CAR and DRIVER

APRIL 1968 / 60 CENTS

ROAD TESTS:

Toyota GT and Datsun PL510: Rise of the Rising Sun

BMW Does It Again—10 Million Americans Won't Even Know

RACING:

Gurney Turns Back the Legions of the South

● *You* try and figure how it happens, except that there's a 6000-mile gap in the way they think. At one end, in England, they're building those boxy, uncomfortable, drafty 1952 cars and cranking them out in perfect innocence and not understanding why there's no queue around the factory waiting to snap them up.

At the other end, in California, they're laboriously, painfully putting together one car—in the dead of night—and it's absolutely the best, sexiest, wildest appeal to visceral response since mini skirts.

Is it because one's Coventry and the other's California?

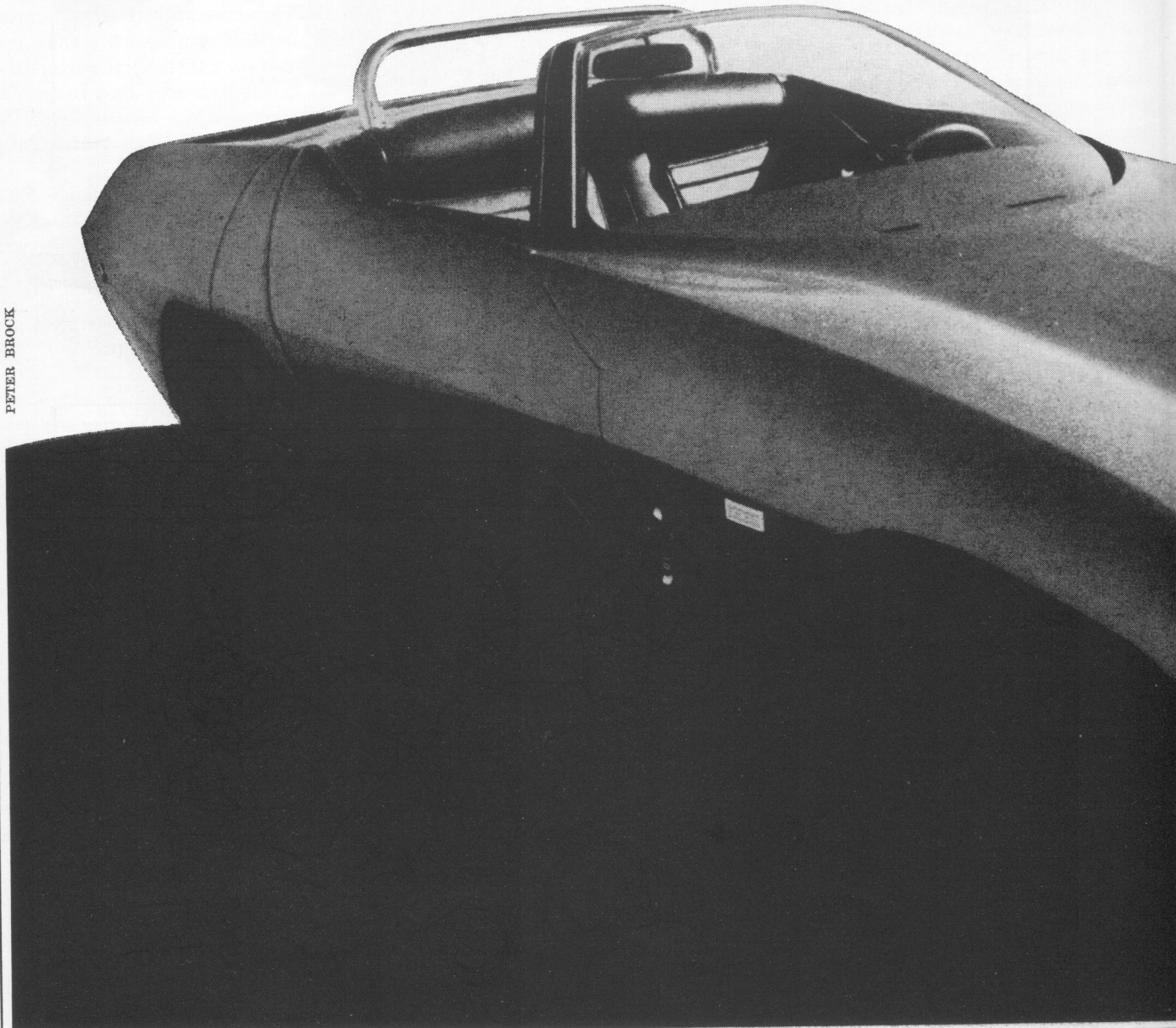
Listen to this: the car is built on a production chassis but it weighs only 1550 pounds; it conforms to every safety standard in the books—and then some; it is so stunning it makes a Lamborghini look like a milk wagon; it is built around *people* and so the cockpit size is greater than in the production version; there is immediate access to working components because the front and rear sections flip up; instrumentation is complete and simple at the same time; it has an integral rollbar and head restraints; weight distribution has been dramatically improved; it has Airheart vented disc brakes; it uses a 2.5-liter, 6-cylinder engine now, but it's all ready and waiting for a 3.5 liter V-8; it's an almost-production car and a Group 6 (prototype) racer at the same time. And, most important of all, it can be built tomorrow, or almost tomorrow, or next year, anyway.

There's one more thing it is; the Triumph 250K is the biggest gamble Kas Kastner, Leyland Triumph's U.S. competitions director, and Peter Brock, the last of the real car designers, have ever taken.

Agree that the idea is to sell cars. In England you sell cars by merging companies—Nuffield and Austin and Jaguar into British Motor Holdings; Triumph, Leyland, Rover into Leyland; and finally BMH and Leyland into British Leyland Motor Corporation. In the U.S. you sell cars by building something someone wants. The English marriage of BMH and Leyland was elegant, attended by ranks of officialdom, a matter of national moment, a concern of the government's, with statesmanlike, long term goals as the object.

The California project was semi-official; its overseers were two irreverent Americans, it was cloaked in the kind of awful anonymity that only inattention from above can bestow. Don't make noise in England, move quietly and with dignity over thick carpets in high-ceilinged rooms —gentlemanly talks over a glass of sherry—dozens of them; that should take a year at least. You can hear the hammers pounding in Gardena. Pick up the phone and, goddammit, get things done.

It has to be a race car, we understand that. But what good's a *race car* if you're trying to sell production cars? So we'll build a race car that isn't, but that's good enough to be. We'll run the thing as a race car, and there's only one (maybe there'll be two, it depends on how patient everyone is) and we'll run it against the 907 Porsches and the Howmet turbines, but it's really



PETER BROCK

the 911s we're after, and you'd better believe that; because this is the car that ought to be in production. "Improving the Breed?" Never thought of it that way.

Kastner came down from the mountains, supervised flat rate mechanics in the old days in Los Angeles for a supermarket dealership, moved to Cal Sales—the Triumph distributorship—as Service Supervisor, and raced.

"I was racing about nine times a year, I guess, and the closest race I ever went to was 460 miles away. You really don't know about cheapskate racing unless you've been a cheapskate racer."

He's a tallish man, and his hair is showing white/gray when you can see it through the cigar smoke he inflicts on the world around him. Everything about his movements seem to hinge on one curious point of articulation somewhere in his hips.

"If we're wrong about this car, look out the window when you drive through Kansas. You're liable to see an eight-foot scarecrow out in the fields. That'll be me."

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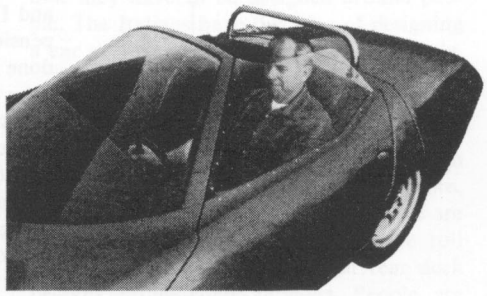
It's the biggest gamble that Kas Kastner has ever taken.



TR-250K: Salvation of an Empire

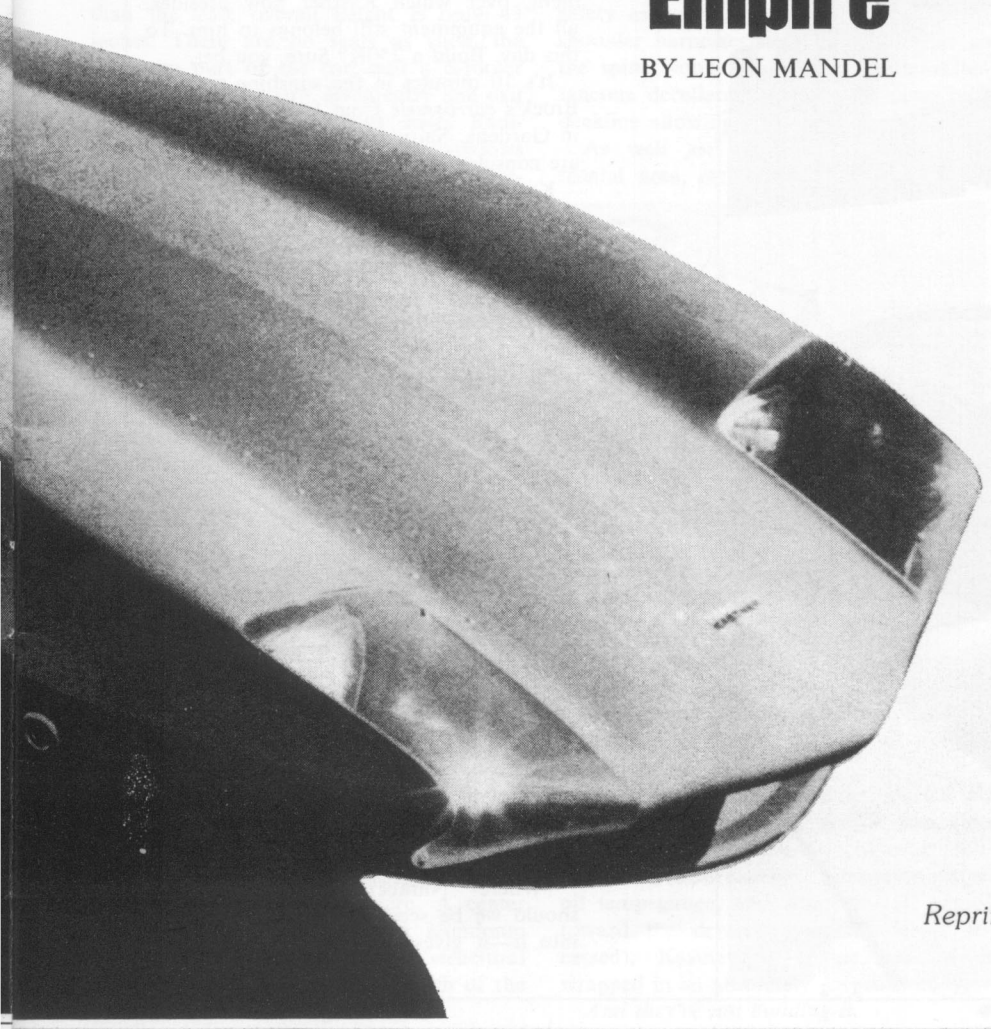
BY LEON MANDEL

It's a startlingly appropriate image. Don't be fooled. With TSOA's (Triumph Sports Owners Association) Fred Gamble, he invented the driver assistance program and his job is bigger than it sounds.

"I am in charge of research and development for Triumph in the U.S., for developing our production automobiles to race specifications. This is development and testing of individual components; evaluation of components that are in the car. What to do with them; whether they're strong enough to do the job—and if they're not, how to make them strong enough."

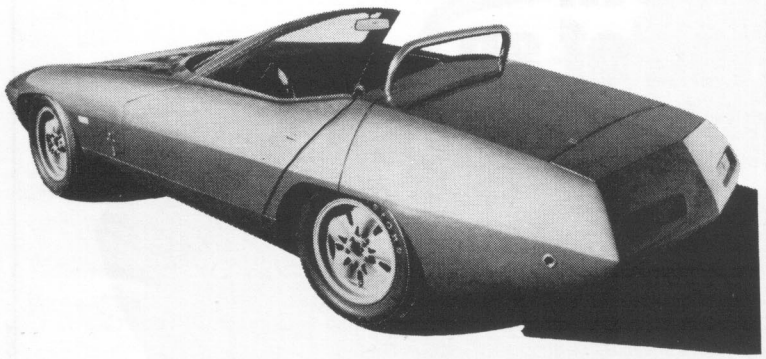
But what Kastner has done is to make all his research available to any Triumph owner who's interested. Think of it in terms of the 250K. Begin to understand what he would like to see done with the Brock/Kastner car.

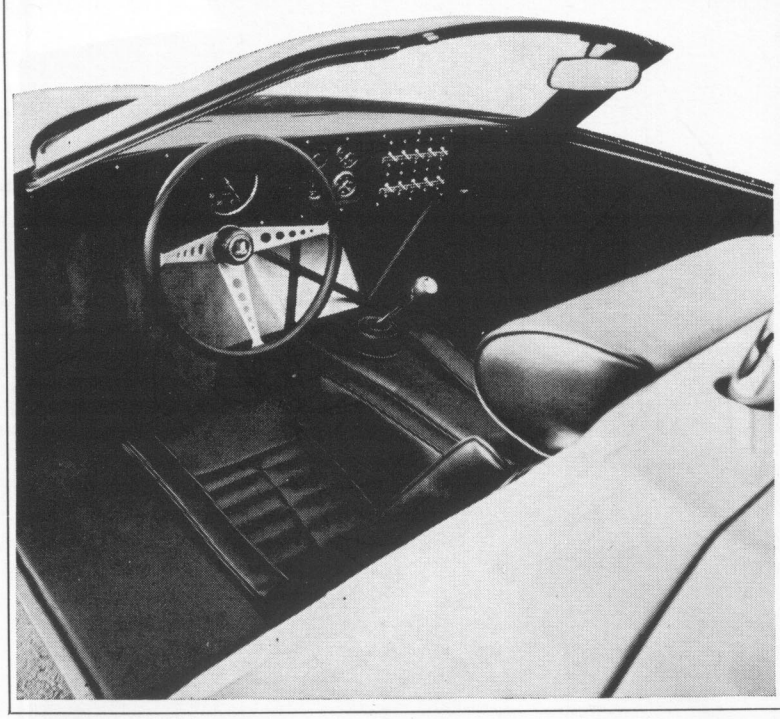
"I have to design equipment that will do the specific job, I have to test it and get someone to build it. And then it has to be manufactured in quantity so that it's available through all our zone offices—at a



Reprinted from Car and Driver, April 1968

A TR-250 in an aluminum
suit; Triumph
bones under a
beautiful skin.
It's the sexiest, wildest
appeal to
visceral response
since mini skirts.
Right now it's
strictly a racer,
but it's designed to
be a production
car as well.
It should be.





proper price—and available to anybody who's got the money to buy it."

Start with a camshaft, end with a car.

"Each time I get a new engine from the factory, I go through it and see things I've been talking about for years. This doesn't mean that it came from me. But I'm certain the research and development I do here helps them."

Kastner and Peter Brock share a methodology: there's a problem somewhere (sales), accept the fact that it's *your* problem, examine it, then go solve it yourself.

"I always wanted to go to Sebring. So I convinced them to give me a few dollars and I could do the job—cheap. All the suspension pieces and the gearboxes were done in my garage in Manhattan Beach. John Bishop (executive director of the Sports Car Club of America) and Lew Spencer (1967 chairman of the board of directors of the club) were down at my house one night. I took Bishop out to the garage, and Jesus, there's shiny crankshafts and modified con rods and everything in a 2-car garage just spread all over the goddamn place and everything full of equipment and he said, 'What's all this?' and I said these are for the factory Sebring entry. He says, 'You mean you're building the factory Sebring engines here in your garage?' and I says, you bet."

In the handsome, pristine service area devoted to Triumph's competition department, over which Kastner now presides, all the equipment still belongs to him. To this day. Build a 250K? Sure, you bet.

It's 10 minutes in the sunshine to Peter Brock's *carrosserie* from Leyland Triumph in Gardena. Spiritually Brock and Kastner are considerably closer than that.

Kastner: "Pete and I have been talking a couple of years about doing a car on the TR4A chassis. It's bullet-proof, that's what Pete calls it.

"So we were trying to figure out how to do it on his few bucks and my few bucks and I thought maybe if we did all this on stock pieces we could get the factory interested because if it's a nice looking car (and if Pete does it it's going to be a nice looking car) we could get some money from them and some interest from them. Because I can't just go off and start making automobiles.

"Well, I'm a company man. The company pays me very well and they're interested in my progress and I'm interested in the progress of the company. I'd like to see them make this car because, there are some good things around (. . . the BOP V-8 engine? Yes.) and we'll take a bite out of the Corvette market. . .

"But I don't think it's my place to try to sell. I don't think I'm trying to sell anything to anyone. The main thing is I want to see us where we belong.

"Where? Number One. Why in hell should we be second? That's how we got into it—it gives Brock an opportunity to

showcase his talent, to build the best looking front-engined car anybody saw in his whole goddamn life. And the way we're building it, it's a production car. . ."

A production automobile that's the best looking front-engined car anybody saw in his whole goddamn life."

A TR250, TR5 really, in an aluminum suit; Triumph bones under a beautiful skin. The engine has been moved back 9.5 inches, and a drastic improvement in weight distribution is the result. One result. Another is a lower allowable hood line and *that* means decreased frontal area. The only major non-Triumph parts are the Airhearts and a Corvette aluminum radiator. No sleight of hand in the suspension; well, almost none—only recommendations that Kastner makes for all TRs running in SCCA's C-production. Underneath it's all Kastner; outside it's all Peter Brock. Brock has an almost unique ability to design genuinely beautiful race cars that work. Every line on the K-car has been drawn not only with the intent to provide minimum drag, but to hold the car down on the track where it belongs.

The body is startling. Low, long, sharp, aggressive, purposeful hood, high deck line; cockpit down inside with glass all around. Overall length is six inches greater than the 250, overall height is only 43 inches. There are no seats as such, the seats are part of the car; and a 6-footer has leg room to spare. Even entry and exit are easy because of the long doors. Radically sloping windshield and side windows combined with the high deck (head restraints just forward of the rollbar) provide a nearly draft-free cockpit even at racing speeds. The body is hand formed from .050-inch aluminum stock; Brock's race car experience reflects in the almost total accessibility of the working devices underneath—front and rear body sections and both doors are readily removable. A network of welded steel tubing supports the body and stiffens the structure. A center backbone of steel tubing and aluminum sheet stock ties into the main structural bulkhead which runs the full width of the car over the driver's legs.

Peter Brock; designer of the Cobra Daytona Coupe, Samurai, Lang Cooper, Mirage—the distinctive race cars of the post-war years—is 31, fierce and polished at the same time. He understands exactly what it's all about.

"We've got a car that's got every rule except the air pollution control thing on it (the engine used is the fuel-injected TR5, not the 250); it could be driven to the supermarket—it's got the clearance lights all the way around, it's got all the shoulder harnesses with roll over bars, everything.

"Part of the problem with automobiles is that they have to be designed around people. The Italians have this idea of designing a car as a piece of architecture. No people.

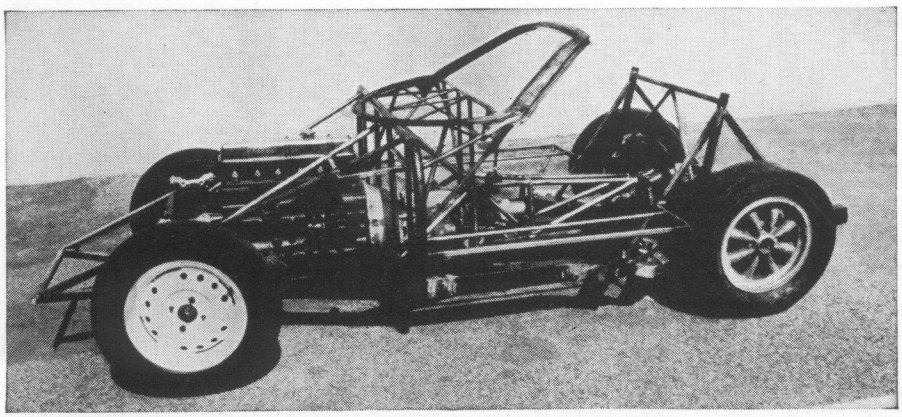
"This car, and I think this is why cars sell, has a distinctive silhouette. The silhouette of a car must be instantly recognizable. An E-Jag; a VW. With ours, it's the high deckline—which is there for many reasons, but also for identification. When people are in the car, the whole purpose of the roll over bar structure and the high rear deck become immediately obvious. People are a vital component in overall design."

All right, here's a list; production chassis, seating position moved rearward and down resulting in more cockpit area, sub-frame designed so that sheet metal subsection can substitute for it (as on the production car), aerodynamically cleaner shape, high deckline with rollbar and head restraint for safety as well as provision for anchoring shoulder harnesses *above* the shoulder so the spine won't be compressed on instantaneous decelleration with the same high deckline allowing more luggage space.

As well as: race car approach (low frontal area, etc.) which lowers the drag coefficient, increases top speed, increases gas mileage, incorporates comparative interior silence because of minimum wind turbulence, and easy access to all working components.

In addition to: large doors, ducted air system, driver-controlled spoiler flap, simplified instrumentation (tach—with telltale—oil pressure gauge, water temp gauge, oil temp gauge, and ammeter—all angled toward the driver's eyes, all deeply recessed), Kastnerized engine, all of it wrapped in an absolutely gorgeous body.

And they're not building it. ●



Stripped of its aluminum skin, the TR-250K reveals production-line components.

KAS KASTNER RECALLS THE TR-250K PROJECT

The TR-250K project began when I was called to England with only a one-day warning. I called Pete Brock and told him I was leaving that afternoon and if he wanted me to try to get permission to build the car I needed some ammo by way of a sketch. Pete did a great sketch on a sheet approx. 24" x 12". I rolled this up and went to the plane.

In New York for the layover I met with my old friend Leon Mandel who was at Car & Driver at the time. I made a deal with Leon. If I managed to get the car approved in England and built he would put in on the cover of the March issue (the Sebring time). Then I went to the chairman of the board at Triumph, George Turnbull, showed him the sketch, told him I had a magazine cover and all we had to do was build this pretty car. After a bit more of magazine subscription salesmanship he finally agreed. I returned with the sketch told everyone we were on for the deal and thus the project began. The time frame for the above was about ten days.

In lots of ways the TR250K was a project that ended poorly. The car was never given the recognition it deserved by Triumph but by the same token it was astoundingly successful to other manufacturers and the press. I remember Donald Healey coming up to me while we were on the grid at Sebring with the car. He was amazed at this beautiful piece and admired it from every direction. Pete Brock and I worked long hard hours to put that devil together but suffered mightily from a lack of funds.

Kas Kastner, March 13, 1999