

CAR and DRIVER ROAD TEST

# Dodge Challenger R/T Hemi

Lavish execution with little or no thought toward practical application

**M**ajor truth: Since the first Mustang rolled out of a dealer's showroom in 1964 sales of that class of car have been as high as 13% of Detroit's total yearly volume—and Dodge has not enjoyed a single dollar of that business. Second major truth: It's bad enough to be late into the market place but to be late with the wrong kind of a car can be fatal (even if only crippling it is still an offense which requires all of the product planners to fall on their swords). Now let's talk about Dodge's new Challenger—easily three years too late to be a smashing success but something Dodge is counting on to make a few bucks with nonetheless.

To understand the Challenger you first better know a little bit about Chrysler Corporation and its strategies. Chrysler doesn't do anything first. Instead, it carefully watches what everybody else in Detroit is doing and when it sees an area of abnormal market activity it leaps exactly

onto that spot. Because it always leaps late—which is inevitable if it doesn't begin to prepare its entry into the market until someone else already has one—it tries to make up for being late by jumping onto said spot harder than everybody else. That is why you didn't see a real Chrysler sporty car until 1970 (and that is why Chrysler's small car will be lucky to see light of day in 1971). There is another problem, too. Sometimes when you leap late you find that by the time you hit your target everybody else has gone somewhere else. This is painfully close to being the case with the Challenger/Barracuda because it is a bald-faced replica of the Camaro/Firebird which GM is planning to completely revamp in just a few months.

To further understand the Challenger you have to go beyond corporate stratagems and straight into the Dodge division. The Dodge boys fancy themselves as the only spark of vitality in the corporation, and right now they are flying high on the Charger, a model

that does nothing more than a Coronet hardtop can do, except look better, and yet has outsold Plymouth's specialty car, the Barracuda, by two-to-one for the last couple of years. According to Robert McCurry, Dodge's general manager who has to be considered as a mild outlaw in such a conservative organization as Chrysler, this is to be the plan with the Challenger. Essentially a sporty car of the type everybody else is selling, it is meant to have more interior room (Dodge attributes a good part of the Charger's success to the 5-passenger capacity) and a comprehensive list of options. McCurry admits that the Challenger is not aimed at any specific type of buyer; not at the performance enthusiasts, not at the comfort seekers who might opt for a small Thunderbird, but rather at the entire sporty car market from Camaro to Cougar and hopefully anyone on the fringe as well. The Challenger's price target is directly between the Mustang and the Cougar—and to avoid



PHOTOGRAPHY: HUMPHREY SUTTON

competition from within the Dodge line the more expensive Dart models have been dropped.

That's what the Challenger is *supposed* to be. In the flesh it is a highly stylized Camaro with strongly sculptured lines, more tumble-home and a grille vaguely in the Charger tradition. There's no doubt it is a handsome car but it also has a massive feeling which is totally unwelcome in a sporty car—a massive feeling which results from a full five inches more width than a Mustang and a need to sign up with Weight Watchers. The Hemi-powered test car weighed 3890 pounds and if any normally equipped V-8 Challenger with a full gas tank weighs less than 3550 pounds we would be surprised. Dodge is quick to point out that the Challenger's 110-inch wheelbase is two inches longer than that of the Barracuda and, in fact, longer than any other sporty car ex-



cept for the 111-inch Cougar. The extra two inches are intended to provide relief for the acute shortage of rear leg room common to sporty cars. To check out this claim we parked the Challenger next to C/D's Blue Maxi Camaro for a little side-by-side comparison. After crawling around in both interiors it is clear that the inside of the Challenger is up to two inches wider, particularly in front seat shoulder room. But face it, width isn't *that* important in a 4-passenger car when there is already enough room for two people side-by-side. A far more important dimension is rear seat leg room and there the Challenger has, at very best, an inconsequential half-inch advantage over the Camaro. Sitting back there, you still have no choice but to spread-eagle your legs around the front seat backs when they are in their full rearward position—it's uncomfortable and damn near impossible to sustain for a trip of any duration. In addition, the Challenger has noticeably less headroom in the rear—enough less to make that seat unsuitable for anyone over six feet tall. It is true that the Challenger's front bucket seats have a longer range of adjustment which means that when the seats can

be pushed farther forward there is definitely more useful room in back than in the Camaro. One of the managers in Dodge's product planning section summed up the situation this way, "In the other sporty cars the rear seat is worthless about 95% of the time. That area in the Challenger is worthless only about 75% of the time."

You can see that the Challenger isn't a family car. The sad part is that Chrysler also passed up a splendid opportunity to make an exceptional performance car. It's simply too heavy. The idea of a "sporty" car weighing within 100 pounds of a comparably equipped Road Runner or Super Bee is ridiculous. Along with all of the weight comes a weight distribution problem—58.9% on the front wheels of the Hemi-powered test car. What has happened is that Chrysler has built itself a "performance" car that is 300 pounds heavier than a Cobra Jet Mustang and almost as nose-heavy. Nice going, you guys.

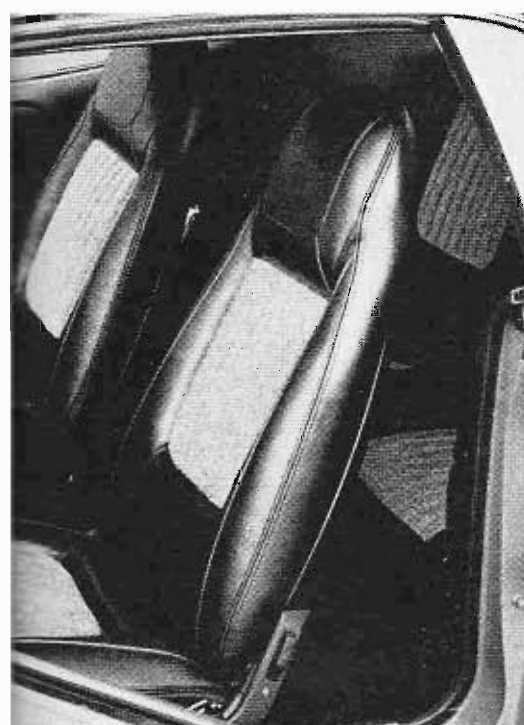
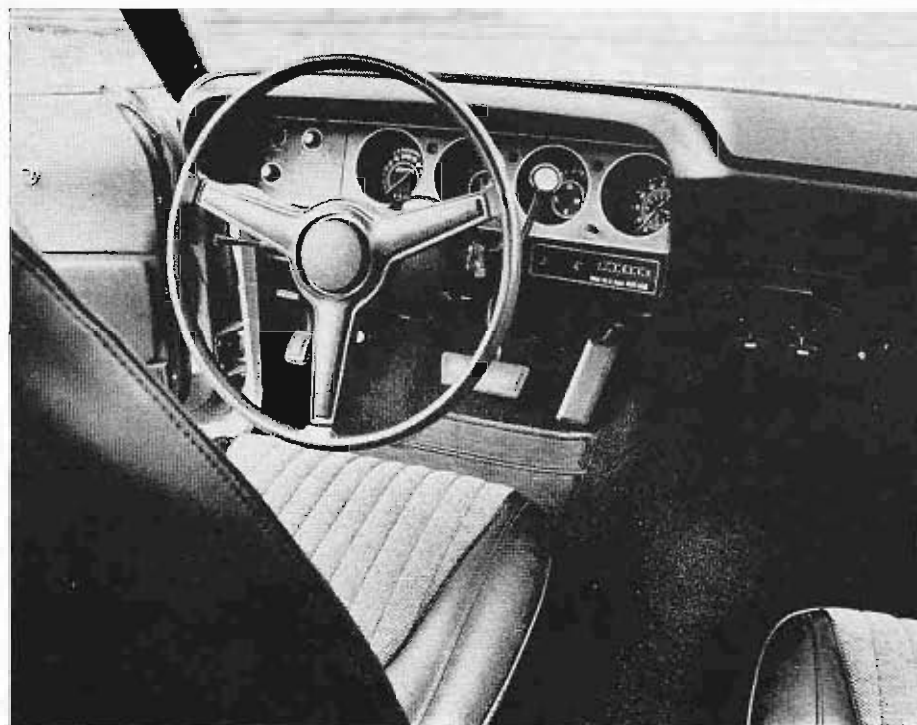
And the Challenger is so wide that it has none of the compact agility normally associated with this class of car. Before we go any further we should make it clear that the test car is perfectly satisfactory for normal maneuvers like going to church and fetching grandma but you don't buy Hemis for that kind of duty. Strong understeer is apparent in places where you might try to hurry, like expressway entrances, and really flogging on a twisting road or a tight road course is a waste of time. The car just won't cooperate. The front wheels begin to lose steering response and to keep from nosing off into the woods you have to use a fantastic amount of power—a fairly risky operation when sometimes the power brings the tail around like a swinging gate and sometimes it just pushes your nose into the woods faster. Just like everybody else in Detroit, Chrysler is afraid to build its powerful cars with anything resembling neutral steering because they are afraid that some clown will tap the throttle in a corner and spin himself into somebody's petunia patch. But we think they should worry just as much about someone finding himself moving too fast in a corner and having no steering response—the car continuing along its path regardless of which way you point the wheels—which is exactly what happens with excessive understeer.

The Hemi's road course performance was hamstrung by two distinct difficulties. First, the carburetors cut out so badly in turns that the whole operation is deprived of the power necessary to negate the understeer and you end up moving very slowly on a very erratic line. The other problem concerns the 24/28 psi tire pressure recommendation—a curious recommendation indeed for such a nose-heavy car. It turns out that this backwards bias is a palliative for tricky transient handling in the small engine Challengers, but the decal with that recommendation appears throughout the model line because whatever department is in charge of affixing the decal can't be bothered to distinguish between Hemis and Sixes.

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We did try the Challenger with equal pressure in the tires but even that doesn't cure all of the evils. Curiously enough considering the unfavorable weight distribution, traction is not a problem. The fat F60-15 Polyglas tires and Chrysler's biased rear suspension (all 440 and Hemi Challengers have rear springs which tend to equalize loading on the rear wheels during acceleration) combine to do a good job of putting the power on the road.

The engineers who develop the ride and handling of Chrysler cars admit that the big engine Challengers (Hemis and 440s have the same suspension) were never a high priority project. Most of the effort was directed instead at the 340 and 383 4-bbl. models—which have a different suspension package that includes a rear anti-sway bar to reduce understeer—and the engineers claim that those models are every bit as agile as Z/28 Camaros and Boss 302 Mustangs. Unfortunately, the smaller engines are completely overshadowed by the two 440s—4-bbl. and 6-bbl.—and the Hemi. Moreover, the Challenger is so heavy that the smaller engines are unable to provide competitive performance so the engineers' handling efforts might better have been applied somewhere else.

There are probably a number of you out there in readerland mumbling to yourselves that anybody with a brain knows the Hemi is by far the heaviest engine Chrysler builds and if we were looking for a well-balanced car we should have picked something else. That's true, and yet the Hemi is also the only real racing engine in all of Detroit that you can dial up from your corner dealer with relative ease. You can't just tick off a Boss 429 on a Ford order form and expect to get it, and aluminum 427 Chevys certainly don't grow on trees. We try to test a Hemi every year just to stay in touch with Chrysler's big gun and to see how that hyper-active horsepower generator is fairing in the less forgiving world of exhaust emissions. Of course it makes for a fast Challenger—14.1 seconds in the quarter at 103.2 mph—but this Hemi was contrary to our past experience in that it didn't offer more pleasure than grief. It was very ill at ease in traffic with a torturous idle when held in drive against the brake and very poor low speed throttle response. Not infrequently it would backfire through the carburetor when coming off idle and, occasionally, after a backfire, die right in the middle of the street leaving us to wonder how much impertinence one should put up with just to go 103 mph in the quarter. At first we blamed the tighter 1970 emission regulations but a conversation with the manager of Chrysler's engine development laboratory dispelled that idea. The 1970 Hemis have hydraulic lifters, higher idle speeds and a solenoid valve on the primary carburetor to close the throttles completely when the ignition is shut off (to prevent after-running), but none of those things should impair driveability. We are left to conclude that this Hemi is a victim of poor quality

control—something not new to Hemi even though we have never had a bad one before. We are left to conclude that the 440 6-bbl. is a better choice for street operation because of its fatter torque curve and the Hemi should be reserved for those who want the maximum performance and are willing to spend considerable time tuning to get it.

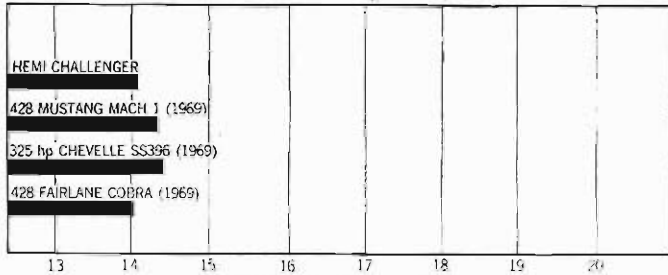
This Challenger did point out the value of specifying the right options to go with the Hemi, however. The standard 3.23-to-one axle ratio is not enough to offset the Hemi's soft low speed performance and the cold air induction hood is essential because, without it, the test car lost 2 mph in the quarter when the underhood temperature reached its normal operating level.

This Challenger, equipped with the standard drum brakes, also pointed out the need for ordering the optional discs if you value good braking performance. The self-energizing drums are difficult to modulate and more inclined to fade. Even so, the test car's poor braking performance—294 feet (0.72-G) from 80 mph—is far more a result of poor braking distribution than of poor brakes. As seems to be normal for Chrysler products, the rears looked up well before the fronts which dramatically reduced the efficiency of the system.

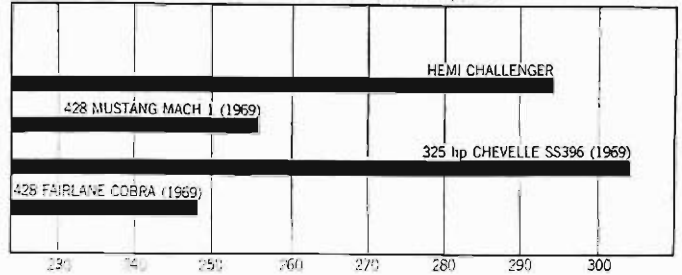
As there are optional brakes and optional engines so are there a multitude of appearance options—all of which are calculated to give the Challenger that broad-based appeal which Dodge is counting upon. For example, take something as seemingly mundane as a hood: there is the standard no-frills simply-cover-the-engine hood, the bulging R/T hood (all performance models are called R/T), and the high performance hood with a big hole in it for the shaker-type scoop. Inside the car all of the R/Ts have a special instrument cluster with four round dials: one each for the tach, speedometer, clock, and the remaining one reserved for all of the small gauges. Then, for those who aren't satisfied with less than the best room in the house, there is the Special Edition trim option which can happen on either the standard Challenger or the R/T. The most straightforward part of the SE package is the seats—either cloth or leather covering. The cloth ones on the test car merit our approval even though they aren't very buckety. But the rest of the package is of dubious value. You get an overhead console with warning lights for the following offenses; door ajar, low fuel and seat belts. "Low fuel" may be helpful even though the ceiling is a strange place for that warning to appear and "seat belts," which operates on a time delay so that it stays on about 30 seconds after you close the door, may actually remind someone to buckle up. But nothing could be more worthless than "door ajar" which operates on the same time delay as "seat belts." It simply means that you have to wait that 30 seconds after you shut the door for the light to confirm that it is really closed—if you take the warning at

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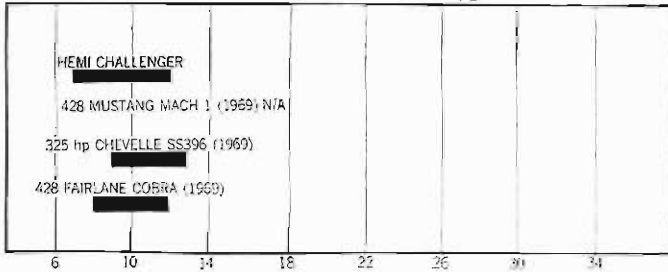
**ACCELERATION** standing 1/4 mile, seconds



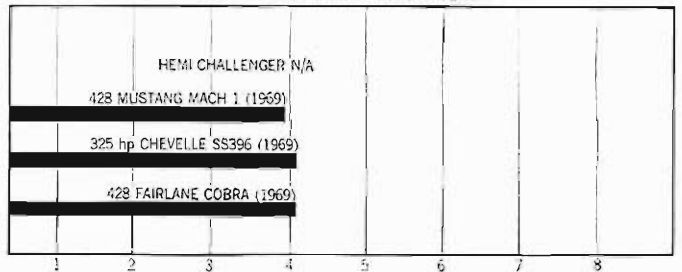
**BRAKING** 80-0 mph panic stop, feet



**FUEL ECONOMY RANGE** mpg



**PRICE AS TESTED** dollars x 1000



**DODGE CHALLENGER R/T**

**Manufacturer:** Dodge Division  
Chrysler Corporation  
P.O. Box 1259  
Detroit, Michigan 48231

**Vehicle type:** Front engine, rear-wheel-drive,  
4-passenger coupe

**Price as tested:** \$ N.A.  
(Manufacturer's suggested retail price, including all options listed below, Federal excise tax, dealer preparation and delivery charges, does not include state and local taxes, license or freight charges)

**Options on test car:** 425-hp Hemi engine, styled wheels, F60-15 tires, automatic transmission, limited-slip differential, power steering, power brakes, Special Edition trim package

**ENGINE**  
Type: V-8, water-cooled, cast iron block and heads, 5 main bearings  
Bore x stroke... 4.25 x 3.75 in, 108.0 x 95.2mm  
Displacement... 426 cu in, 6990cc  
Compression ratio... 10.3 to one  
Carburetion... 2 x 4-bbl Carter AFB  
Valve gear... Pushrod operated overhead valves, hydraulic lifters  
Power (SAE)... 425 bhp @ 5000 rpm  
Torque (SAE)... 490 lbs-ft @ 4000 rpm  
Specific power output... 1.00 bhp/cu in, 60.9 bhp/liter  
Max recommended engine speed... 6500 rpm

**DRIVE TRAIN**  
Transmission... 3-speed, automatic  
Max. torque converter... 2.1 to one  
Final drive ratio... 3.23 to one  
Gear Ratio Mph/1000rpm Max. test speed  
I 2.45 9.6 58 mph (6000 rpm)  
II 1.45 16.2 97 mph (6000 rpm)  
III 1.00 23.6 111 mph (4700 rpm)

**DIMENSIONS AND CAPACITIES**  
Wheelbase... 110.0 in  
Track, F/R... 59.7/60.7 in  
Length... 191.3 in  
Width... 76.4 in  
Height... 51.4 in  
Ground clearance... N.A. in  
Curb weight... 3890 lbs  
Weight distribution, F/R... 58.9/41.1%  
Battery capacity... 12 volts, 70 amp/hr  
Alternator capacity... 444 watts  
Fuel capacity... 18.0 gal  
Oil capacity... 5.0 qts  
Water capacity... 16.0 qts

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

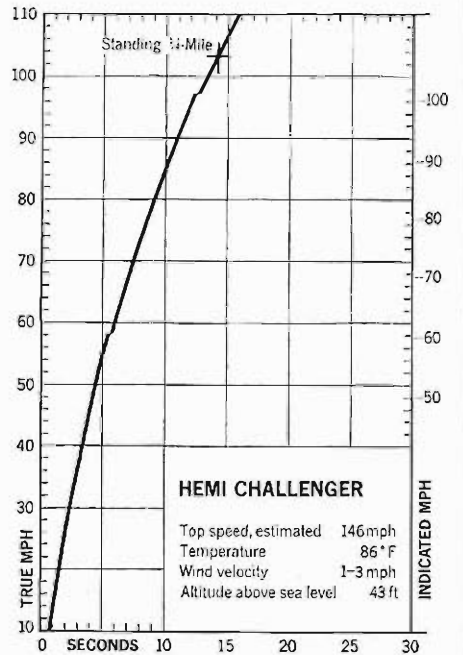
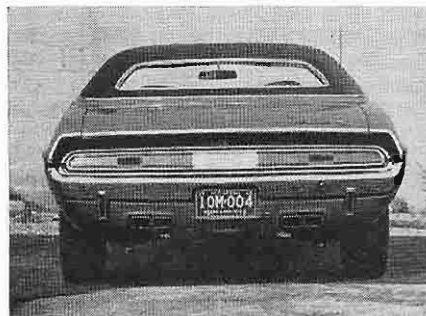
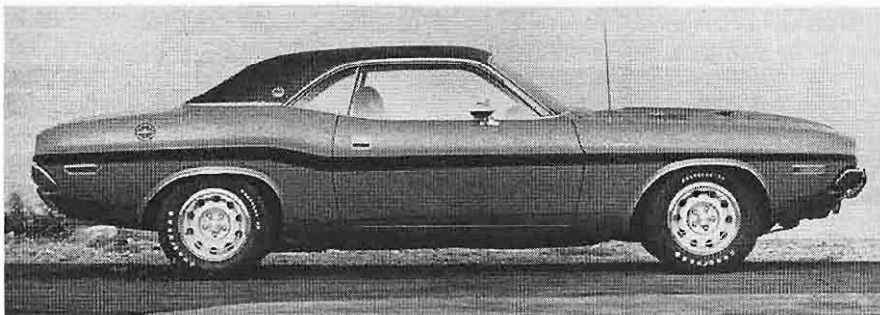
**STEERING**  
Type... Recirculating ball, power assisted  
Turns lock-to-lock... 3.5  
Turning circle curb-to-curb... 42.0 ft

**BRAKES**  
F... 11.0 x 3.0-in cast iron drum, power assisted  
R... 11.0 x 2.5-in cast iron drum, power assisted

**WHEELS AND TIRES**  
Wheel size... 15 x 7.0-in  
Wheel type... Stamped steel, 5-bolt  
Tire make and size... Goodyear F60-15  
Tire type... Polyglas, tubeless  
Test inflation pressures, F/R... 24/28 psi  
Tire load rating... 1500 lbs per tire @ 32 psi

**PERFORMANCE**

Zero to	Seconds
30 mph	2.3
40 mph	3.3
50 mph	4.3
60 mph	5.3
70 mph	7.3
80 mph	8.0
90 mph	10.9
100 mph	13.4
Standing 1/4-mile	14.1 sec @ 103.2 mph
Top speed (estimated)	146 mph
80-0 mph	294 ft (0.72G)
Fuel mileage	7-12 mpg on premium fuel
Cruising range	126-216 mi



## I AM THE WORLD'S GREATEST DRIVER

(Continued from page 65)

was readying himself for a ride on a rocket sled, or wearing safety glasses and steel-tipped shoes and fireproof skivvies?

"My field is driver behavior. I don't have any axes to grind, I'm just looking for increased driver efficiency. We translate a great deal of knowledge into behavior in the Smith System. Once you teach a guy to play golf properly, he never forgets, and that's the same way with driving. Driving is a mental process, with emphasis on mental and visual skills." He is heading over the new bridge that connects the city of San Diego with the small, fusty city of Coronado, a mothball community for hundreds of retired Naval officers. The bridge towers over the harbor so that destroyers and high-masted amphibious fleet transports can pass underneath. Harold L. Smith looks at the low barrier wall and muses, "All it takes is some guy drinking the right kind of hooch to get airborne in a sports car and off he'll go into the bay. They'll be dragging for his body for three days." He laughs ironically.

"Most drivers on the road are just practicing for an accident. Forget all that crap about 50,000 fatalities—the numbers that are important involve accidents. There is only one death in every 455 accidents, but 25% of the nation's drivers are involved in accidents each year. *That's* what we've got to correct. Look at General George Patton. There he was in Europe, chasing the Germans all over hell, doing a beautiful job, a *beautiful job*, and then he's killed by his own sergeant in a stupid jeep! Like the Navy too. They never realized that they were a fleet trucking operator and when the war was over they counted up the number of guys who were killed driving and they were appalled. I'll never forget going ashore at Guam and there was a sign about driver safety the Navy had put up and it said, '383 of your buddies have been killed or maimed since we took this Island.' That really rocked me.

"When I got out of the Navy in 1945, I went back home to Detroit and looked up driver's schools in the phone book, and you know what? There wasn't one driver training school in the Motor Capital of the World! So I started a school and I was trying to teach people's hands and feet to drive a car, which I learned wouldn't work after about two years. This shook a missing link loose. I asked myself, why can't I teach someone to drive as well as myself? That was in 1948 and it took me four years to develop the Smith System. There were no subsidies or research grants, just me and my own staff. In 1954 I did my first film for Ford on the Smith System and it broke all records. I updated it in 1963 and it still is in great demand. In fact, several states, including New York, require it in their driver education courses.

"In the beginning all I heard about was how the driver's attitude could not be

helped. I believed in developing skill. Like drivers after an accident often say, 'I just didn't see him!' *That's it!* Driving is a function of the eyes and the mind, not the hands and feet! We have two types of vision; peripheral and central, and the central system only encompasses a three degree viewing field. And if you have such good peripheral vision, how do you knock over a perfectly good martini when your eyes are locked on the salt shaker you're reaching for? Because your mind has told you to go after the salt and that's how we trip, fall, stumble and crash automobiles.

"After 1966 we went after the dollars. To industry, to the big truck fleet operators who were losing millions of dollars annually in accidents. Up to then they had been listening to crap—crap from zeros who thought they were heroes. Now we got out and peddled this story of the Smith System and met with a great reception; big outfits like the People's Gas and Light and Coke were having an accident experience of from 50,000 to 80,000 miles per preventable accident. After the first year of using the Smith System to train their drivers, the figure rose to 145,000 miles and is now over 200,000 miles. We've had similar experiences with United Parcel Service, a number of the Bell Telephone Companies, The American Gas Association, Greyhound, Sealtest, Mobil, and many others.

"I was a Johnny-come-lately in the safety field and when I emerged with innovation—revolution!—I created a certain amount of animosity, but the Smith System has withstood the sands of time. Oh, I have been plagiarized, I have been damaged, but we will work all that out. But the most impor-

## DODGE CHALLENGER R/T

(Continued from page 43)

face value and keep slamming the door the light will never go out. All this overhead console amounts to is an excuse for the product planners to hang a piece of bright work on the headliner and thereby "create the impression of greater value" when in reality it is next to useless (the Mustang and Cougar at least had a pair of map reading lights in their overhead console which worked very well). The final goodie in the SE package is a vinyl roof with a tiny back window—meant to recreate the visual ecstasy of a Carson padded top from the early Fifties. Unfortunately the normal rear window opening has been made smaller by blocking off a band several inches wide across its bottom, which means that you can no longer see any of the rear deck from the driver's seat and the Challenger consequently becomes a park-by-ear car. In all, the SE package serves to exemplify the entire Challenger approach—lavish execution with no thought to practical application.

Dodge figures it has to offer more in the Challenger because it will sell at a higher price than the Mustang/Camaro/Javelin

tant thing is, the Smith System works, and when it is administered properly, I have no competition. Sure, people have imitated me, but my work is copyrighted. I have a lot of trouble, but no litigation yet in the federal courts. I've taken the necessary steps, gone on record, made my position clear."

The Smith System, which is a part of the Harold H. Smith Driver Improvement Institute, Inc., is located in a pleasant 2-story, pink stucco office building on Rosecrans Avenue in San Diego. It is not intended to teach individual citizens how to drive. It is specifically designed for training fleet truck drivers how to avoid accidents, and Harold L. Smith can produce statistics that prove his system works. "We have a 4-pronged approach," says Harold L. Smith as he heads down Rosecrans toward his office, where he will pick up the mail before heading for a cruise on his yacht. "First of all, we are not only driver behavior instructors, but we are accident prevention specialists. Secondly, if we can improve driver behavior for a company, we can also reduce wear and tear on their vehicles. Thirdly, if we can teach a worker, say, for the phone company, to move from job to job more efficiently, we can improve productivity. Fourthly, when a management man is out working with an employee on the Smith System, he has a chance to engage him in informal conversation; learn his gripes, complaints and little problems. Now that's a helluva 4-pronged program and I can't take a program like this to clerks—this is a program for vice-presidents!"

Harold L. Smith checks his Cushion, ignores the idiot stick and wheels the Ford onto the driveway beside the pink stucco office. "Let's face it," he says, "that package is loaded with dollars!" ●

class of sporty cars. We do find the Challenger's interior to be visually very dramatic. The inner door panels, pebble-grained one-piece molded plastic affairs, are deeply sculptured but unfortunately are as hard as a plastered wall. The door lock button has been replaced by a lever in the armrest—a lever which is cleverly positioned exactly where your elbow wants to go. Armrests are also molded into the flimsy panels that flank the rear seats but they are so high that anyone tall enough to use them comfortably won't fit into the back seat in the first place.

But never mind all of these details. If Dodge's sporty car is like everyone else's its success will depend entirely upon public acceptance of its looks. We've never accused the Mustang of being a wizard car but it sells like one and we think the Challenger has got it covered in the looks category. Still, we are disappointed that looks are awarded such a high priority over function and we think Dodge has had enough time to build a more purposeful car. It's our humble suggestion that, to avoid similar ineptitude in the future, all of the Challenger product planners fall on their swords immediately. ●