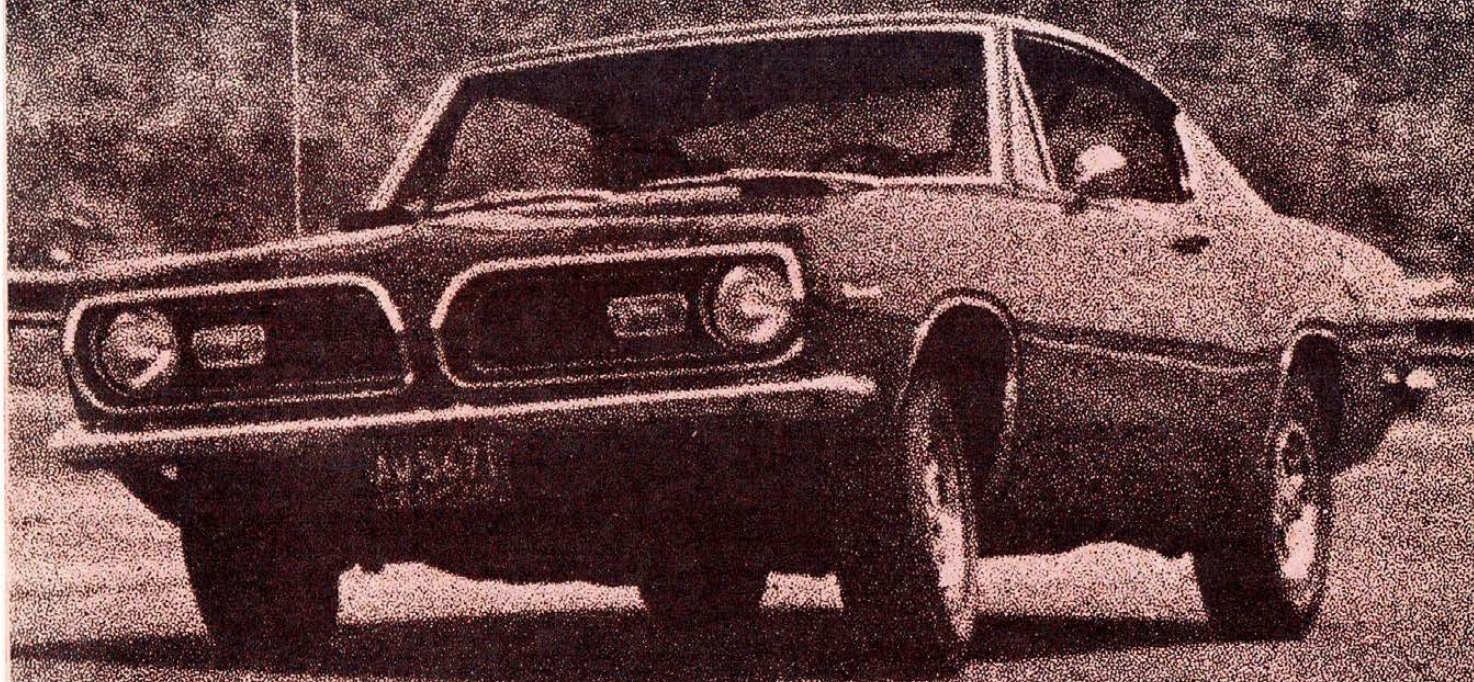


# CAR LIFE ROAD TEST



## PLYMOUTH'S POCKET ROAD RUNNER— **1969 'CUDA 340**

***It's a Grand Tourer,  
a Budget Supercar, and  
(so help us) Defender  
of Our National Pride***

**N**ATIONAL PRIDE made the challenge mandatory. A European manufacturer has gone into the Supercar business, with the huge engine from its limousine installed in an intermediate-size sedan. When only Americans did this, the Europeans denounced the practice as vulgar. Now it is proclaimed as advanced engineering, ►





# 1969 'CUDA 340



continued

and the factory claims its new creation would put the hurt on America's finest.

Another magazine, the name of which we forget, brought one of these SuperGermans to the track on the day CAR LIFE was there with Plymouth's pocket Road Runner, the 'Cuda 340. In the style of a Western shoot-em-up, we ambled over, and allowed as how the Barracuda isn't the fastest thing in Mopar's line-up, and the 340 isn't the biggest engine available in the Barracuda, but would they care to step over to the starting line, just to find out if...?

They would. It was a tough fight, but the 'Cuda won, three out of three. It gained a few feet off the line, and stayed there until both cars were in high gear. Then the 'Cuda pulled away, and kept on pulling past the quarter-mile and until both cars ran out of track.

Sportsmanship requires us to say here that the import was geared for cruising, not accelerating, and that it was loaded with air conditioning and all manner of luxury equipment. But it cost something like \$10,000 more than the 'Cuda, and that's the point. The 'Cuda 340 is a Ponycar in the Road Runner manner.

The Road Runner proved what the enthusiast had long suspected: There are thousands of enthusiasts willing to pay for the big engine and the handling package, but not for the myriad interior options, appearance groups and wheel covers that were usually a part of the Supercar package.





This year, Plymouth repeats the theme, but with a Ponycar. The familiar abbreviation, 'cuda, becomes a model name, 'Cuda. The 'Cuda comes with a spartan interior and bench seat, but with the 340-cid V-8, four-speed manual transmission, stiffer springing, bigger shock absorbers, wide steel wheels, oversize tires, decorative hood scoops, and special paint on the hood and lower body panels.

It's a little confusing. The 'Cuda has a long option list, as does the standard Barracudas, and the top-of-the-line Formula S, which comes from the factory with the bigger engines, handling package, more interior trim, and semi-bucket seats. The buyer can start with the plain version, and add all the good stuff, or he can order the Formula "S" with everything on it, or he can order a 'Cuda, and go as fancy as he wants, when he wants.

Plymouth's marketing people say there's an economic benefit, that building 10,000 'Cudas and sending them to the dealers for sale off the floor is cheaper for the factory and the dealers than handling 10,000 special orders for plain Barracudas with big engines. Body style is the only limitation. The Barracuda convertible is more expensive than the coupe or fastback, and isn't cheap, no matter what the engine or interior. For this reason, there is no 'Cuda convertible.

Speaking of price, we can't. The test was conducted many weeks before the new cars and the new car prices, were officially announced. The marketeers

couldn't say what the 'Cuda will list for, and they couldn't even say what price they recommended. Best we can do is predict that the 'Cuda will sell for more than the stripped versions, but not much.

The test 'Cuda wasn't the economy version. It had separate seats, power-assisted disc front brakes, power-assisted steering, the alloy wide-rim wheels that are a new Barracuda option for 1969, and the optional Goodyear Polyglas tires. The test car looks fancier than the standard 'Cuda package, but only the tires would add to performance.

The 'Cuda performed. In the America-First match races, carrying two people and test gear, with street tire pressures, the 'Cuda turned consistent quarter-mile times in the high 14s, with trap speeds between 95 and 100 mph. Shifts came at 6000 rpm. although the engine would turn higher, and the shifting was done as the enthusiast owner would—quickly, but not brutally. The 'Cuda may be a more rewarding package than big brother Road Runner if the price is right. The 'Cuda turned better quarter-mile times than those of the 383-cid Road Runner CAR LIFE tested last year.

The 340 engine is especially impressive. Even the National Hot Rod Assn. is impressed—the engine is rated at 275 bhp, while NHRA factors the engine at 310. The idle is rough, a plus factor in a performance car, but the 340 pulls strongly and smoothly from just above idle to redline. It's light for

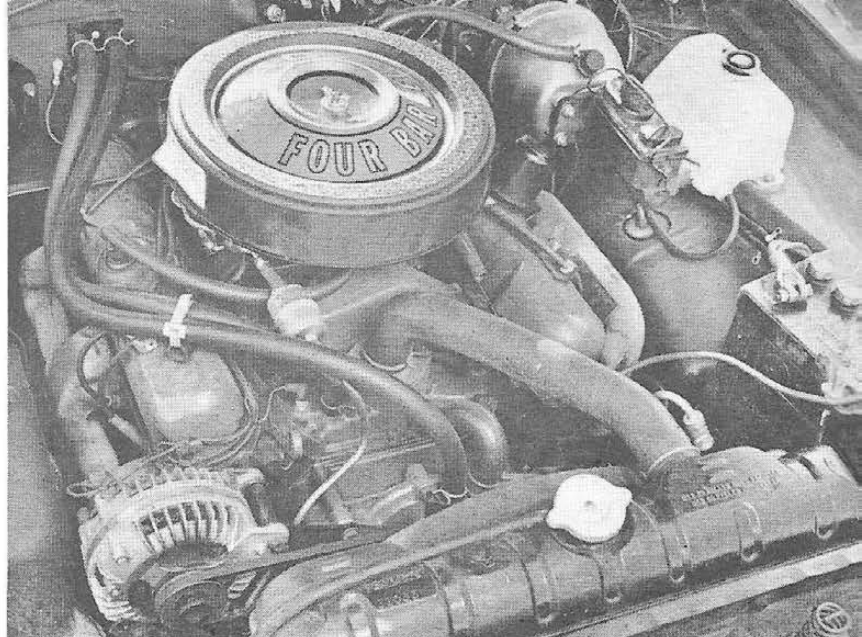
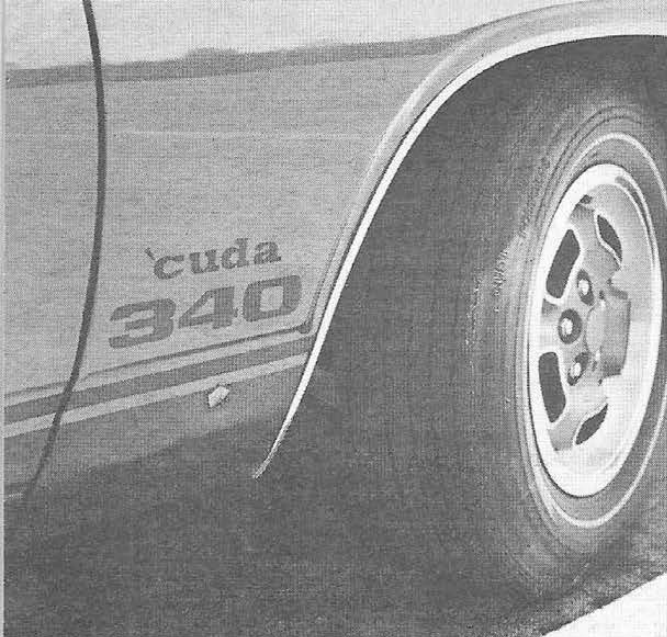
its displacement. The 383-cid V-8 is an option, but the extra engine size would have to be balanced against the extra weight. As a side note, Chrysler has reworked the power steering system this year, and the 383 'Cuda can be ordered with it.

Handling, aided by the Polyglas tires, was very good. There is mild understeer, but none of the determined front-end plow that hampers several of the big-engine Ponycars. The 'Cuda could be driven around corners in any attitude the driver chose, with front wheels pushing, all four sliding, or the back wheels hung out, under power. The 'Cuda felt stable at all speeds. The power steering and the big sticky tires balance each other. The ratio is quick, and the wheel can be spun with little effort. There is some road feel, although it takes many miles for the driver to become sensitive enough to feel it.

The 'Cuda's brakes worked very well. The first hard stop, using enough effort to keep all four wheels from locking, pulled a steady deceleration rate of 27 ft./sec./sec.—very good. With mild brake fade, the rate had dropped to 20 ft./sec./sec. by the sixth stop. That's better than some cars do on the first stop. The 'Cuda was still easy to control, with only slight swerving, although more pedal pressure was required.

As an experiment, the driver simulated a panic stop, literally jumping on the pedal, hard as he could, with no effort to control the pressure. No prob-





COMPACT 340-cid V-8 is standard in the 'Cuda. Light, strong and happy at high revs, the 340 performs on a par with the bigger 383.

lem. Again, the wheels didn't lock, and the 'Cuda swerved only slightly. Deceleration improved, to 22 ft./sec./sec. Trying the same thing again produced even better braking, with the rating up to 23. The 'Cuda's brakes worked well at first, and even deliberate attempts to over-use them did no harm. Last year's test Barracuda didn't make the CAR

LIFE list of Ten Most Satisfying Test Cars. This year, things could be different.

The impromptu match race would have been worth doing even without the patriotism factor, because it was an excuse to extend the 'Cuda to its limits, something that couldn't be done while driving the 'Cuda from Detroit

to California for the test. Most of the trip was on the Interstate system, safe, quick, but dull.

There wasn't even a status boost. The 'Cuda was a 1969 model, being driven in public two months before its introduction, but this year and last year look almost the same. There's a new grille, a new rear panel, and

## 1969 'CUDA 340

### PLYMOUTH BARRACUDA



#### DIMENSIONS

Wheelbase, in.	108.0
Track, f/r, in.	57.7/55.6
Overall length, in.	192.8
width	69.6
height	52.7
Front seat hip room, in.	22 x 2
shoulder room	55.4
head room	37.2
pedal-seatback, max.	42.0
Rear seat hip room, in.	57.0
shoulder room	55.4
leg room	31.1
head room	36.5
Door opening width, in.	42.0
Trunk liftover height, in.	26.0

#### PRICES

List, FOB factory	n.a.
Equipped as tested	n.a.
Options included:	Power-assisted steering, disc front brakes; alloy wheels; belted-tread bias-ply tires; semi-bucket seats.

#### CAPACITIES

No. of passengers	5
Luggage space, cu. ft.	varies
Fuel tank, gal.	18.0
Crankcase, qt.	4.0
Transmission/dif., pt.	7.5/4.0
Radiator coolant, qt.	16.0

#### CHASSIS/SUSPENSION

Frame type:	Unitized.
Front suspension type:	Independent by s.l.a., torsion bars; telescopic shock absorbers.
ride rate at wheel, lb./in.	100
antiroll bar dia., in.	0.88
Rear suspension type:	Hotchkiss live axle, multi-leaf rear springs, telescopic shock absorbers.
ride rate at wheel, lb./in.	132
Steering system:	Integral assist recirculating ball gear; parallelogram linkage behind front wheels.
overall ratio	18.8:1
turns, lock to lock	3.5
turning circle, ft. curb-to-curb	38
Curb weight, lb.	3470
Test weight	3650
Distribution (driver), % f/r	55.1/44.9

#### BRAKES

Type:	Ventilated disc front; cast iron duo-servo drum rear; proportioning valve.
Front rotor, dia. x width, in.	10.79 x 1.84
Rear drum, dia. x width, in.	10.0 x 1.75
total swept area, sq. in.	314.7
Power assist	
line psi at 100 lb. pedal	800

#### WHEELS/TIRES

Wheel rim size	14 x 5.5J
optional size	none
bolt no./circle dia., in.	5/4
Tires:	Goodyear Polyglas.
size	E70-14
normal inflation, psi f/r	28/28
Capacity @ psi	5200

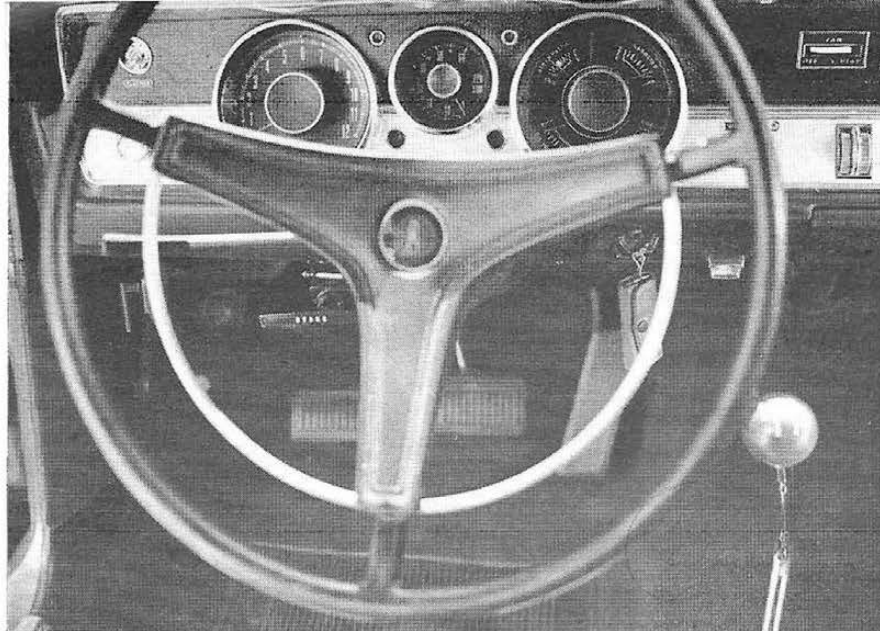
#### ENGINE

Type, no. of cyl.	ohv 90° V-8
Bore x stroke, in.	4.04 x 3.31
Displacement, cu. in.	340
Compression ratio	10.5
Fuel required	premium
Rated bhp @ rpm	275 @ 5000
equivalent mph	96.5
Rated torque @ rpm	340 @ 3200
equivalent mph	61.8
Carburetion:	Carter 1x4.
throttle dia., in./sec.	1.44/1.69
Valve train:	Hydraulic lifters, pushrods and overhead rocker arms.
cam timing	
deg., int./exh.	22-66/74-22
duration, int./exh.	268/276
Exhaust system:	Dual, reverse-flow mufflers.
pipe dia., ex./tail	2.25/1.88
Normal oil press. @ rpm	45-65 @ 2000
Electrical supply, V./amp.	12/37
Battery, plates/amp. hr.	54/48

#### DRIVE TRAIN

Clutch type:	Single dry disc coil-spring type pressure plate.
dia., in.	10.5
Transmission type:	Four-speed manual.
Gear ratio 4th (1.00:1) overall	3.91:1
3rd (1.39:1)	5.43:1
2nd (1.91:1)	7.47:1
1st (2.66:1)	10.4:1
Shift lever location:	Console.
Differential type:	Hypoid, limited-slip.
axle ratio	3.91:1





**INSTRUMENT PANEL** is nicely laid out. Tachometer is small, but it's in the proper place. There are gauges for oil pressure, water temperature and alternator.

decoration-only scoops replace the simulated injector intakes on the 1968 hoods. Comments from other drivers were favorable, but the consensus was that somebody had done a nice job customizing a '68, and where did you buy those boss wheels? Things are tough when a man has to volunteer the secret that he's driving a new car.

But the trip was a good way to learn what it's like to tour in a performance car. It's not bad at all. The 'Cuda has plenty of room for luggage, the driving position was good, and the seats were habitable for 12 hours at a time. The stiff suspension jars the occupants over rough roads, but it's worth having in the mountains. The four-speed trans-

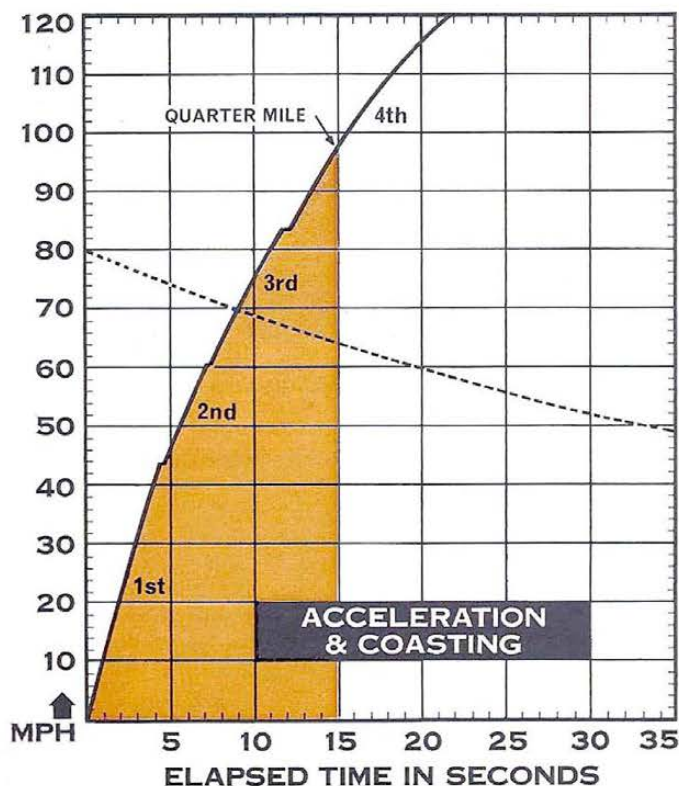
mission wasn't needed, but it was only noticed rowing the car through traffic.

The gearing was an annoyance. Plymouth's product planners spell performance E.T., and they fitted the car with a 3.91:1 final drive. The car didn't have air conditioning, again for performance reasons. With the windows up, the 'Cuda was quiet, and hot as blazes. Windows down, the heat level dropped to merely unbearable, and the noise level went up. Overgearing didn't seem to hurt the engine, and wind noise drowned out engine noise, but the driver worried, watching the neat little tachometer showing 4000 rpm mile after mile. The gearing wasn't all that useful, at that. Last year's test Barracuda, same engine, same body, had a 3.23:1 gearset, and it went just as quickly. Fuel mileage was acceptable, but again, it could have been better.

The 'Cuda may do for Barracuda what the Road Runner did for Belvedere. The 'Cuda has handling and speed, but it could use a reputation.

Air conditioning wouldn't hurt, either. The desert gets hot in the summer. Between Needles and Indio the 'Cuda's path was crossed by a Road Runner, of the feathered variety. He was walking.

## CAR LIFE ROAD TEST



### CALCULATED DATA

Lb./bhp (test weight).....	13.27
Cu. ft./ton mile.....	168.9
Mph/1000 rpm (high gear).....	19.3
Engine revs./mile (60 mph).....	3144
Piston travel, ft./mile.....	1734.4
CAR LIFE wear index.....	54.5
Frontal area, sq. ft.....	21.0

### SPEEDOMETER ERROR

30 mph, actual.....	28.12
40 mph.....	36.40
50 mph.....	46.24
60 mph.....	56.30
70 mph.....	65.40
80 mph.....	74.68
90 mph.....	84.11

### MAINTENANCE

Engine oil, miles/days.....	4000/90
oil filter, miles/days.....	8000/180
Chassis lubrication, miles.....	36,000
Antismog servicing, type/miles..	tune-up check and replace PCV valve/12,000
Air cleaner, miles.....	replace/24,000
Spark plugs: Champion NGY.	
gap, (in.).....	0.035
Basic timing, deg./rpm.....	5 BTDC/650
max. cent. adv., deg./rpm.....	22/4000
max. vac. adv.,	
deg./in. Hg.....	8.5/10.5
Ignition point gap, in.....	0.014-0.019
cam dwell angle, deg.....	37-42
arm tension, oz.....	17-21.5
Tappet clearance, int./exh.....	0/0
Fuel pressure at idle, psi.....	5-7
Radiator cap relief press., psi.....	16

### PERFORMANCE

Top speed (6200), mph.....	119.6
Test shift points (rpm) @ mph	
3rd to 4th (6000).....	83.4
2nd to 3rd (6000).....	60.6
1st to 2nd (6000).....	43.5

### ACCELERATION

0-30 mph, sec.....	2.8
0-40 mph.....	3.7
0-50 mph.....	5.6
0-60 mph.....	7.1
0-70 mph.....	9.0
0-80 mph.....	10.9
0-90 mph.....	13.7
0-100 mph.....	15.6
Standing 1/4-mile, sec.....	14.93
speed at end, mph.....	96.63
Passing, 30-70 mph, sec.....	6.2

### BRAKING

Max. deceleration rate from 80 mph	
ft./sec./sec.....	27
No. of stops from 80 mph (60-sec.	
intervals) before 20% loss in decel-	
eration rate.....	5 (see text)
Control loss? Slight.	
Overall brake performance.....	very good

### FUEL CONSUMPTION

Test conditions, mpg.....	12.8
Normal cond., mpg.....	11-14
Cruising range, miles.....	198-252