Instrumentation	5	2	6	4	3	1
Heater/defroster	5	4	6	3	2	1
Ventilation	5	2	6	2	4	1
Construction						
Exterior workmanship	1	3	4	6	5	2
Interior workmanship	2	5	4	6	3	1
Convenience and Protection						
Trunk space	6	3	4	5	1	2
Bumper protection, front	6	5	4	1	3	2
Bumper protection, rear	5	3	1	4	2	6
Visibility	6	2	4	2	1	5
Wiper effectiveness	3	1	5	1	5	6
TOTAL NON-MECHANICAL RATING	58	42	55	54	37	43
OVERALL RATING	111	79	90	118	73	91

But Chrysler thinks the Barracuda is a sporty car. Barracuda buyers think of the Barracuda as a sporty car, it performs like a sporty car—and that's enough for us.

The 340 Barracuda might have been the biggest of our test cars, but it was also the lightest. Most of the weight saving comes from the engine itself which is significantly smaller and lighter than the behemoths in the other cars.

The car was a puzzler at the drag strip. Occasionally it would roar off the line and turn an absolutely astonishing ET of 14.2 at 99 mph. Other times it would come out of the hole, look great for about an eighth of a mile and then seem to run into a wall of Jello. When this happened, the car would be in the 15s with a terminal speed of around 92 mph. This schizophrenia was further manifested in the Barracuda's not only losing match races to every other car at one time or another—but winning races against every other car as well. We finally discovered that Chrysler is using a new 4-barrel carburetor this year, which relies on air pressure to start the secondary jets in operation. If the spring tension on the secondary air valve is out of adjustment, operation of the rear half of the carb will be erratic.

The fact that it was out of adjustment was not unexpected. In general, the Barracuda was not put together too well. Trim elements were constantly falling off, the passenger's seat wasn't bolted down, the paint had runs in it, and the passenger side vent window couldn't be fully opened because the outside mirror was in the way. Seats were straightforward with somewhat vertical backs—but not all that objectionable. And the inside of the car was just fine. Visibility was by far the best of any of the sporty cars, instrumentation was complete and readable and the controls were well positioned.

What really decided us on the fact that the Barracuda is a legitimate sporty car is that it was the least passive of the cars when it came to driving. The engine is more race car than shopping cart; it demands positive and forceful inputs by the driver to realize its potential. A gentle hand is not what the Barracuda thrives on. You don't just gradually depress the throttle and get much of a belt out of the 340, but if you kick it down hard, BOO-BOOMY, it's a whole different matter.

That's endearing stuff to us—that's involvement, and that, in turn, is what a sporty car should mean. The Barracuda's real strengths lie outside the test area—give a good man this car and he'll have a delightful, responsive automobile. Look at it solely as a super-compact, or a drag-strip performer, or a tight course handling exercise and you deprive it of what's really there—the opportunity to drive it well and hard over a variety of conditions.

It's even a mildly attractive feature that the baby hemi is a little rough around

*(Text continued on page 32;
Specifications overleaf)*



Technical editor, Pat Bedard, made certain that none of the cars was over prepared.



Wheel-to-wheel evaluations changed our opinions about some of the sporty cars.



AMERICAN JAVELIN SST

Price as tested: \$3,943.05
(Manufacturer's suggested retail price, including all options)

ENGINE

Type: Water-cooled V-8, cast iron block and heads, 5 main bearings
Bore x stroke.....4.17 x 3.57 in
Displacement.....390 cu in
Compression ratio.....10.2 to one
Carburetion.....1 x 4 bbl Carter
Power (SAE).....315 bhp @ 4600 rpm
Torque (SAE).....425 lbs/ft @ 3200 rpm

DRIVE TRAIN

Final drive ratio.....3.15 to one

DIMENSIONS AND CAPACITIES

Wheelbase.....109.0 in
Track.....F: 58.4 in, R: 57.0 in
Length.....189.2 in
Width.....71.9 in
Height.....52.0 in
Curb weight.....3430 lbs
Weight distribution, F/R.....57.0/43.0%
Fuel capacity.....19 gal
Oil capacity.....4 qts
Water capacity.....14 qts

SUSPENSION

F: Ind., unequal-length wishbones, coil springs, anti-sway bar
R: Rigid axle, semi-elliptic leaf springs

STEERING

Type.....Recirculating ball
Turns lock-to-lock.....3.6
Turning circle.....40.1 ft

BRAKES

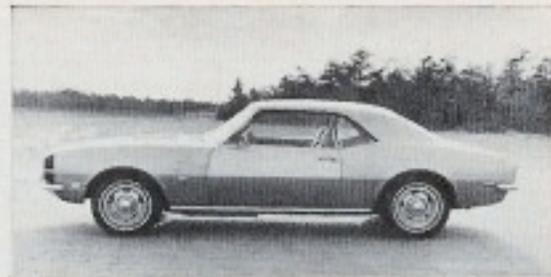
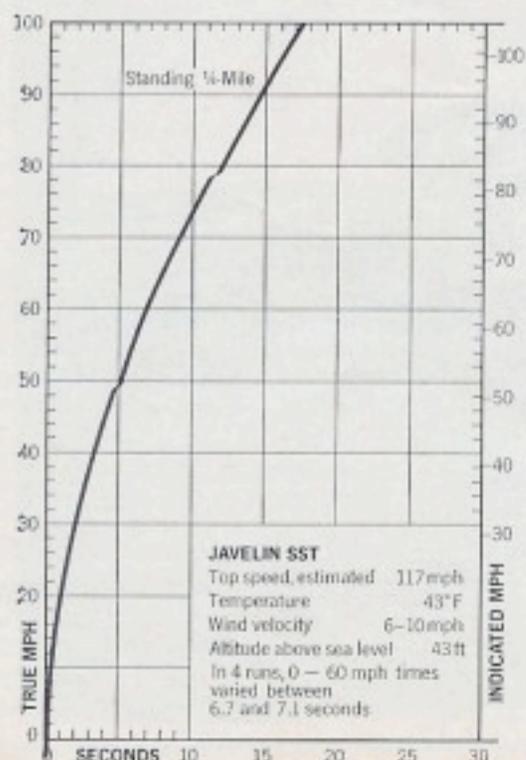
F.....11.2-in solid disc
R.....10 x 1.75-in cast iron drum
Swept area.....371.0 sq in

WHEELS AND TIRES

Wheel size.....14 x 5.5-in
Tire make and size.....Goodyear E70 x 14
Test inflation pressures...F: 24 psi, R: 24 psi
Tire load rating.....1190 lbs per tire @ 24 psi

PERFORMANCE

Zero to	Seconds
40 mph	3.2
60 mph	6.9
80 mph	12.1
100 mph	17.6
Standing 1/4-mile	15.2 sec @ 91.9 mph
80-0 mph panic stop	285 ft (.75 G)



CHEVROLET CAMARO SS 396

Price as tested: \$4,262.40
(Manufacturer's suggested retail price, including all options)

ENGINE

Type: Water-cooled V-8, cast iron block and heads, 5 main bearings
Bore x stroke.....4.09 x 3.76 in
Displacement.....396 cu in
Compression ratio.....10.2 to one
Carburetion.....1 x 4 bbl Rochester
Power (SAE).....325 bhp @ 4800 rpm
Torque (SAE).....410 lbs/ft @ 3200 rpm

DRIVE TRAIN

Final drive ratio.....3.07 to one

DIMENSIONS AND CAPACITIES

Wheelbase.....108.0 in
Track.....F: 59.6 in, R: 59.5 in
Length.....184.5 in
Width.....72.3 in
Height.....50.9 in
Curb weight.....3670 lbs
Weight distribution, F/R.....57.5/42.5%
Fuel capacity.....18 gal
Oil capacity.....4 qts
Water capacity.....23 qts

SUSPENSION

F: Ind., unequal-length wishbones, coil springs, anti-sway bar
R: Rigid axle, semi-elliptic leaf springs

STEERING

Type.....Recirculating ball
Turns lock-to-lock.....3.1
Turning circle.....41.0 ft

BRAKES

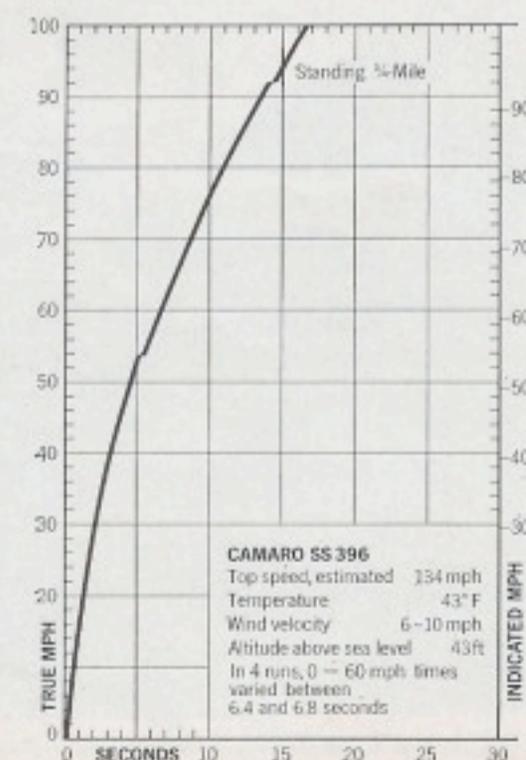
F.....11.0-in vented disc
R.....9.5 x 2.0-in cast iron drum
Swept area.....332.4 sq in

WHEELS AND TIRES

Wheel size.....14 x 6-in
Tire make and size.....Goodyear F70 x 14
Test inflation pressures...F: 24 psi, R: 24 psi
Tire load rating.....1280 lbs per tire @ 24 psi

PERFORMANCE

Zero to	Seconds
40 mph	3.2
60 mph	6.6
80 mph	10.9
100 mph	16.8
Standing 1/4-mile	15.0 sec @ 93.9 mph
80-0 mph panic stop	228 ft (.94 G)



FORD MUSTANG 2+2 GT

Price as tested: \$3,951.92
(Manufacturer's suggested retail price, including all options)

ENGINE

Type: Water-cooled V-8, cast iron block and heads, 5 main bearings
Bore x stroke.....4.05 x 3.78 in
Displacement.....390 cu in
Compression ratio.....10.5 to one
Carburetion.....1 x 4-bbl Holley
Power (SAE).....325 bhp @ 4800 rpm
Torque (SAE).....427 lbs/ft @ 3200 rpm

DRIVE TRAIN

Final drive ratio.....3.25 to one

DIMENSIONS AND CAPACITIES

Wheelbase.....108.0 in
Track.....F: 58.0 in, R: 58.0 in
Length.....183.6 in
Width.....70.9 in
Height.....51.6 in
Curb weight.....3546 lbs
Weight distribution, F/R.....56.8/43.2%
Fuel capacity.....16 gal
Oil capacity.....4 qts
Water capacity.....20.5 qts

SUSPENSION

F: Ind., upper wishbones, single lower arms with drag struts, coil springs, anti-sway bar
R: Rigid axle, semi-elliptic leaf springs

STEERING

Type.....Recirculating ball
Turns lock-to-lock.....3.8
Turning circle.....37.3 ft

BRAKES

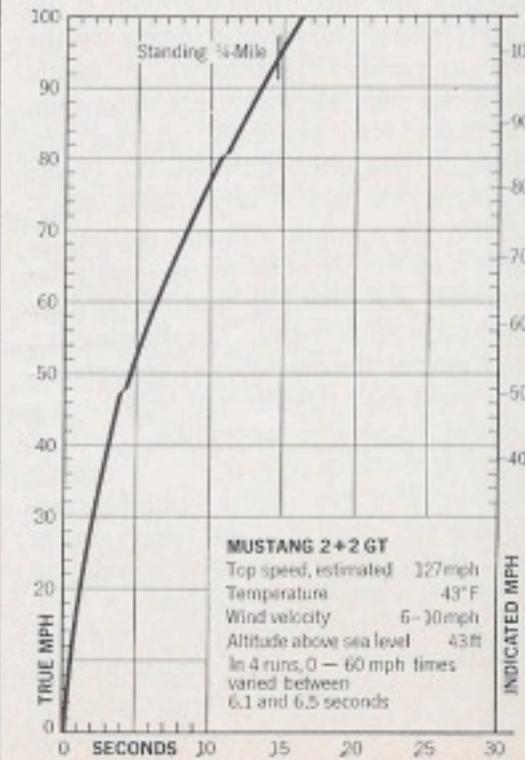
F.....11.3-in vented disc
R.....10 x 1.75-in cast iron drum
Swept area.....324.8 sq in

WHEELS AND TIRES

Wheel size.....14 x 6-in
Tire make and size.....Firestone F70 x 14
Test inflation pressures...F: 26 psi, R: 24 psi
Tire load rating.....1280 lbs per tire @ 24 psi

PERFORMANCE

Zero to	Seconds
40 mph	3.0
60 mph	6.3
80 mph	10.7
100 mph	16.3
Standing 1/4-mile	14.8 sec @ 94.6 mph
80-0 mph panic stop	230 ft (.93 G)





MERCURY COUGAR XR-7

Price as tested: \$4,067.22
(Manufacturer's suggested retail price, including all options)

ENGINE

Type: Water-cooled V-8, cast iron block and heads, 5 main bearings
Bore x stroke..... 4.05 x 3.78 in
Displacement..... 390 cu in
Compression ratio..... 10.5 to one
Carburetion..... 1 x 4-bbl Holley
Power (SAE)..... 325 bhp @ 4800 rpm
Torque (SAE)..... 427 lbs/ft @ 3200 rpm

DRIVE TRAIN

Final drive ratio..... 3.25 to one

DIMENSIONS AND CAPACITIES

Wheelbase..... 111.0 in
Track..... F: 58.5 in, R: 58.5 in
Length..... 190.3 in
Width..... 71.3 in
Height..... 51.7 in
Curb weight..... 3560 lbs
Weight distribution, F/R..... 58.6/41.4%
Fuel capacity..... 16 gal
Oil capacity..... 4 qts
Water capacity..... 20.5 qts

SUSPENSION

F: Ind., upper wishbones, single lower arms with articulated drag struts, coil springs, anti-sway bar.
R: Rigid axle, semi-elliptic leaf springs

STEERING

Type..... Recirculating ball
Turns lock-to-lock..... 3.8
Turning circle..... 40.0 ft

BRAKES

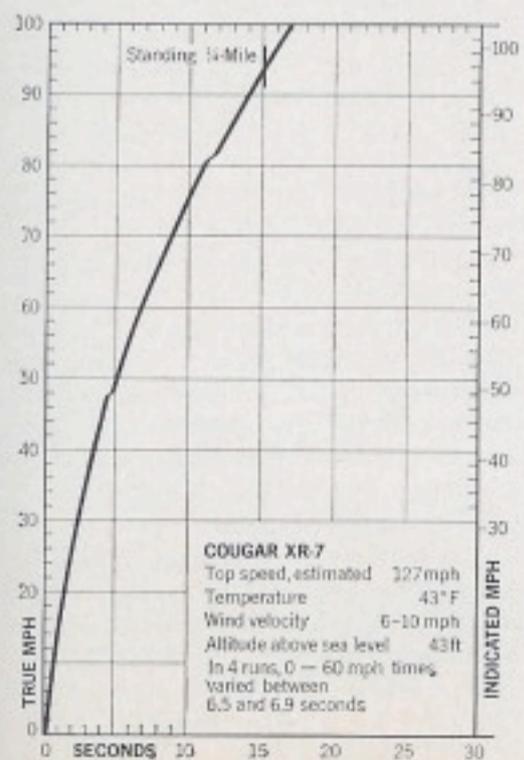
F..... 11.3-in vented disc
R..... 10 x 1.75-in cast iron drum
Swept area..... 324.8 sq in

WHEELS AND TIRES

Wheel size and type..... 14 x 6-in
Tire make, size and type..... Goodyear F70 x 14
Test inflation pressures... F: 24 psi, R: 24 psi
Tire load rating..... 1280 lbs per tire @ 24 psi

PERFORMANCE

Zero to	Seconds
40 mph	3.2
60 mph	6.7
80 mph	11.1
100 mph	17.0
Standing 1/4-mile	15.1 sec @ 93.7 mph
80-0 mph panic stop	240 ft (.89 G)



PLYMOUTH BARRACUDA FORMULA S

Price as tested: \$3,888.30
(Manufacturer's suggested retail price, including all options)

ENGINE

Type: Water-cooled V-8, cast iron block and heads, 5 main bearings
Bore x stroke..... 4.04 x 3.31 in
Displacement..... 340 cu in
Compression ratio..... 10.5 to one
Carburetion..... 1 x 4 bbl Carter
Power (SAE)..... 275 bhp @ 5000 rpm
Torque (SAE)..... 340 lbs/ft @ 3200 rpm

DRIVE TRAIN

Final drive ratio..... 3.55 to one

DIMENSIONS AND CAPACITIES

Wheelbase..... 108.0 in
Track..... F: 57.4 in, R: 55.6 in
Length..... 192.8 in
Width..... 71.6 in
Height..... 52.7 in
Curb weight..... 3330 lbs
Weight distribution, F/R..... 56.6/43.4%
Fuel capacity..... 18 gal
Oil capacity..... 4 qts
Water capacity..... 18 qts

SUSPENSION

F: Ind., unequal-length wishbones, torsion bars, anti-sway bar
R: Rigid axle, semi-elliptic leaf springs

STEERING

Type..... Recirculating ball
Turns lock-to-lock..... 3.6
Turning circle..... 40.8 ft

BRAKES

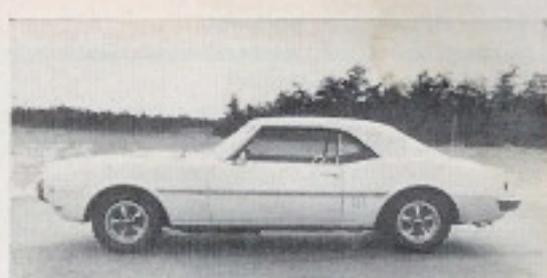
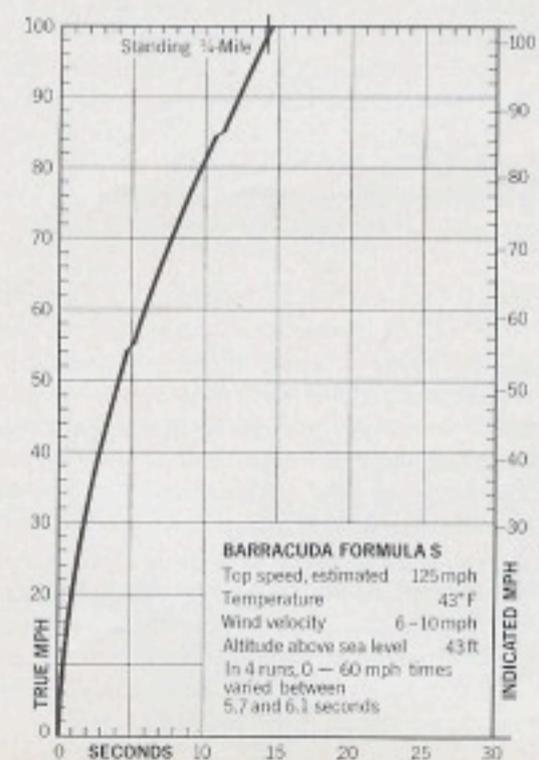
F..... 10.8-in vented disc
R..... 10 x 1.75-in cast iron drum
Swept area..... 314.7 sq in

WHEELS AND TIRES

Wheel size..... 14 x 5.5-in
Tire make and size..... Firestone D70 x 14
Test inflation pressures... F: 24 psi, R: 24 psi
Tire load rating..... 1120 lbs per tire @ 24 psi

PERFORMANCE

Zero to	Seconds
40 mph	2.9
60 mph	5.9
80 mph	9.7
100 mph	14.5
Standing 1/4-mile	14.3 sec @ 99.1 mph
80-0 mph panic stop	253 ft (.85 G)



PONTIAC FIREBIRD 400 HO

Price as tested: \$4,183.00
(Manufacturer's suggested retail price, including all options)

ENGINE

Type: Water-cooled V-8, cast iron block and heads, 5 main bearings
Bore x stroke..... 4.12 x 3.75 in
Displacement..... 400 cu in
Compression ratio..... 10.7 to one
Carburetion..... 1 x 4 bbl Rochester
Power (SAE)..... 335 bhp @ 5000 rpm
Torque (SAE)..... 430 lbs/ft @ 3400 rpm

DRIVE TRAIN

Final drive ratio..... 3.55 to one

DIMENSIONS AND CAPACITIES

Wheelbase..... 108.1 in
Track..... F: 60.0 in, R: 60.0 in
Length..... 188.8 in
Width..... 72.8 in
Height..... 50.0 in
Curb weight..... 3550 lbs
Weight distribution, F/R..... 59.2/40.8%
Fuel capacity..... 18.5 gal
Oil capacity..... 6 qts
Water capacity..... 17.8 qts

SUSPENSION

F: Ind., unequal-length wishbones, coil springs, anti-sway bar
R: Rigid axle, semi-elliptic leaf springs

STEERING

Type..... Recirculating ball
Turns lock-to-lock..... 2.4
Turning circle..... 42.0 ft

BRAKES

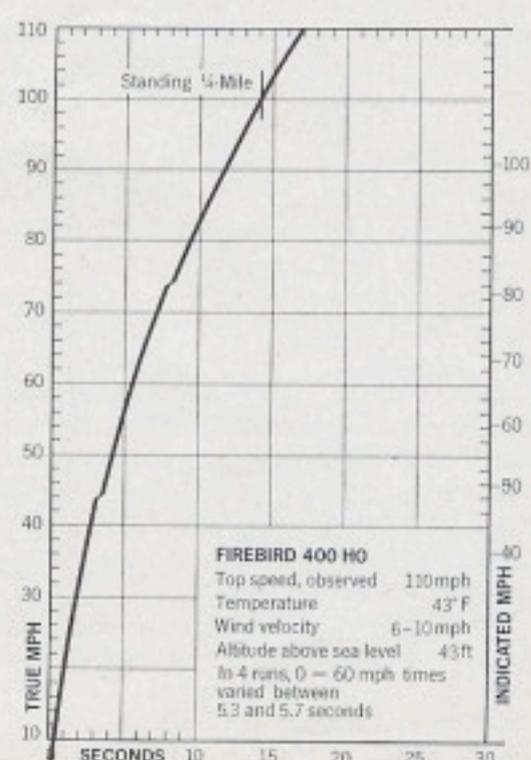
F..... 11.1-in vented disc
R..... 9.5 x 2.0-in cast iron drum
Swept area..... 323.6 sq in

WHEELS AND TIRES

Wheel size..... 14 x 6-in
Tire make and size..... Firestone F70 x 14
Test inflation pressures... F: 24 psi, R: 24 psi
Tire load rating..... 1280 lbs per tire @ 24 psi

PERFORMANCE

Zero to	Seconds
40 mph	2.7
60 mph	5.5
80 mph	9.4
100 mph	14.1
Standing 1/4-mile	14.2 sec @ 100.3 mph
80-0 mph panic stop	256 ft (.83 G)



THE SPORTY CARS

(Continued from page 29)

town—it *should* be. Furthermore, it's helped by the Mopar 3-speed automatic, a strong unit that can be easily controlled by the driver thanks to the precise, virtually dimwit-proof shifting mechanism.

Not so good on the Barracuda is the fact that the controls are of the super-low effort variety with the result that the driver sometimes feels removed from what the car is doing. It's too much in contrast to what the car ends up being—a demand on driver skill and interest.

Also not so good was the Barracuda's braking. It stopped in relatively short distances, but it tended to be a handful to keep under control when the rear wheels locked up too soon.

So the Barracuda's schizophrenia is Plymouth's schizophrenia in its attitude toward the sporty car concept. The car asks a lot of the driver—most of the time—but makes things too bland for him when it doesn't. The styling is a visual departure from the sporty car theme—but it's appealing. If you like to drive, and drive hard, and know what you're about, you'll get the most out of this second rated of the sporty cars. If you don't do any of those things, you're probably not a sporty car buyer anyway.

AMC JAVELIN 390 SST

Latest entrant in the sporty car sweepstakes, the Javelin, has the benefit of time working for it in its design. It's a third-generation car. It also has the disadvantages of AMC's less-than-glamorous image, and AMC's previous track record in the enthusiast market to contend with.

Our Javelin was the first 390 ever built—but its long suit was its handling. It felt very much like a British sports car—with the same advantages as well as the same disadvantages. The Javelin is nearly neutral when pushed through a hard corner and a controllable, power-induced oversteer can be obtained whenever desired. The car displayed a high degree of roll stiffness (a function of the high spring and anti-sway bar rates) which contributed to the driver's feeling of security and comfort even when the Javelin was all bent around itself in a turn. On the tight handling course the SST was everyone's favorite because of its versatility and predictability. It was light and responsive and felt more at home being driven like a sports car than it did on the drag strip.

The Javelin's styling was another area that received unanimous approval. It has a clean understated appearance that is not marred by phony vents, power bulges, mounds or bizarre sculpturing of whatever variety. The Javelin is an honest-looking car with a dramatic flair.

AMC hasn't had any time to play with the 390, at least officially, and so we didn't expect the car to tear up the pavement. We weren't disappointed. It didn't. It was the

slowest in the quarter-mile (15.2 at 92 mph), and the engine felt like a lump in the midst of rebellion. At idle the car sounded like an over-muffled AA/Fueller with the engine limping at 700 rpm one instant and then taking a giant breath and racing up to 1200 rpm the next. That didn't do much for us at a stop light or in traffic.

When the *go* signal is given, and you open the throttle, things feel fine for a few instants. Then, all of a sudden, your foot is right down on the wood—just when you figure all hell is about to break loose. The deception comes from the extremely short travel of the accelerator pedal; even short increments of pedal depression seem to produce large gains in acceleration, but the whole feeling doesn't last long enough to be really impressive.

While the 390 engine represents a significant commitment by American Motors in the performance market, it would have been nice if they'd coupled it to something other than the Borg-Warner 3-speed automatic. The engineers at AMC have wrought a minor miracle in modifying this archaic transmission so that it is merely inconvenient instead of being an outright disappointment, but, compared to the other, *modern* 3-speeds, the B-W doesn't cut it. Manual shifting proved there are great lags on both up and downshifts and cruising through traffic at 40 mph is a truly confusing time for the transmission. It's constantly upshifting and downshifting in the hope of finding some range where it will be happy.

Inside the Javelin you will find an all-plastic world. Plastic has its virtues as a straightforward material (genuine, imitation plastic?) and there's no quasi-teak anywhere to be seen. The only problem here is the plastic butts against itself and the metal body panels of the car, and every time the wheels hit a slight bump, there's a multitude of rattles and squeaks.

So you may be distracted a little by the noise, but by God you can see. The windshield is raked well back into the roof so it's easy to spot overhead traffic lights even if you're parked almost underneath them. The seats are comfortable, more than that, they're unique: they have adjustable backrests so that anyone can find, or can vary, a comfortable seating position. But we have to call AMC sharply on the company's much ballyhooed and bragged about extra room for rear seat passengers. Nonsense. First off, it almost isn't there at all, and secondly, what kind of curious mentality would seize upon that as a virtue to publicize in a sporty car? It might help you get your wife down to look at the car, but *she'll* try out the back seat and find out for herself that it isn't there.

The biggest problem with the interior of the Javelin is the instrumentation. We can understand wanting to save money by going to all that plastic, and we can even live with the B-W automatic thanks to the precise and simple shift lever that AMC has

designed, but if we're going to buy a sporty car we want to be kept abreast of what's going on under the hood and the Javelin doesn't do it. The speedometer is set in a well that must be six inches deep and it is very hard to read; there are precious few worthwhile instruments (idiot lights are in their stead) and the tachometer is nearly unusable. It's mounted in another well, like the speedometer, but off to the driver's left so that unless he drives with his left hand in his lap, there's no way to see the tiny instrument and its jumpy indicator needle. One clever and convenient idea that other manufacturers should copy, is installing the door locks inside the arm rests. Most of the sporty cars have long doors which necessitate twisting around in the seat to push down the lock buttons. AMC's idea makes the whole process much easier.

The Javelin, because of its handling, turned out to be the most fun to drive of any of the sporty cars. But its performance was not spectacular and AMC is going to have to make it spectacular if they're going to do well in the enthusiast market.

MERCURY COUGAR 390 XR-7

As with the Barracuda, there was some doubt whether the Cougar really belonged in this test of sporty cars. But if the Barracuda was suspect because of its humble origins and plain-jane exterior, the Cougar's problem was just the opposite. Mercury's entry in the market may be *styled* in the sporty car manner, but that's about it. It's sort of the Thunderbird of the sporty car world and it makes it clear that it's far more at home on the old Interstate than thrashing around back-country roads or running up and down drag strips.

Our Cougar test car may have suffered more than anyone knew from its dice out on the Ohio Turnpike. (Some people from Mercury checked it out before turning it over to us and reported that everything was fine, and then we checked it out to make sure things weren't *too* fine and found nothing out of the ordinary.)

The problem with the Cougar was that it wasn't very fast, its handling was soft and loggy, it didn't stop too well and was generally unimpressive. It was the dowager of the group, and certainly didn't like the idea of being thrown in among all that brute riff-raff. That was a source of embarrassment not only to Cougar but to us. *Individual* Cougars we have tested in the past have seemed lovely cars. "Cougar is one of our favorite sporty cars . . ." we have said time and time again. Yet, when we got the Cougar face to face with the other sporty cars, the conclusion was inescapable. It was a stone. An elegant stone, a comfortable stone, but a stone nonetheless.

Drag strip performance of the Cougar was a ho-hum 15.1 seconds at 93.7 mph. Moreover, the car never felt that it was trying very hard, and the Ford 3-speed automatic gave everyone fits when trying to shift manually. The problem wasn't quite

(Continued on page 82)

THE SPORTY CARS

(Continued from page 32)

as extreme on the Mustang, but it was present to a degree on that car as well. The problem lay in trying to make a clean first-second shift or second-third shift without bypassing the desired gear. There was a vague feeling, accompanied—only in the Cougar—by a long lag before the transmission actually chose to shift itself.

The Cougar tripped all over itself out on the handling track. The car has a lot of overhang at both ends and a large flat spot in the engine's performance curve which made it very unresponsive. On top of that we discovered that the oil pick-up in the engine sump uncovered itself during cornering to allow the lifters to go dry. Then, as this portion of the test progressed, someone noticed an object that dropped off the car on the short straight. It was part of a front disc brake pad that had shattered. Earlier, the Cougar's performance in the braking tests had been none too good, with the brakes fading into near nothingness on the second stop. Now, during a handling test that hadn't bothered any of the other cars, the Cougar's right front brake blew itself apart—something was seriously wrong. The next day the car was returned to Mercury to have the pad replaced, but instead the whole caliper assembly was returned to Detroit for evaluation. It seems that a couple of rivets had sheared, knocking the brake puck out of alignment, putting extraordinary stress on it, which eventually resulted in the puck shattering under hard braking. So much for any more handling tests with the Cougar.

The Cougar's strong points proved to be the same things that you would look for in a family sedan: quality of material and construction, ride comfort, convenience, etc. The interior looks great with neat if not very comfortable seats, a wood-grained

dashboard and plenty of instruments to bewilder and impress those who haven't the foggiest notion what is going on. It's all very British with lots of switches and peculiar numbering and funny shaped needles on the gauges. It's so British in fact that they've stuck the oil pressure gauge over in front of the passenger well out of the driver's line of vision. One nice idea shared by both Mustang and Cougar was the tripometer incorporated into the speedometer.

The Cougar was the only car to come with disappearing headlights as standard equipment. While these help the appearance of the car from a distance, the vertical members of the grille never lined up right giving the car a kind of snaggle-toothed grin when viewed from dead ahead.

The Cougar sure looks like a neat car, a bit more somber perhaps than the other sporty cars we tested, but then it's blatantly obvious that Mercury doesn't intend the Cougar to be Everyman's sporty car. Instead it exudes an image of maturity, sort of an automotive Geritol for those suffering from tired image.

CHEVROLET CAMARO SS 396

At this point we suppose a word of explanation is due. You don't have to be Edward Cole to realize that Chevrolet's Camaro is, for all intents and purposes, the same car as Pontiac's Firebird. The engines are different with Chevy's smaller (by 4 cu. in.) 396 V-8 having a reputation as being one of the best, most modern engines available on the market, while Pontiac's 400 cu. in. V-8 version is thought to be a good design—although not nearly as strong. Yet, in our ratings, the Firebird came out first while the Camaro was fifth (or, in a six-car field, next to last). O.K. road testers, how does all that work?

Well, we were pretty interested ourselves

in finding out how a car that figured to be up among the leaders ended up being down in the pack. For one thing it shows how close all of the sporty cars are in terms of overall design, but, perhaps more than that, the Camaro's low rating reflects the difference in the way manufacturers have approached the problem of building a "personal" car. The Camaro we tested was loaded down with almost every convenience and trim option known to man. Disappearing headlights and air conditioning were about the only major items missing from the Chevy option list. There were instruments galore (all poorly positioned), remote control mirrors, fiber-optic light monitors, double-zoomy wheels, color coordinated interior and exterior trim, special paint and trim options, GM's elaborate ventilation system for cars without side vent windows—all the goodies that Detroit tacks on basically good cars to make them seem more than they really are. But when it got right down to the nitty-gritty of vehicle preparation, the Camaro was a terrible bust. The engine wheezed and coughed until it was fully warmed up. In traffic it was constantly overheating. The transmission was the most difficult to control of any of the cars as the stirrup shifter mechanism refused to work properly. (Every member of the staff found that at one time or another he was missing shifts, shifting into neutral, or, when he gave up trying to shift manually, was subjected to 5100 rpm shifts that would rattle fillings loose.) In simple terms the Camaro tried to be too many things at once and consequently was nothing.

Sitting still on the side of a road it was a super-appointed sporty car, but when you fired it up and got rolling you found that most of the appointments were illegible (in the case of the console-mounted cluster of instruments), unnecessary (in the case of much of the trim and the phony Ram-Air stacks and mesh filters sitting on the hood)

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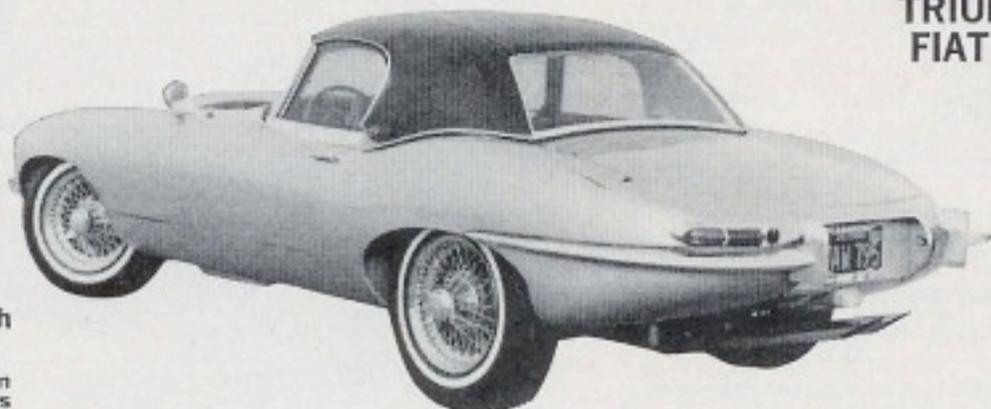


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or just plain no good (in the case of the Astro ventilation system that did not work at all at low speeds, and at high speeds created temperature variations of 10° in the space of three feet).

On top of that the Camaro's handling was poorest of any of the cars tested, even though the ride was harsh enough to qualify it as a Trans-Am racer. The car was an unmanageable handful on the road course simply because of overwhelming understeer, while out on the drag strip the much-vaunted 396 engine seemed loath to do the job. The Camaro strolled through the quarter in an unspectacular 15 seconds with a terminal speed of 94 mph. While this does not exactly put it in the slug category, neither does it make street racers stand up and take notice. We expected the Camaro to perform much better in the acceleration tests and spent a good deal of time trying to find out why it seemed so sluggish, but even after running a complete check and tune up, our 396 Camaro did not show any significant improvement.

The Camaro was a terrific disappointment because everyone had expected so much of it. Instead it turned out to be a boring car with little to recommend it, and, based on its option-inflated price tag, a lot to dissuade anyone from buying it.

FORD MUSTANG 390 GT

As in all comparison road tests, there's got to be one car that is rated poorest, and, much to the surprise of the *C/D* staff, the Mustang took home the booby prize in our latest six-car test. It would seem that Ford has been content to rest on its laurels while the rest of the industry has gone all out to win a piece of the Mustang market.

Our test car was a fastback, which immediately put the car at the low end of the scale in terms of rear seating comfort and visibility even when compared to the other sporty cars. Ford's 390 engine has a reputation for being a bit of a stone, unlike Chevy's 396, so we were surprised when it came off tops in a series of match races with the Camaro. The Mustang's 14.8 seconds at 94.6 mph through the quarter still has it ranking in the lame gazelle class in the street racers' sweepstakes, but this was all accomplished without a limited-slip rear end and with an engine that obviously needed two aspirins and plenty of rest before it could be considered healthy. It wouldn't run on anything but Sunoco 260 and, even treated to this high-potency vitamin formula, the Mustang had all it could do to fire itself up in the morning. Thereafter, until fully warmed up, the car displayed an alarming tendency to unpredictably die out in traffic.

One thing about the Mustang that still sets it apart from the rest of the field is its styling. The long-hood, short-deck appearance has been copied to death but, like prints of a great masterpiece, the original still looks the best. Unfortunately the sleek styling is anything but functional. It's almost impossible to see cars behind, or to

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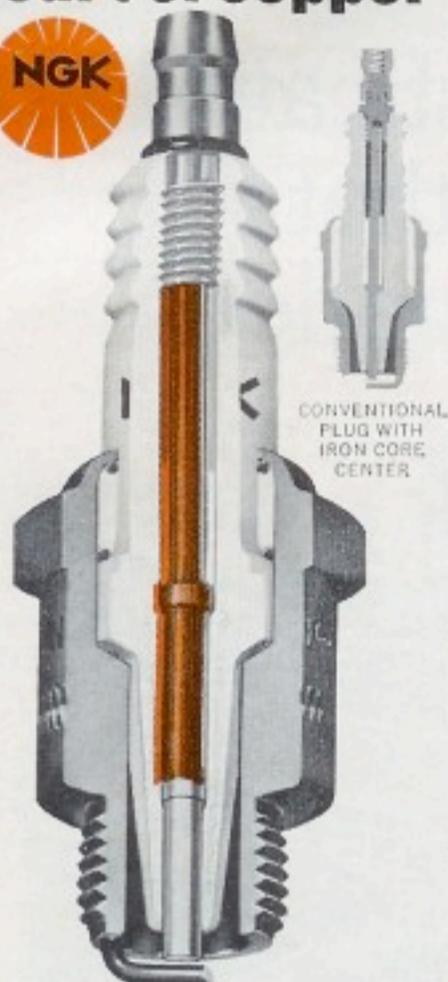
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THE SPORTY CARS

(Continued from previous page)

either side, because of the massive roof supports. And, if there is any moisture in the air, the enormous backlight becomes so thickly covered with condensed vapor that even the Bessemer process rear window defroster can't cope with the job of keeping the window clean.

The Mustang displayed a lot of understeer in the handling tests, but with considerable applications of power the tail could be brought around. It took some effort to make the car handle well, partially accounted for by a power steering unit that was excessively heavy, but in the hands of a capable driver the Mustang will take a corner as quickly as any of the sporty cars.

The Mustang interior was cause for considerable debate. Most of the staff liked it, perhaps because they are used to it, while two members felt that the minimal instrumentation and unobtrusive placement of warning lights was an unforgivable flaw. Everyone agreed that the optional stereo tape deck was handled best in the Mustang. Unlike some of the other cars that boasted the same option, the Mustang stereo unit blended in with the interior design.

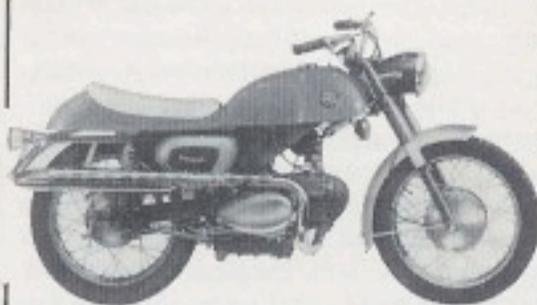
Unfortunately the Mustang seats which used to be manually adjustable for rake by turning two screws, are now firmly fixed and are too upright to suit most drivers.

Even though the Mustang came out on the bottom of the list, no one picked it as the worst car of the group. A claim that only the Firebird can make as far as individual staff opinions go. So why in hell is the Mustang languishing down in no-man's-land? For one thing no one picked it as the best car and for another thing it was not exactly in full song when we were handed the car and it required a bit of tuning to bring it up to acceptable standards. But probably most damaging, other manufacturers have had time to improve on the Mustang's faults before going into production, while the original sporty car has remained basically unchanged for three years. Maybe we just expected more.

That's the sum of it: the six sporty cars, the most exciting troupe to come out of Detroit in modern times. They're as different from a dumb 4-door sedan as Linda Vaughn is from your mother. They're home-grown GT cars, pure and simple—all low and squat with great, wide street-racer tires sticking out of the wheel openings. Unfortunately, Detroit still doesn't have the entire concept within its grasp. Three of the cars tested had tachometers without redlines, a mortal sin in a street-racer car, and for reasons beyond imagination, two of those cars had redlined speedometers.

Even so, it's what the car *feels* like that counts and the sporty cars come on like a cherry bomb in a library. They're great, and our affection came more from two weeks living with the cars than the three days out testing. Some may be better than others, but we loved them all.

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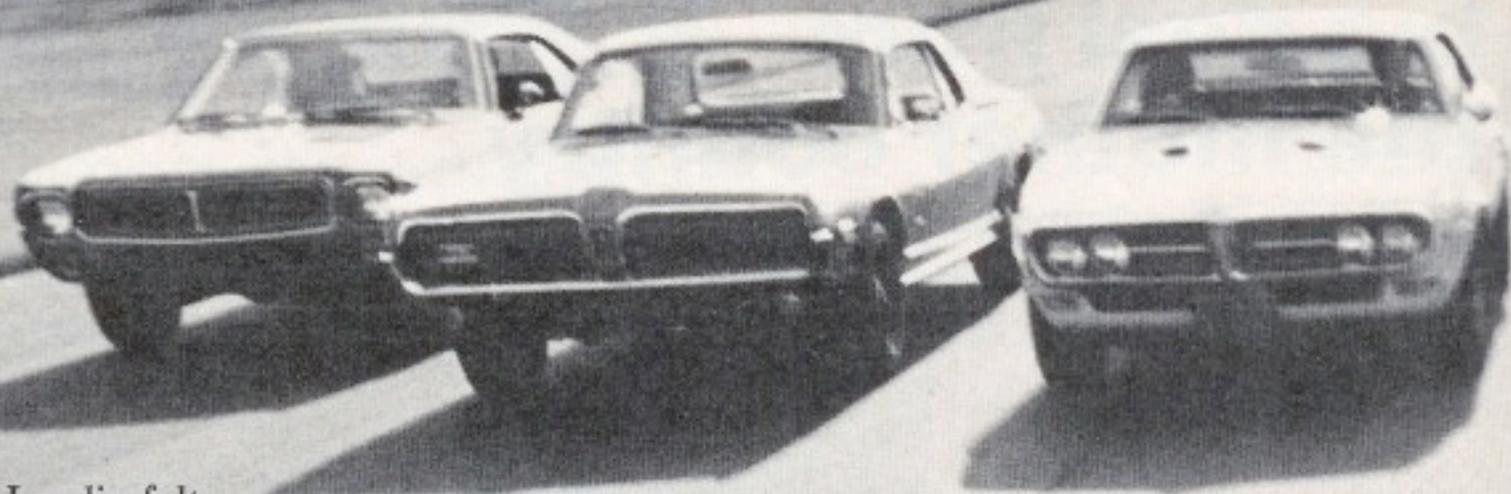
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The Javelin felt more at home being driven like a sports car than it did on the drag strip.

Mercury's Cougar was the dowager of the group, and it didn't like being pitted against such wild brutes.

For sheer enjoyment and confidence behind the wheel, the Firebird was almost in a class by itself.



The Camaro was built to be all things to all people, as a result, it was a disappointment.



Mustang, the original sporty car, seems to have been resting on its laurels for too long.

A gentle hand is not what the Barracuda thrives on; it demands forceful inputs to realize its potential.

CAR and DRIVER • MARCH 1968

Car and Driver Six-Car Comparison: The Sporty Cars

(continued)

They are Ford's better ideas, Pontiac's dream of a wide-tracking life, Chevrolet's sports department stars, American Motors' Image changers and the ongoing beat of Chrysler Corporation.

They are the six sporty cars: AMC Javelin, Barracuda, Camaro, Cougar, Firebird and Mustang; and they have taken the country by storm.

But in 1964/5, when Ford introduced Mustang as the first of the sporty cars with the largest advertising budget ever allocated to a single product, the consensus in Detroit was that another Edsel had been born. Ford was leading with its chin again in the rough and tumble marketplace, and solid, staid and unspectacular Chevrolet was going to flatten Dearborn for once and for all. Part of this feeling came from Detroit's surprise—a sporty car couldn't work because it was new and unexpected. After all, everybody said, the car was nothing more than an impractical Falcon—only two people could ride in it, there was almost no trunk space, and, horror of horrors, the styling was radical. Oh, some of the kids might go for the long-hood, short-deck look, and maybe even the sports car nuts might latch onto the idea, but that was about it and doomsday was just around the corner.

Within four months those oracles were watching 65-year-old retired druggists, school teachers and just about the whole population of every semi-fashionable suburb in the country standing in line to buy a Mustang—and the rush was on in Detroit.

Opinion that the Mustang would be a failure was so generally held in Detroit that Ford was able to hold onto the sporty car market virtually unchallenged for a year and a half while everybody else was spending precious months tooling up to get a piece of the action. Plymouth was the first to follow Ford's lead with the Barracuda—a car that was hurried into production and showed it, ending up looking more like a beached whale than its namesake.

But by 1966 Ford had plenty of company. Plymouth had a new, sexy Barracuda; Chevy made its move with Camaro and was followed a few months later by Pontiac with the Firebird. Ford's sister division, Lincoln-Mercury, jumped on the bandwagon with the Cougar. Then, this year, AMC brought out the Javelin. And now, three generations and three years later, almost everyone but Checker and Excalibur is building a sporty car.

And the American people can't seem to get enough of the idea. Thus far, none of the manufacturers has reason to regret his entry into the market—and the doomsday criers are now nodding wisely and saying it had to happen; the concept is irresistible with its appeal stretching across the traditional age and economic boundaries.

Everybody from street racer to ad executive to country doctor has been caught up in the fascination of having a car that feels lithe and responsive, and offers sleek good looks to put a little sparkle in the

image. And, by offering a list of options as long as a six-year-old's Christmas list, Detroit has made it possible for every buyer to order his own car; from the super econ-o 6-cylinder versions with the 3-speed manuals and skinny tires for little old ladies, all the way to the double-zoomy 427 V-8s with heavy-duty 3-speed automatics, styled wheels, fat tires and metal-flake paint jobs. There's a sporty car for everyone out there in buyerland.

The result is infinitely important to the future of the car: even though there are a couple of million sporty cars running around on the roads, the individual buyer considers his car to be unique—something he has had a part in designing—and something that sets him apart from those stodgy clowns who march down to the local dealer every three years and drive out in another dumb 4-door sedan.

So all the world loves a sporty car and no one more than C/D. Because of their relatively compact dimensions, the sporty cars handle better than most other Detroit products; and all of them, to a greater or lesser degree, have been designed to be driven rather than to haul parcels down to the post office or to serve as odd shaped school buses. These are real cars and, with the exception of the Corvette, AMX and some of the Super Cars, they are the industry's only attempt to build something that will appeal to people who enjoy driving.

So the sporty cars were a natural for a patented *Car and Driver* Comparison Test—except every time we scheduled one, a new car appeared on the horizon and we had to postpone testing. But now there are six; Ford, Chrysler, GM and AMC have their cards on the table and have anted up.

We knew which cars we would test, but what models of those cars would be most representative? The wildest? The best selling? We wanted to end up with six cars that could be considered true enthusiasts' cars—but it's obviously unfair to test a 427 Mustang or Cougar against a 343 Javelin. We decided the 390 cu. in. versions would be the clear choice—and then discovered that Plymouth preferred to build us a 340 Barracuda rather than the 383 we requested. Considering that the 383s still aren't equipped with power steering because of the size of the block, and also considering the 340 "baby hemi" promised to be a very strong engine, we agreed.

We got a big plus when AMC promised us the first of the 390s—a car that will be available later in the year. Not only do we have a six-car test, but within the test, we have the first-ever evaluation of AMC's top-line sporty car.

The last time we ran a super comparison test with domestic cars (March, 1966) some of the manufacturers had gotten a little carried away in their zeal to show up well. The result was a couple of cars that were stock as stoves—and the rest

came from such popular new car showrooms as Bud Moore's shop, Holman and Moody and John Fitch. We ended up with a pair of NASCAR stockers, an all-out Super Stock dragster and a road racing machine. While that test was a hell of a lot of fun, it didn't seem to offer much that was meaningful to our readers. Consequently, for this test, we sent out warnings that these cars were to be tuned only to the extent equal to a careful dealer prep, and that we would be checking them out very carefully to be sure that super-tuning was held to an absolute minimum.

We also called on the talents of Ed Eaton, manager of New York National Speedway. Ed, who has been involved in drag racing most of his life, has had as much experience with cheater engines as anyone in the world. In addition, his modern track on Long Island is equipped with the latest gadgetry to make quick and accurate checks of actual displacement, cam timing, etc. Even with all this we did have to tear down a couple of engines just to make certain.

Our stated intentions seemed to do the job: none of the cars was overprepared. The trouble was just the reverse, some were underprepared. The Camaro, for instance, never did perform up to our anticipations, and its 396 engine (which we know is one of the best) just never seemed to do the job it should. Likewise the Mustang, which improved after some on-the-spot tuning, for some inexplicable reason had not been equipped with a limited-slip rear axle and suffered during acceleration runs.

Each of our cars was equipped with a console-mounted 3-speed automatic transmission, front disc brakes (vented, with the exception of Javelin), heavy-duty suspension, wide oval tires, tach and power-assisted brakes and steering.

After two minor catastrophes—the Cougar was a victim of a hit-and-run sideswiper on the Ohio Turnpike, and the Javelin couldn't be unloaded from a railroad flat car until 4000 post-strike Fords were unloaded first—the entire staff of C/D showed up at New York National for three days of intensive performance testing, to be followed by two weeks of over-the-road evaluation. At NYNS we used the drag strip, a tight handling section, a skid pad and a brake test area. In the next two weeks we used every kind of road in every kind of weather the northeast is subject to in winter.

The results of the first part of the test appear along with each car's specifications (on pages 30 and 31) while our check list, which represents the consensus of the staff, appears on page 28.

The cars are rated in direct comparison with each other, based on a 6-point "must" system of scoring. Seeming inconsistencies, where two cars that are virtually the same (Firebird and Camaro; Mustang and Cougar) have received different scores, are accounted for by the fact that such at-first-



The Barracuda hangs on remarkably well despite junior-size tires.



Well, yes, it does understeer. Why do you ask?



Relatively soft suspension handicaps Cougar's cornering ability.



The Camaro requires a heavy throttle foot to overcome understeer.



Super fast, variable-ratio steering makes the Firebird a joy.



Being nearly neutral, the Javelin goes where you point it.

glance inconsequential matters as the design of the front seats or the optional equipment installed can make significant changes in curiously non-related areas.

Listed below—and in order of our preference—are the six sporty cars.

PONTIAC FIREBIRD 400 HO

Pontiac entered the sporty car race late and, moreover, was saddled with a basic body and chassis developed by Chevrolet. So it must be the most imitative of all, right? Wrong. Pontiac has a reputation of taking a mediocre idea and building it into something far above the norm.

In the case of the Firebird, the reputation has been well earned. What Pontiac

has done is to have seized on the "personal car" concept with more enthusiasm than anyone since the first Mustang and developed the Firebird/Camaro body into a real driver's car.

It doesn't take more than five minutes in the car to make the idea of slogging it along to the station or the store seem absurd. It demands to be taken out on the open road and flogged as hard as you think you are able. For sheer enjoyment and confidence behind the wheel, the Firebird was almost in a class by itself.

We should note here, that the Bird came equipped with enough options (Koni shocks, for one) to make it the second most expensive car tested. It should also

be noted that the preparation on the car was absolutely out of sight.

The 400 cu. in. engine, largest of any tested, was also the least fickle. It started readily when cold, warmed up without die-outs, and generally idled so smoothly and quietly we had to check the tach now and again to be sure it was running. (The timing was changed on this particular car so that it was not so retarded at idle, which helped in around-town driving, but probably meant that this Firebird would not have passed the anti-smog regulations.)

The engine's Clark Kent disguise is quickly shed when you stick your foot in it. In the drag strip section of the test, ETs of 14.2 seconds at 100 mph were