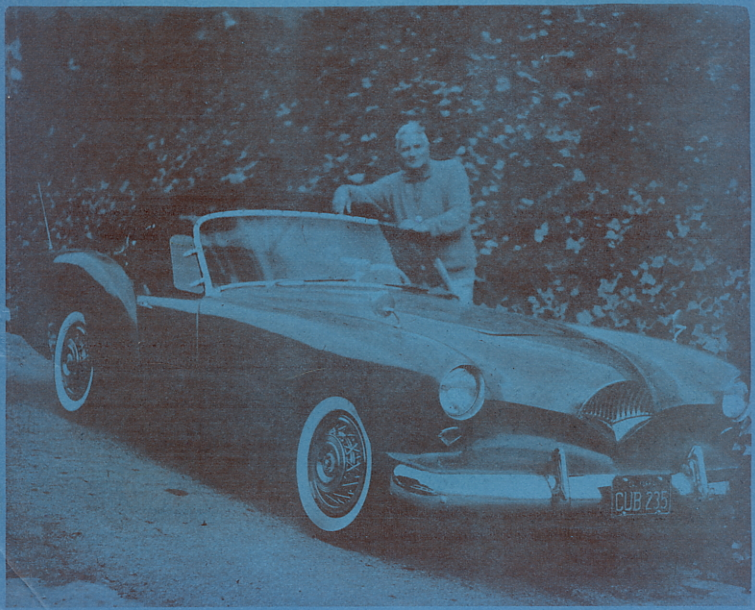
KAISER

Quarterly

FRAZER

JANUARY 1964

HOWARD DARRIN



VOLUME FOUR NUMBER ONE JANUARY 1964

KAISER OWNER'S CLUB QUARTERLY FRAZER

BOX 691 ST LOUIS 88 MISSOURI

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HONORARY.....These are established by the officers to honor those people that have had an important bearing on the Kaiser-Frazer automobiles and at present only four of these exist. They are:
Henry Kaiser Joseph Frazer Edgar Kaiser Howard Darrin

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The KAISER-FRAZER QUARTERLY is published 4 times a year and the Bulletin 12 times a year in the interests of the Kaiser, Frazer, Henry J, Willys, and Kaiser Darrin Automobiles by the Kaiser Frazer Owners Club, Inc. Non Members may buy individual issues of the BULLETIN and QUARTERLY when available after free distribution to paid up members. The BULLETIN costs 25¢ and the QUARTERLY $2.00.. All that is required to join the Club is an interest in the cause of the preservation of the Kaiser Frazer family of automobiles. It is not necessary to own a Kaiser Frazer car.

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KAISER OWNER'S CLUB FRAZER QUARTERLY BOX 691 ST LOUIS 66 MISSOURI

JANUARY 1964

NOTES FROM THE EDITOR.....

With this edition we start a new year and a new volume of the Kaiser Frazer Owners Club Quarterly. We start the year by honoring a man, Howard Darrin, who designed our cars. We hereby welcome him to that select group of men who we have made honorary members of our Club. These men are the key men that shaped the destinies of our cars. In looking back thru some previous issues of the Quarterly, I find references to the late Howard Darrin. I am happy to say the facts are in error because one of our Club members has finally located the living Howard Darrin and the picture on the cover was taken very recently. You will find the facts later on in this issue in letter form.

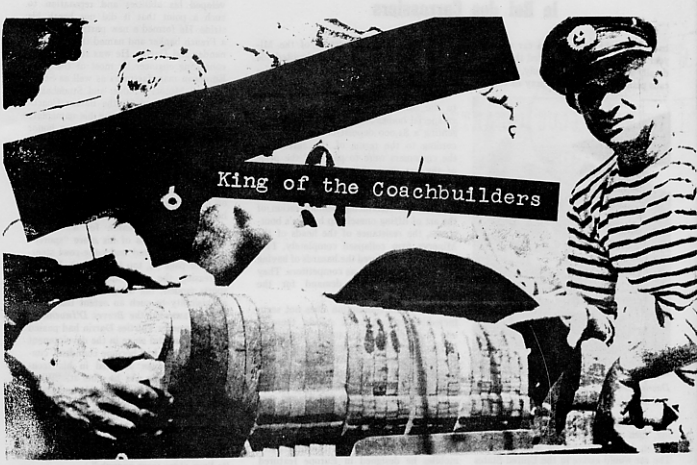
I want to thank all the Club members that have made this issue possible with their contributions of articles and photos and advertisments that they have loaned me so that we can all have copies of that material that deals with the Kaiser Darrin, the most glamourous and rare of all our autos. Ted Dahlmann sent large chunks of his collection, Jimmie Adams loaned some of his over a year ago, Club President Herb Scutt dug into his collection, The Willys, pardon?... Kaiser Jeep Corporation gave us their file copy of the owners manual. This is being published separately and is being issued as the last Quarterly for year 1963 even tho you will receive it along with this issue.

The picture inside the front cover is a picture of Howard Darrin taken in 1945 with a scale model of our first cars. Elsewhere is another picture with the top removed also taken in 1945 and were taken from the photo files of Kaiser Jeep.

I have been getting some static recently from some newer members about the irregularity of the publication of the Bulletin and Quarterly. Let me explain that we have no paid help in having these publications put out. Both Editors are dues paying members like yourself and both have to make a living and this sometimes gets in the way of some of our printing deadlines. You would normally expect a Monthly Bulletin to come out every month. Some months we do not hear from enough of you to have anything to publish. With postage rates going up and up it costs more to send it to you than it does to print it. The Bulletin is sent bulk rate and is the lowest form of mail and is sometimes delayed elsewhere other than in St Louis where it originates. It is not forwarded so if you move and do not notify us you do not get the Bulletin. The Quarterly costs about 20¢ to mail and if you have moved and not notified us it costs us another 20¢ to get it back. Then we send it again to your new address if you have provided one at your local postoffice and we spend another 25¢ to try and get it to you. This soon eats up yourmembership fee. That's enough static from me. I think you get the drift.

Dean Moore

The Editor



"Dutch" Darrin has carved for himself a remarkable career which, perhaps, has not yet reached its peak

By Jim Earp

DARRIN OF PARIS. That was the sign on a new showroom right in the heart of Hollywood's exotic Sunset Strip.

Now Hollywood could *never* ignore a sign like that. Rumors whispered through the town by way of the usual well-oiled channels. It became known that he did not make dresses, he had never "coiffed" a hair-do, but that he *had* designed fabulously luxurious limousines for King Alfonso of Spain and Leopold of Belgium. "The crowned heads of Europe!" the whispers said.

Fascinating stories continued to drift through the studio lots. They told about the Paris auto show where Darrin was enraged as a design consultant by Minerva, Panhard, Daimler-Benz, Armstrong-Siddeley, Renault, Citroen; all the great auto manufacturers of the continent. After the show, at a dinner given for the most famous designers of the day, Darrin was put on a throne and crowned King of the Coachbuilders—*Roi des Carrossiers.*

The ever-cynical press agents were considerably shocked, and Hollywood became somewhat breathless when it was discovered that all these rumors were uncontestably true. Marlene Dietrich and Norma Shearer already drove $24,000 Rolls-Royces that had been designed and constructed by Darrin in Paris; and soon the "Parisien" designer was building special cars for Dick Powell, Clark Gable, Errol Flynn, Donald Meek, and the Countess Dorothy Di Frasso. Darrin had definitely "arrived."

Hollywood could not resist the lure of a French designer; and somehow the rumor never did insist on the fact that the fabulous Howard A. Darrin of European renown is as American as Coney Island.

Darrin chuckles as he remembers those days. "With a name like Darrin, and that sign 'Darrin of Paris,' everyone automatically assumed that I was French. In Hollywood that was worth more than all the work I had ever done. Of course I *had* been designing cars in Paris for 15 years, so why should I tell anyone that my ancestors were American pioneers, or that a Darrin fought in the American revolution? It would just have disappointed them. I don't remember that I ever actually *told* anyone that I was French, but then I never did discourage anyone who wanted to think so."

Darrin has a natural instinct for showmanship; he is a born promoter. And both his ideas on design and the cars he has constructed are as bold and original in their concept as are his schemes to attain financial backing. That is why he has reigned as king of the coachbuilders for 30 years.

Darrin the artist and Darrin the business man worked as a smooth team when he first started in Paris. He and Tom Hibbard had gone to Paris in 1922 as representatives of the budding LeBaron Company, but they soon realized that the French capital, loaded as it was with wealthy tourists from all over the world, represented a gold mine to enterprising coachbuilders.

Then Darrin noticed that there was no agency in Paris for the Minerva, although the cars sold well in the United States for $14,000 to $15,000. Their well-scrubbed American faces shining with hope and promise, Messrs. Hibbard and Darrin scurried off to the Minerva factory in Antwerp, Belgium.

They proposed simply that they be given the Paris agency for the Minerva. When the Belgians pointed out that Minerva

le Roi des Carrossiers

had never sold more than a car or two a year in Paris, Darrin unfolded the plan in detail. They would sell chiefly to Americans planning an extended stay in Europe.

Darrin served as an air observer with the 71st Escadrille during the first world war

They could drive the car while sightseeing, then ship it home, taking advantage of the duty exemption on used property. The car would arrive in the United States at a total cost much lower than the New York price.

The Belgians were impressed with the idea but finally rejected it on the grounds that it would ruin their New York agent. Darrin then promised that the price would be set high enough so that no customer could get his car home for less than $11,000—a reasonable saving for a used vehicle. After the Belgians extracted an additional promise that all cars would remain in Europe for six months, they demanded $20,000 as a guarantee that the price level would be maintained.

Neither of the partners had anything approaching that sum of money, but they had nerve and inspiration. Rushing back to Paris, they were just in time to rent space in the Paris auto show. By burning gallons of midnight oil, they sketched a number of special bodies for the Minerva chassis and hired an artist to complete full color drawings. They were, of course, unable to display a car, but with great aplomb they hung their pictures under a bold sign reading, "Minerve de Paris, Minerve de France."

When the crowds poured into the Grand Palais opening day, Darrin began circulating from stand to stand. Whenever he located opulent-looking Americans gazing at the lush limousines displayed by Hispano, or perhaps Rolls-Royce, he would strike up a conversation that leaned heavily toward the beauty and virtues of the Minerva. In case anyone ever doubted his generous statements, well, there were pictures to prove it.

After the show they were able to return to the Minerva factory with orders for 20 special bodies and $40,000 cash, representing a $2,000 deposit on each car. According to the terms of the agreement, the customers were to pay half the price of the car upon delivery of the chassis and the balance on completion of the vehicle.

After this convincing demonstration of the art of lifting oneself up by one's bootstraps, the resistance of the heads of the Minerva firm collapsed completely. Perhaps they considered the hazards of having these two young men as competitors. They even withdrew their demand for the $20,000 bond.

In case this transaction does not seem incredible enough as it stands, there is one more point that can be mentioned. Darrin sold those Minerva town cars for $8,000 or $9,000 each. The entire chassis, complete with the engine and all the running gear, cost him $600 at the factory.

The firm of Hibbard and Darrin was soon solvent. Darrin was free to work out the wealth of revolutionary ideas that flashed into his consciousness in an inexhaustible array. One of the first automobiles he designed in Europe featured sliding doors. In 1926 he designed two Rolls-Royce convertible sedans (see page 35, top right photos) that set the trend in styling for the next 10 years. They were the first cars that Darrin knows of with rounded sides. Fifty units of each model were purchased by Rolls-Royce of America—the first large-scale production order the firm had received. General Motors adopted the impressive hood, sides, and fender lines of these cars for its production Cadillac and LaSalle, and paid Hibbard and Darrin a $25,000 yearly retainer plus $1,000 per month for the privilege. Even the Hibbard and Darrin molding—which always ran straight down the sides of the hood and then curved across at the bottom of the windshield—was retained in the GM cars.

Only two years after concluding those first arrangements with Minerva, Hibbard and Darrin were known as the foremost designers in Europe. They were receiving twice the number of orders that they could handle and eager customers had to wait a year or longer before they could expect delivery. The firm opened showrooms just off the Champs Elysees and finally boosted its production until it turned out magnificent, incredibly expensive limousines at the rate of 150 per year.

When Hibbard and Darrin dissolved their partnership in 1928, Darrin had developed his abilities and reputation to such a point that it did not break his stride. He formed a new partnership with a French banker and named the firm Fernandez and Darrin. He was retained as a consulting engineer by most of the great European manufacturers as well as Stutz, General Motors, Dodge, and Studebaker. When he designed for the Barker Coachworks of London, they put his nameplate beside their own ancient crest—an honor nearly equivalent to an introduction at court.

Darrin had become a name with magic in it. His cars stopped crowds all over the world. And bold, new ideas still poured off his drawing boards—such as the drophead coupe which he developed and introduced. In his search for a way to lengthen the hoods of his more "sporty" models, he invented under-the-cowl steering (see page 34, top left photo). Besides increasing the racy appearance of his sports models, the design improved overall visibility to such an extent that Darrin was awarded the *Brevet D'Invention*.

By the early Thirties Darrin had passed the experimental stage in the development of his art, and had become confident, controlled, and even subdued in his techniques of design. As he puts it, "When we first started in Paris, nobody knew anything about designing cars. We used to clutter them up with molding and ornaments because we didn't know any better. But I tried to avoid ornamentation as I learned more, and to build the car so that its lines alone were enough."

The latest cars he designed in Europe show amazing flexibility in concept. Some of his cars achieve their effect through a feeling of massive power (see the Panhard photo on page 34, lower left) while others attain beauty through graceful, flowing curves (see center lower photo, page 34).

At the peak of his successes in Europe the devaluation of the dollar and the ominous international situation in 1937 caused Darrin to pack up and return to America. His arrival in California has already been described. After an overwhelming success in selling all of Europe on the idea of an American coachbuilder, it was not too difficult to sell Americans a world famous Parisien designer.

Once Darrin settled down in Hollywood, he completely discontinued the use of molding and designed his cars with clear, sweeping lines that were almost totally unencumbered with ornaments. One of his most beautiful cars, the Rolls-Royce designed for the Countess Di Frasso, is absolutely devoid of *anything* that might be called decoration. More than any other single car, it demonstrates that Darrin had reached that point of artistic maturity where he could forget tricky technique and think in terms of pure form.

Strangely enough, this car was one of the last "one off" cars that Darrin constructed. The shop on the Sunset Strip had started well. Rudy Stoessel and Burt Chalmers (who are now partners in Coachcraft Ltd. of Hollywood) were in charge of construction and sales and the shop was well organized. Darrin was turning out incomparable cars; but from the standpoint of the classic car fan, things went to pot when the first Packard Darrin was delivered to Clark Gable.

The car was too good, and so many orders were received that Darrin had no time to think of anything else. About 15 were constructed on the Sunset Strip, and then Packard took over production. From that time until the war started, Darrin was immersed in the details of designing production cars for Packard.

The war stopped everything, of course, and Darrin went out of business as a designer. Since he had served as an air observer with the 71st Escadrille during the first world war, and had spent some time in 1919 as a manager of a scheduled airline, Darrin was chosen for the post of field commander in an army contract flight school. Actually, it was a good job, but Darrin was never satisfied with it. He had wanted to fly himself, but both the Canadian and United States air force had rejected him for being beyond the age limit.

Almost immediately after the war, Darrin was placed under contract by Kaiser and stepped into a bitter feud with the salaried designers on the plant payroll. Although he was doing handsomely from a financial standpoint (he received 75 cents for each Frazer, and 50 cents for each Kaiser that came off the assembly line) his ideas were either ignored or distorted beyond recognition. However, through the benevolent intervention of Kaiser himself, he saw his ideas brought to fruition in the 1951 model. It was put into production with Darrin's plans almost unchanged, and before the paint was dry on the first model off the assembly line, the car won the Grand Prix D'Honneur at the Cannes auto show.

Although Darrin's contract with Kaiser forbids him to do any free-lance designing, he is far from inactive. He is at present furiously engaged in the preparation of five new Fiberglas sports cars for delivery to the Kaiser factory. If everything goes well, these cars should be in factory production within a year and will be sold at around $2,800.

Like almost everything Darrin does, the new sports car is radically original. The top folds completely out of sight under the rear deck. Cleverly designed sliding doors remove the worry about curb height, so the car is extremely low—only 34 inches. It is constructed on a Henry J chassis, and with the light Fiberglas body to improve the power-weight ratio, the car may fill a long-felt need in this country.

Let us hope that Kaiser adds a respectable powerplant and pays some careful attention to the suspension system.

It is obvious that the King of the Coachbuilders is still willing to fight for his crown, even against such formidable antagonists as Ghia and Farina.

Darrin is a healthy, athletic-looking man who shows little sign of his 50 and some odd years, and he drives himself with a furious energy that wears even his younger assistants to the ground when they try to match it.

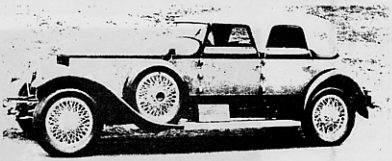
It is an interesting situation. Nash has Pinan Farina, and Kaiser has Darrin. Both companies have demonstrated that they are willing to chance something new.

We can be sure that something will pop somewhere.

—Jim Farh

1 & 2. It is startling to realize that these classic Rolls-Royces were wildly daring in their day. Curved sides, rakish windshields, and the "speed" back sported by car No. 1 (top right) shocked conservatives of 1928. Orders of 50 each of these gems let Hibbard and Darrin produce in quantity for the first time. General Motors paid flat fees for permission to use these "radical" lines.

3 & 4. A *Bertet d'Invention* was Darrin's reward for inventing the under-cowl steering. Although the citation mentions an increase in driving safety through improved visibility, Darrin was chiefly concerned with improving appearance in models by lengthening the hood.



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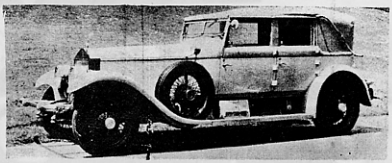

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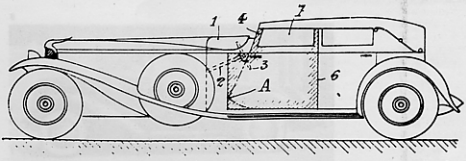

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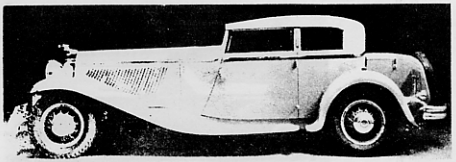

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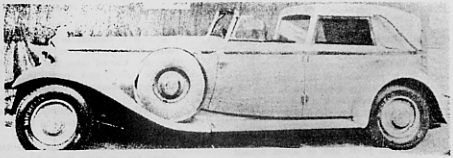
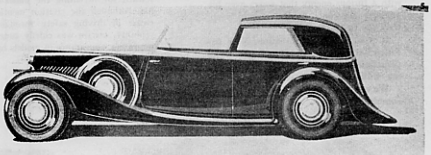
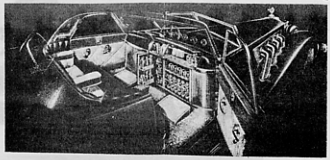


5 & 6. These two cars—one looking massive and powerful, the other appearing gracefully feminine—were both constructed on the same Packard chassis by Fernandez and Darrin. Note that the Fernandez and Darrin molding follows a straight line around the car. Hibbard and Darrin molding (photos 1 & 2) curves up the windshield post and crosses the hood. Sloping tonneau windshields and these moldings were Darrin trademarks for years.



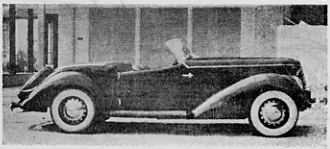
7. The then Viscount Louis Mountbatten insisted on specifying the features of this beautiful limousine and knew exactly where and how he wanted them placed. The only thing missing is a barbecue pit. In the jargon of the hucksters, "Has many extras."

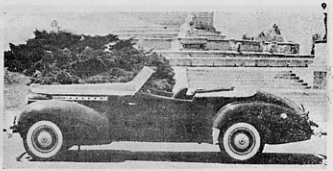


8. To many minds the most beautiful car Darrin ever designed, this Rolls-Royce was constructed in Hollywood for the Countess Di Frasso. Note that the sleek, feline lines are unmarred by any gadgets. Many will recognize this beauty as the star of several Springs Mills advertising shots.

9. This 1937 Ford four-seater is the first car Darrin designed upon his return to the United States. The motor was stock the last we heard, but what if a full house Mere, headers, a Barris paint job were . . .? Colonel Fogel of 8862 Sunset Blvd., Los Angeles still owns the car.

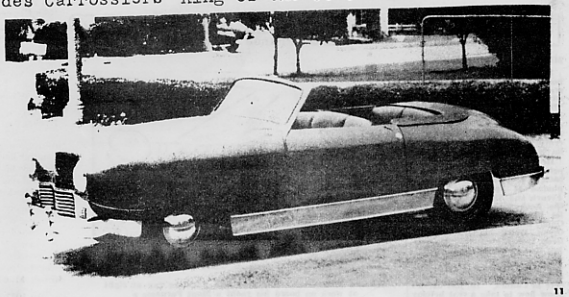
10. This is the famous Packard Darrin. The first was a "one off" model for Clark Gable. Gable was in a fever of anticipation while the car was being completed, but rumor has it that Gable returned the car in three months. At every stop light panting females clambered aboard by way of the low, cut-away doors. Needless to say, driving became something of a hazard.





"It needs more than the touch of a woman's hand . . . it needs the touch of a match!"

le Roi des Carrossiers – King of the Coachbuilders



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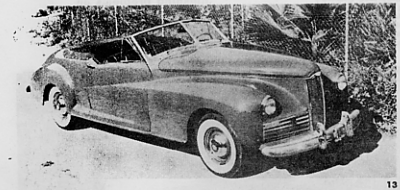

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11. This car is chiefly interesting because the body is constructed of Fiberglas. Designed and constructed in 1946, the car was too far ahead of its time. Darrin says that production plans were shelved because of the inadequate Fiberglas available at that time.

12. This 1951 Cadillac boasts a sliding type drop-head. Entire hard top is demountable. Although the hood is electrically operated, it is seldom necessary to raise it. The three barely perceptible "Vs" along the hood are $\frac{2}{3}$ functional. One is a dummy. The other two lift so that water and oil can be checked and filled without raising the hood.

13. This, the only Packard Clipper convertible made, was sold to Errol Flynn in 1941. Note the swept-back fenders and cut-away doors. Had Packard refrained from changing Darrin's plans, all Clippers would have been graced by these features.

14. The graceful fender line of this late model Kaiser was drawn into the plans in 1946. The factory made such changes until 1951.

15. This controversial Fiberglas sports car looks even better in real life. Kaiser hopes to have them in production soon. We are all waiting.

14

15

British and American News

From Cannes France Newspaper

MEET HOWARD A. DARRIN

If you look at the back of the body of any Kaiser car you will see in script writing, enclosed in silver "Darrin". This means that "Dutch" as this internationally-known car designer (bodies not engines) is known, designed the body. For over a quarter of a century, he has been planning lovely windshown lines.

He has designed bodies for such personalities as Lord Louis Mountbatten, Leopold of Belgium, Alphonso of Spain, the English, French and Austrian branches of the Rothschilds, James A. Moffet (Standard Oil Chief), Clark Gable, Rita Hayworth, Errol Flyn, Orson Wells, Marlene Dietrich, Hedy Lemar, etc., etc. He worked first in France, then, after 15 years more of designing in Hollywood, he has now returned to France and as proved is right here in Cannes. He just doesn't know how to take a real holiday. Ora Darrin and their three year old son are looking after that part) so he bought a yacht and has his atelier on board and here he is working every day. He returned to France to try and reabsorb European ideas, 15 years is a long time to stay in the States, and he was almost forgetting what it was like to work in France.

On lovely big blocks of Redwood, which "Dutch" bought himself over here from California where it grows, he is hewing and whittling car bodies (are at a time of our's) just one quarter of the normal size. Soon cars will be roaring around Paris, London and New York and Hollywood of course, just to mention a few places on the map, with "Darrin-Kaiser" written on the back. He has his own particular ideas about how a car should look and he is usually so much ahead of the fashion that they look smart long after other designers are seeing their bodies sold for junk.

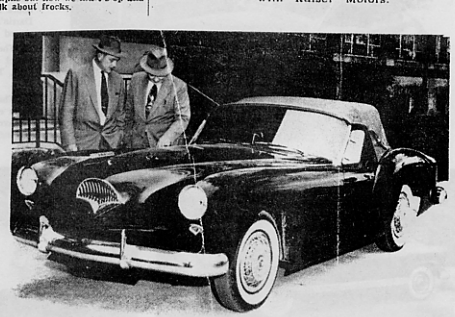
Mr Darrin was a pilot in the two last wars, his son was in the last war, and like his father, won a herbaceous border of decorations. Many of our readers will remember the American Eagle Squadron of the R.A.F., well, Dutch was responsible for recruiting about two thirds of the 2000 members, and helping train them.

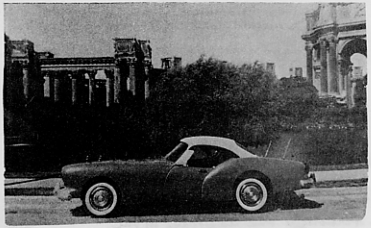
He and his son won a competitive playing partners in tennis doubles as the "best looking couple of men". The competition was keen, as many Hollywood stars were playing also. He remarried and had another son, this time the son is Patrick, the loveliest little peach-skinned boy you could kiss, he is only three. His mother is an attractive blond who understands her husband's craving for working out new designs. The other day on the "Mont Parnasse" as Mr Darrin's yacht is named, Patrick missed his step, tripped over a coil of rope and fell down the hatchway, as the drop was about 10 feet, the moment was tragic, but he was unhurt, just a little mark on his forehead which has now disappeared. But the hatchway is now covered with a wired netting.

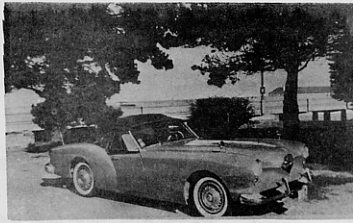
The Darrin family love Cannes and adore living on board their yacht. If we had more space we could go on for many more paragraphs but now we must stop and talk about frocks.

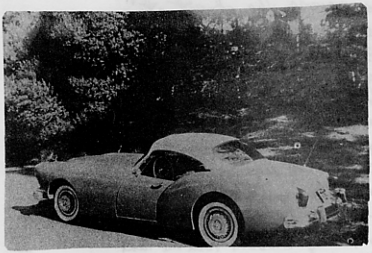
Howard J. Darrin (or Dutch to) with yachting cap at right at work on board his yacht « Mont Parnasse »

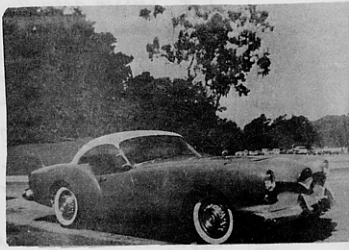
The jet black finish on this Darrin sports car is the center of attention for Howard P. DeVilbiss, left, president of The DeVilbiss Company, Toledo, and engineering vice president Don Peeps. The "glass" body of the Darrin presented new finishing problems on which DeVilbiss has recently cooperated with Kaiser Motors.











Kaiser ⋆ Darrin—161

...the sports car America has been waiting for. Designed by Darrin of Paris, built by Kaiser-Willys...a new criterion of motoring performance, a new standard of luxury.

Hand-crafted of wondrous armor-clad Fiberglas, the fabulous Kaiser-Darrin measures only 36 inches from road to cowl. Its amazingly low center of gravity, combined with light, positive steering, provides unbelievable stability on turns at any speed.

Its three-position Deauville convertible top, unique sliding doors, and amazing weight-to-horsepower ratio are only a few of the many preeminent advances that make it the outstanding pleasure car of our day.

Dear Dean;

After several years of searching for Howard Darrin wherever I could visit Los Angeles, I have finally found him this last week. Although the address in the phone book is the same one in the KFOC membership list, Darrin actually lives across the street at 1448 Benedict Canyon Drive, Beverly Hills. The woman who answered the door at 1436 never even heard of Darrin - that's the big cities for you.

I often wondered what Darrin himself was driving, now I know. He has a Kaiser-Darrin next door to his place, but in rather bad shape being outside constantly and not being driven. Mrs. Darrin uses a Tempest (I believe a 1961 rather than a 1962) with the fiberglass front end that Darrin designed and built and that appeared recently in Motor Trend. Darrin told me that another Kaiser Darrin of his had been stolen from his home and evidently destroyed. I believe it had a supercharger. He drives a non-K-F product.

On the Darrins made after Kaiser quit, only 4 or 5 were made with the Cadillac engines by Darrin. The only hardtops made on Santa Monica Blvd. were the ones for the Cadillac Darrins and a few for friends. Evidently, none were made for other Darrins. The tops were unfinished, but flocked on the inside. Side curtains were made and were hinged on the outside of the windshield posts.

Darrin says he has an offer to design cars again, and built them too, from a map in Cannes, France. And so it looks as if he will again return to France as he did in the twenties, this time to do Rolls-Royces for export.

He has several interesting photos of revamped Kaisers and Willys's (what is the plural of Willys anyway?). One shows a 1954 Willys sedan with 1954 Kaiser front fenders, 1951 Kaiser wheel covers, and rear fenders similar to 1954 Plymouth.

Another photo-a Henry J with Kaiser body area, cut down & presume to suit the shorter chassis, and a convertible top with Kaiser-Darrin type rear windows that wrap around. This car was supposed to sell for $1200, and Darrin thinks such a car would have done much to save Kaiser. Certainly looks good.

He also has many pictures dated 1960 of Kaiser design studies for the South American car. Nothing came of them obviously.

I must admit he was glad to see a Darrin in good condition, and I got him to pose with my car for a slide picture.

Darrin does not have much material on the cars he has designed over the years, in fact I have more than he does. So I am getting together a collection of ads and articles for him.

Changing the subject for a minute - I have made up lists of Kaiser and Frazer ads and articles that I think would be helpful to club members. I realize it is too difficult to copy such lists to put in the Quarterly, but maybe I can make the lists on some kind of paper and such writing that they can be duplicated directly. I don't type, but I can hand letter as I am a draftsman, perhaps with India ink. Let me know what is needed.

Sincerely,

Ted Dahlmen
2320 Moraga St.
San Francisco 22, California

Here's some additional publications having articles on the Darrin than I listed last time:

Popular Science - January 1953 p.109 - photos of the car & Howard Darrin at the wheel of the prototype.

Popular Science - May 1953 p.109 - prototype photos including interior & dash.

Popular Science - August 1954 p.112 - Wilbur Shaw's impressions of the production Darrin - road test - facts.

1956 Sports Car Pictorial - p.20 - photos of prototype and production models & facts.

Trend's Automotive Yearbooks:

1954 Trend Book #114 p. 129 Photo of production model & description.
1955 Trend Book #118 p. 84 Prototype model & production specs.
1956 Trend Book #126 p. 71 Prototype model & production specs.
1957 Trend Book #142 p. 64 Shows hardtop model & specs.

Popular Mechanics Fact Book on 1954 Cars - photo & description production model.

Motor Life - July 1956 p.22 - photos of hardtop model & interior with dashboard.

Automobile Topics - February 1954 - Cover shows photo production model.

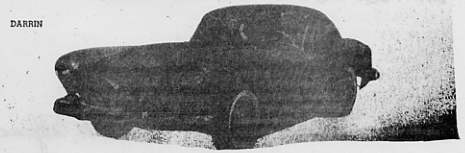
All the 1954 World's Cars - p.116 - photo & specs. prototype model.

DARRIN U.S.A.

H. A. DARRIN AUTOMOTIVE DESIGN, LOS ANGELES, CALIF.

According to our information, no changes have been made in the Darrin sports car for 1957. This sleek, boulevard-type sports car is available either in two-seater roadster or hardtop version. The Darrin uses a pressed-steel chassis of 100-inch wheelbase. It has an independent front suspension system with coil springing, while the rear suspension is a rigid axle with leaf springs. The car body is made of reinforced plastic material. The interior is luxuriously fitted with contoured, bucket-type seats and a particularly attractive instrument panel. The luggage compartment in the rear deck is rather large for a sports-type car. One of the unusual features of the Darrin sports car is its sliding doors, designed by Darrin because of the car's low ground clearance. The doors make it possible to park the car alongside a high curb without encountering the problem of opening them in the usual manner, if they were built on normal hinges. The Darrin sports car is powered by the latest Cadillac engine, which for 1957 will be the 300-horsepower V8 equipped with a four-barrel carburetor. Displacement of this engine is 365 cubic inches, and the compression ratio is 10 to 1. Because of the car's light weight, an excellent power-to-weight ratio is obtained. ■

DARRIN



1946

KAISER
- 4-DOOR SEDAN-FRONT WHEEL DRIVE (17)
- 4-DOOR SEDAN (1947 model)
- 4-DOOR CUSTOM SEDAN (1947 model)

FRAZER
- 4-DOOR SEDAN (1947 model)
- 4-DOOR MANHATTAN SEDAN (1947 model)

1947

KAISER
- 4-DOOR SEDAN-#2184
- 4-DOOR CUSTOM SEDAN-#2535
- 2-DOOR PINCONNING SPECIAL SEDAN (1)

FRAZER
- 4-DOOR SEDAN-#2374
- 4-DOOR MANHATTAN SEDAN-#2846

1948

KAISER
- 4-DOOR SEDAN-#2329

FRAZER
- 4-DOOR SEDAN-#2673
- 4-DOOR MANHATTAN SEDAN-#2991

1949

KAISER
- 4-DOOR SPECIAL SEDAN-#1995
- 4-DOOR TRAVELER SEDAN-#2088
- 4-DOOR VAGABOND SEDAN
- 4-DOOR DE LUXE SEDAN-#2195
- 4-DOOR VIRGINIAN HARDTOP SEDAN-#2995
- 4-DOOR CONVERTIBLE SEDAN

FRAZER
- 4-DOOR SEDAN-#2395
- 4-DOOR MANHATTAN SEDAN-#2545

1950

KAISER
- 4-DOOR SPECIAL SEDAN-#1995
- 4-DOOR TRAVELER SEDAN-#2088
- 4-DOOR VAGABOND SEDAN
- 4-DOOR DE LUXE SEDAN-#2195
- 4-DOOR VIRGINIAN HARDTOP SEDAN-#2995

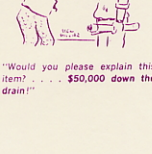
FRAZER
- 4-DOOR SEDAN-#2395
- 4-DOOR MANHATTAN SEDAN-#2545

1951

HENRY J
- 2-DOOR SEDAN (4 cyl.)-#1299 (#1323 later)
- 2-DOOR DE LUXE SEDAN (6 cyl.)-#1457

KAISER - SPECIAL
- 2-DOOR 3-PASS. BUSINESS COUPE-#1935
- 2-DOOR SEDAN-#2099
- 2-DOOR CLUB COUPE
- 4-DOOR SEDAN-#2150
- 2-DOOR TRAVELER SEDAN-#2202
- 4-DOOR TRAVELER SEDAN-#2285
  - DE LUXE
- 2-DOOR 3-PASS. BUSINESS COUPE
- 2-DOOR SEDAN-#2212
- 2-DOOR CLUB COUPE #2232
- 4-DOOR SEDAN #2263
- 2-DOOR TRAVELER SEDAN-#2315
- 4-DOOR TRAVELER SEDAN-#2366
- 4-DOOR GOLDEN DRAGON SEDAN
- 4-DOOR CABALLERO SEDAN (cloth interior) (1)
- 4-DOOR CABALLERO SEDAN (plastic interior) (1)
- 4-DOOR CABALLERO SEDAN (Arabian stallion interior) (1)
- 4-DOOR EXPLORER SEDAN (1)
- 4-DOOR SAFARI SEDAN (1)
- 4-DOOR SOUTH SEAS SEDAN (1)
- 2-DOOR CONVERTIBLE COUPE (1)

FRAZER
- 4-DOOR SEDAN-#2354 } (9956)
- 4-DOOR VAGABOND SEDAN-#2379 }
- 4-DOOR MANHATTAN SEDAN-#3075 } (282)
- 4-DOOR MANHATTAN HARDTOP SEDAN }
- 4-DOOR MANHATTAN CONVERTIBLE SEDAN-#3055 }



"Would you please explain this item? . . . . $50,000 down the drain!"

1952

HENRY J
- 2-DOOR VAGABOND SEDAN (4 cyl.) - #1349
- 2-DOOR DE LUXE VAGABOND SEDAN (6 cyl.) - #1494
- 2-DOOR CORSAIR SEDAN (4 cyl.) - #1449
- 2-DOOR DE LUXE CORSAIR SEDAN (6 cyl.) - #1574

KAISER-SPECIAL
- 2-DOOR BUSINESS COUPE - #1992
- 2-DOOR SEDAN - #2160
- 4-DOOR SEDAN - #2212
- 2-DOOR TRAVELER SEDAN - #2265
- 2-DOOR DE LUXE CLUB COUPE - #2296
- 4-DOOR TRAVELER SEDAN - #2317

(VIRGINIAN MODELS #116 MORE THAN SPECIAL)
- DE LUXE
  - 2-DOOR BUSINESS COUPE - #2213
  - 2-DOOR SEDAN - #2275 (#2400 later)
  - 2-DOOR CLUB COUPE - #2296 (#2537 later)
  - 4-DOOR SEDAN - #2328 (#2453 later)
  - 2-DOOR TRAVELER SEDAN - #2380 (#2505 later)
  - 4-DOOR TRAVELER SEDAN - #2433 (#2558 later)

(MANHATTAN MODELS #116 MORE THAN DE LUXE)

1953

HENRY J
- 2-DOOR SEDAN - #1493
- 2-DOOR DE LUXE SEDAN - #1686

KAISER-DE LUXE
- 2-DOOR CLUB SEDAN - #2454
- 4-DOOR SEDAN - #2513
- 4-DOOR TRAVELER SEDAN - #2618
- MANHATTAN
  - 2-DOOR CLUB SEDAN - #2547
  - 4-DOOR SEDAN - #2650
  - 4-DOOR TRAVELER SEDAN - #2755
  - 4-DOOR GOLDEN DRAGON SEDAN

"Are you the lady that Mrs. Jones, next door, says can't afford a **Kaiser** like I just sold her?"

1954

HENRY J
- 2-DOOR SEDAN - #1404
- 2-DOOR DE LUXE SEDAN - #1566

KAISER-SPECIAL
- 2-DOOR CLUB SEDAN - #2334
- 4-DOOR SEDAN - #2389

(22,113)
- MANHATTAN
  - 2-DOOR CLUB SEDAN - #2617
  - 4-DOOR SEDAN - #2670

(5323)
- DARRIN
  - 2-DOOR ROADSTER - #2608 (435 total)

1955

KAISER-SPECIAL
- 2-DOOR CLUB SEDAN - #2334
- 4-DOOR SEDAN - #2387
- MANHATTAN
  - 2-DOOR CLUB SEDAN - #2617
  - 4-DOOR SEDAN - #2670

(15)
- DARRIN
  - 2-DOOR ROADSTER - #2608 (none made in 1955)

"I remember when you were this high!"

The Kaiser Darrin as it first appeared in prototype form had doors and windows electrically operated at the touch of a button. Both hood and trunk lids were to be opened by knobs on the dash. Even the convertible top was push-button controlled. Too bad that the production models did not get at least the windows.

Because of the thickness of material required for strength, the fibreglas body at 300 pounds does not really weigh too much less than a comparable metal body. However, the fibreglas allows the smooth flowing front and rear body pans behind the bumpers.

The main purpose of the sliding doors is to clear high curbs which would be hit by normal hinged doors. Also, though, they prevent accidental opening with the car in motion, and they eliminate the stress that would be imposed on the plastic body with conventional hinged doors being used.

After the prototype was completed in Los Angeles by Darrin, molds were sent to Kaiser, and the car was assembled at Jackson, Michigan. When Kaiser quit in 1955, Howard Darrin began selling the car himself in Los Angeles again. The Darrin as it was then known was sold at and repairs made at his shop at 8006 Santa Monica Blvd. until about late 1958 when the building was torn down.

The Darrin featured an optional fibreglas hardtop designed and built by Darrin himself just as the car was. It was sold at the time that it cost about $400 by itself - I presumed without side curtains, and evidently unfinished on the inside.

The latest Cadillac El Dorado engines were used and were rated as follows: 1955-270 hp., 1956-305 hp., 1957-325 hp., 1958-335 hp.

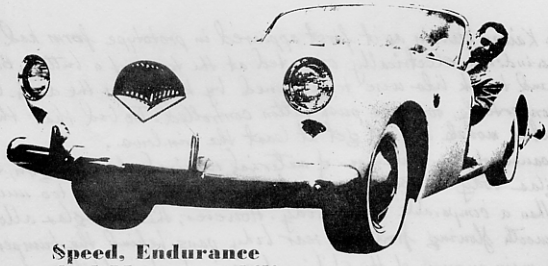
As built by Kaiser the car rated as follows:

Price - $3668 6 cyl.-90 hp F-head engine weight-2175 pounds 3-speed transmission with overdrive 95 mph top speed

The Darrin in 1956 listed by Trends 1956 Automotive Yearbook #126:

Price - $4350 V-8 305 hp. overhead valve engine weight-2450 pounds automatic transmission 137 mph top speed

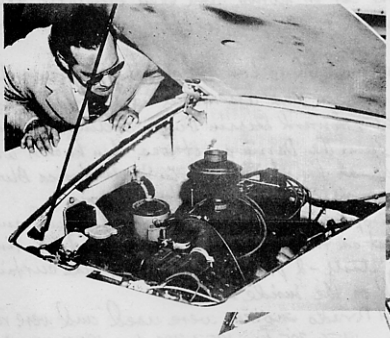
Trends book #126 also mentions the possibility that the car was to be built on a "Packard chassis", but no details are given.



Speed, Endurance And Maneuverability Are Major Factors . . .

The Kaiser-Darrin is only 36 inches from road to cowl. Designed by Howard Darrin, its body is made of Fiberglas.

Kaiser–Darrin

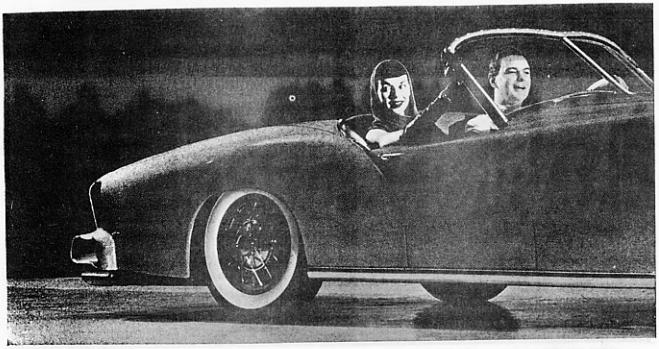


Its six-cylinder F-Head engine provides a maximum horsepower of 90 at 4,200 rpm., with compression ratio of 7.6:1.

The new sport car has a large, fully enclosed luggage space in the rear.

Plastic Henry J

Makes Play for Sports-Car Fans



Kaiser-Frazer's new "show-off," with the European look, weighs 1,500 pounds less than the lightest steel-body U. S. convertible.

MANY an eye will blink in wonder and admiration when Kaiser-Frazer's dazzling bid for the sports-car market appears on the nation's highways in July.

Howard Darrin, its noted designer, believes the American public longs for "show-off" cars. The KF-161 is a show-off in practically every respect, from plastic body to beefed-up engine.

It is as low as a racing car—36 inches from ground to cowl, only 54 inches to the crown of its fold-away top—and nearly as fast. Its top speed is over 100 miles an hour, the exact figure depending on who is driving. It takes off like a rocket, whisking from 10 to 70

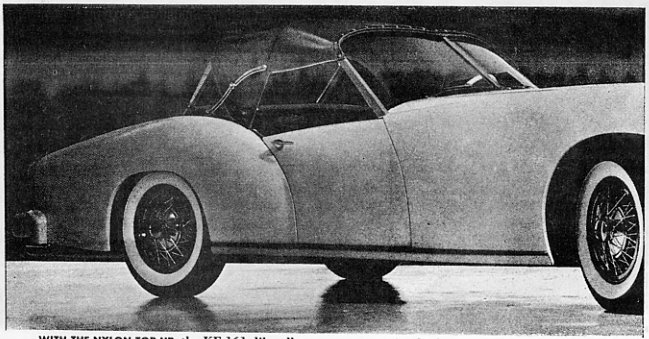
TOP-GRADE LEATHER covers seats and floor tunnel, lines doors and dash. All instruments are familiar to a stock-car driver except the tachometer, at the left of the ignition key.

miles an hour in high gear in 15 seconds.

Its power plant is a six-cylinder Henry J engine souped up, with high-compression head, three carburetors in line, a modified camshaft and dual exhausts, to provide better than 100 horsepower. The "161" in its name is for piston displacement. Compression ratio is 8:1.

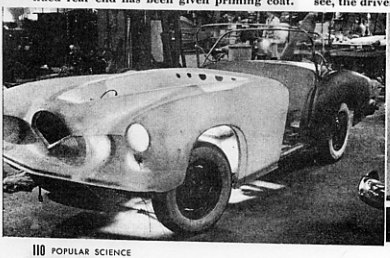
The KF-161's speed and swift getaway are partly the result of increased power, partly of reduced weight.

It is the first car with a body of glass-fiber-reinforced plastic to be produced in quantity. Its body weighs only 300 pounds, enabling the completed car to tip the scales at a fraction over a ton, or about 1,500 pounds less than the lightest steel-body U.S. convertible. The weight-to-power ratio is 22 pounds.



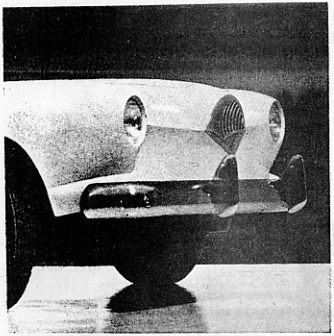
WITH THE NYLON TOP UP, the KF-161, like all true sports cars, is a bit hard to get in and out of.

LIGHT SHOWS THROUGH the glass-fiber-reinforced plastic body in its unpainted state, when it resembles animal horn. The darker-hued rear end has been given priming coat.



IT'S A TEMPTATION to play with the sliding doors of a KF-161. Each travels on a metal rail that is part of the car's frame. As you can see, the driver sits mighty close to the ground.

The car's body is molded in seven parts: front end, rear end, hood, rear-deck lid, doors and floor. The parts that fasten to the frame are bolted to it. The parts that, like the hood, fasten to other plastic parts, are hinged. Sections where bolts pass through the plastic shell are built up to provide extra strength. The hood, by the way, opens along its right-hand side.



Front flap snaps onto windshield.

Darrin believes that since the number of foreign sports cars registered in the U.S. has doubled in the last three years, there's a lively potential demand for an American car of the same general heft, size, look and speed.

His KF-161, which is 15.3 feet long, is exceedingly graceful and has a minimum of "gook." That is the word which true sports-car fans use to describe all hydraulically operated gadgets, chromium decorations, power steering, automatic transmissions and riding comfort.

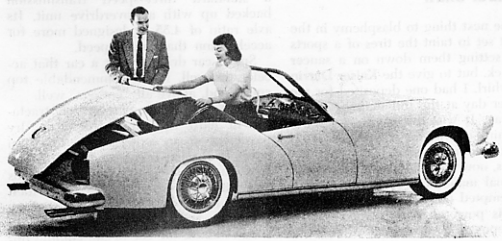
Has Typical Hard Sports-Car Ride

The KF-161's ride is hard, as the lover of sports cars thinks it should be. The steering and shifting are standard. There's almost no chrome work. The doors—a brand-new note—slide into the front fender cavities instead of opening out, but you have to slide them yourself. Even the wire wheels, which add so much swank to the car's appearance, are optional.

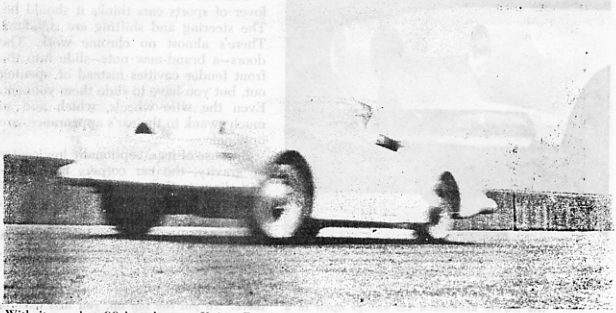
Because of its exceptionally low center of gravity, the car corners beautifully and clings to the road. It has 132 square inches of braking surface to restrain an eager foot at the accelerator.

The price—not yet firmly decided—is rumored to be under $3,000.—*Wesley S. Griswold.*

THE NOVEL REAR-DECK LID swings open in a backward direction, with its widest opening near the seat backs. The collapsed top, as well as luggage, is lowered into the rear end there. To put the top up, you first have to raise the rear-deck lid, which covers it completely when closed. The top opens fanwise as it is hoisted out of the rear end.



A seductive murmur from the exhaust is the tip-off to an acceleration and cornering performance worth experiencing.



With its modest 90 hp. the new Kaiser Darrin sports car gets under way surprisingly fast.

By Wilbur Shaw

IT'S the next thing to blasphemy in the beret set to taint the tires of a sports car by setting them down on a saucer race track, but to give the Kaiser Darrin 161 a whirl, I had one deposited for me the other day at the Indianapolis Motor Speedway. It was the handiest place I could think of where I could open it up without greetings from a traffic cop.

Willys, now a subsidiary of Kaiser and the actual manufacturer of the Darrin, has attempted no legerdemain with this car. It is powered with the company's 90-horsepower F-head engine, and has a standard three-speed transmission backed up with an overdrive unit. Its axle ratio of 4.55 is designed more for acceleration than high speed.

Sports-car drivers want a car that accelerates well, has a commendable top speed and, above all, "corners" well.

The Kaiser Darrin was entirely tractable in hard right-angle turns on dry pavement at an indicated 55 miles an hour. It began "breaking loose" on all four wheels just beyond that speed. This was with the rear-wheel "dig" provided only by high gear. It was here, in pulling out, that the axle ratio counted. On rough footing the car began coming un-

A nice weight balance between the axles keeps the side sway in cornering to a minimum.

stuck from the road about 10 miles an hour earlier.

Before seeing what the car would do flat out, I checked the speedometer. Its error was about normal—3.7 miles an hour on the high side at an indicated 60 m.p.h., and just over six m.p.h. at 90. With a passenger aboard, top speed in third gear was an indicated 90. At that pace the tachometer in the instrument cluster registered 5,200 r.p.m. Top speed in overdrive was only slightly better—95.

Top speed in second gear was an indicated 70 m.p.h., with a tach reading of 5,800, and that in first gear 40 m.p.h., with the tach at 6,500. The little F-head engine revved up amazingly high.

All speeds were averages of runs with and against the wind.

Here are the average acceleration times:

Zero to 30 m.p.h., using first gear only: three seconds.

Zero to 40, using two gears: 7.5 seconds.

Zero to 50, using three gears: 11 seconds.

Zero to 60, using three gears: 14.7 seconds.

Time to the quarter-mile from a standing start: 19½ seconds.

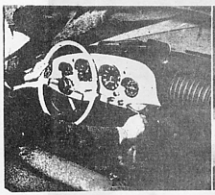
DUE TO THICKNESS of material necessary for strength, plastic bodies aren't so much lighter than steel ones. The Darrin's weighs 300 pounds. Total weight is 2,175.

Measures Up to European Sports Cars

Esthetically, Darrin has done himself proud in the 161. (The designation is taken from the piston displacement.) The car can be stacked up against anything Europe has to offer in sports cars.

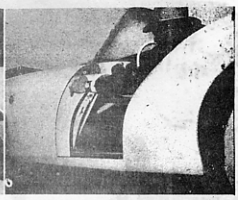
The Kaiser Darrin is the first mass-production U. S. sports car of this era. It's being made by Willys, along with Willys, Kaiser and Jeep, because the Kaiser people have fused all their automotive interests under the Willys manufacturing name. The "Darrin" comes from Howard A. Darrin, the custom-car designer who styled the job.

The car I drove was one of only 2,000 that Willys will make as a first and possibly only batch of plastic-and-fiber auto-



RIGHT HALF OF DASH is covered by a crash pad. All the trim, including that on the seats and folding top, is of embossed plastic cloth.

REAR DECK LID is split between two compartments—one for the top when lowered, the other for luggage. Only two molds are used to form main body structure.



TRICK SLIDING DOOR disappears into the fender when open but closes flush with the body metal. The frame is a modified Henry J's.

mobiles. When they have been manufactured and sold—at $3,668 a copy—the company will stop and look at the market. Chevrolet and Ford, the only other U. S. companies making production-line sports cars, are being equally cautious.

The prices on these cars are high not only because relatively few are being made, but also because plastic bodies are expensive to manufacture. Until they learn a faster way to do it, bury the myth that plastic cars can be turned out of molds as rapidly as cupcakes.

It's no great chore to mold the Darrin body, though it does require more man-hours than a steel body. The plastic is laced with fibers, in a steel or aluminum mold, and forced into shape like a felt hat, under heat and pressure. But then the problems start. Plastic pieces have to be cemented together, often bolted.

Finishing problems are complex. As the stuff comes from the mold, it has imperfections. That requires patching, and the plastic requires time to cure.

Slow "Crumple Rate" Means Safety

Yet the stuff must have a terrific capacity for absorbing impact stresses. In one instance a Darrin unexpectedly encountered a truck at a blind intersection at 40 miles an hour. The car wasn't much to look at after the dust settled, but the driver walked away unscathed. He was saved by what engineers know as the slow "crumple rate" of the body material.

Plastic bodies are also excellent sound dampers. They filter out extraneous noises. That's one reason why the seductive tailpipe music of the Kaiser Darrin comes through so clearly, as deep-toned as any sports-car lover could ask. END

FACTS ON KAISER DARRIN 161

Model: sports car.

Engine: 6-cyl., F-head in-line; 90 hp. at 4,200 r.p.m.; compression ratio, 7.6:1; piston displacement, 161 cu. in.; piston travel (in feet per car mile at 20 m.p.h.), 2,101; bore and stroke, 3.125" by 3.5"; crankshaft bearing surface, 30.14 sq. in.; torque, 135 lb.-ft. at 1,600 r.p.m.

Weight: 2,175 lb. (without gas and oil); per hp., 24.1 lb.

Transmission: 3-speed manual shift; rear-axle ratio with overdrive, 4.55:1.

Steering ratio: 24:1; radius of turning circle, 17½'.

Effective brake-lining area: 176 sq. in.

Springs: front, coil; rear, semi-elliptic.

Outside dimensions: height, to highest bow of top 50.8", to base of windshield 36"; over-all length with bumpers and guards, 184"; width, 67.5"; wheelbase, 100"; overhang, front 35", rear 49"; tread, front and rear, 54".

Inside dimensions: seat-cushion widths (total), 50.6"; leg room, 46.8"; headroom, 35.6"; seat height, 9.8"; vertical distance, steering wheel to seat cushion, 5.2"; seat adjustment, horizontal 5", vertical 0".

Tire size: 5.90 by 15.

Price: $3,668, Toledo, Ohio.

Driving around with Walt Woron

Driving down the "crookedest street in the world" . . . first impressions of the new Kaiser . . . preview of a supercharged Kaiser - Darrin sports car

THIS MAY LOOK LIKE Kaiser-Willys month, but it wasn't intentional—it just worked out that way, what with making a trip to San Francisco, Kaiser and Willys just coming out with their new line of cars, and getting our first chance to give the Kaiser-Darrin 161 a good driving around.

The picture you see in the upper right-hand corner of this page was taken during the press unveiling of the '54 Kaiser and Willys. It's a '54 Kaiser on "the crookedest street in the world," located in San Francisco. In the space of one short block Lombard Street drops off at a sharp angle, making four complete left turns and four equally sharp right turns. It's brick surfaced, is about a car width and a half wide, and has a suitable retaining wall for anyone who loses control going down (it's only one-way).

The first time down, a Kaiser rep (Jack Davies) was at the wheel. Without a word of warning (the street being new to me) he stormed down in high gear, spinning the steering wheel from lock to lock to keep from piling up on the low, but formidable retaining wall. After this I took over.

Turning it hard into corners, I let loose of the wheel and it returned to neutral by itself. It was a rare experience, and I was happy that the Kaiser was as good-handling as it is.

1954 KAISER MANHATTAN

AND WHILE WE'RE ON the subject of the Kaiser's handling ability, here's what Don MacDonald had to say about the '54 which he drove recently.

"The Kaiser handles nicely with Monroe power assistance (which requires only four to six pounds pull before taking over). Ordinary highway maneuvering requires hardly any effort. Only three turns lock to lock make parking easy. The steering wheel is disconcertingly small.

"Accessibility of secondary controls has been notably improved this year. You hardly have to take your left hand from the steering wheel to operate the heat and ventilation quadrant. This is a good safety feature in that you don't have to divert your attention from the road to operate the controls.

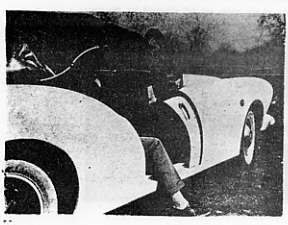
"The McCulloch-blown engine starts instantly by turning the ignition key to the far right. Kaiser and McCulloch engineers have worked closely together to keep down the noise level of the supercharger for this stock car installation. They have succeeded so well that you may feel a little cheated after paying for this conversation piece that is so unobtrusive your passengers may never notice it; there's no outward indication of this underhood surprise package either.

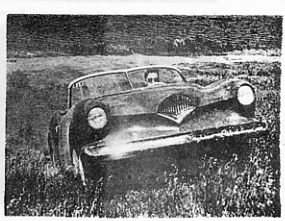
"Performance-wise, though, they will know that there's something very unusual about your new Kaiser. This year's supercharged Manhattan with Hydra-Matic has at least 25 per cent better acceleration from a standing start than last year's unblown version with the same transmission. Improvement in the more important passing range is even better. Last year's car took over a half-minute to get from 50 to 80 mph. Now it can be done in slightly under 20 seconds; this makes the Kaiser a much safer highway car for today's traffic conditions. Another important safety consideration which only a supercharger can provide is that performance will hold up at altitude. Other, more powerful, cars will be hard pressed to match the Kaiser's ability in the second half of a long mountain climb (like Pikes Peak) because they do not have forced air induction.

"Visibility through the big windshield is good. Corner posts are unobtrusively thin except at the top where the excess thickness can hide traffic lights at certain angles. The rattan-textured crash pad on the panel has a glare-proof surface, the light-colored facing had a tendency to reflect in the windshield, and the sun visors, when down, blocked off part of the rear view mirror."

KAISER-DARRIN 161

WHEN WE REQUEST a road test or impression test car, we ask for a produc-





tion model and that means *not* specially tuned. Despite this rule, though, we couldn't get very upset when we found that the only Darrin available to drive was an experimental job powered by a McCulloch-supercharged Willys F-head.

The Darrin is bigger than competitive American sports-type cars such as the Corvette and the Nash-Healey. Its size (184 inches long—67½ inches wide) is emphasized by the massive front fenders and the long hood, which is actually higher at the nose than at the windshield. Despite these dimensions, it takes practice to get into the car on the driver's side when the top is up. You lean in head first; place your right hand on the passenger seat for balance; and squiggle (a word coined for this operation) around the door post and under the wheel. There is no other practical way.

Once inside (still with the top up) there is plenty of head- and shoulder-room. Closing and locking the sliding door from the inside is awkward, but roller bearings on later models make this easier. The two bucket seats (with optional safety belts) are very comfortable. Clutch, brake, and accelerator pedals are nicely spaced, although your left foot can tangle with the frame rail on the way up to the clutch. The shift lever is easy to reach on top of the transmission tunnel. The round, full-size instruments mounted in the padded panel are a delight to the eye; a 6000-rpm tach takes the place of honor in front of the driver. Thoughtful features are a manual choke and the emergency brake mounted on the panel for right-hand use.

Forward visibility is marred somewhat by the high hood, but to the rear, it's excellent even with the top up. The three-piece, wraparound transparent inserts are standard. The side-curtains are cumbersome, drafty, and do not permit hand signaling when zipped in place. Aside from this, quality of trim and upholstery is outstanding.

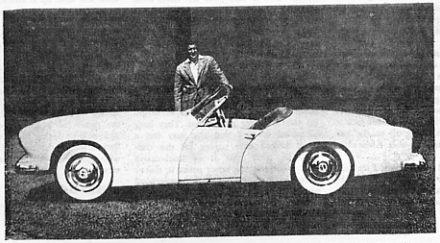
Out on the road, we soon became aware of the McCulloch blower. Loafing along at 60 mph in overdrive (2500 rpm on the tach), we tromped down into direct which also kicks in the supercharger. The tach jumped to 3800 almost immediately and acceleration was only slightly less dramatic. The little Willys F-head was throatily at home in the unfamiliar region (for it) of 4500-plus rpm. In the background was the whine of the blower.

The 4.55-rear-axle ratio combined with overdrive and supercharger is tricky. Full-throttle standing starts in low spin the wheels on any pavement, and when you do get going, you're soon at rpms which aren't healthy for a borrowed Willys engine. A normal shift to direct second is fairly fast, and you can stay floorboarded to about 50 mph before dropping down to direct high. This technique, if it can be called that, will consistently give 0-60 times in the neighborhood of 10 seconds. Considerably better results can be obtained if you want to risk speed shifting with a somewhat inadequate change lever.

A high gear downshift at 30 mph will bring you up to 60 in about 10 seconds, and we trimmed two seconds off this by using second overdrive, even though the supercharger is not fully operating under these conditions. Fifty to 80 mph in direct high is an easy 12 seconds.

The KD-161 can be taken over a particularly bad washboard road at respectable speeds. The low center-of-gravity keeps the car stable during severe cornering and the instant power from the supercharged engine is ideal when corrective action is necessary. This was handy once when the rear end broke loose during an overzealous maneuver.

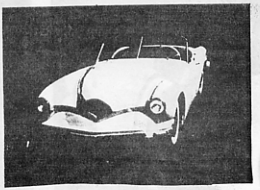
The overall steering ratio of 24 to 1 (2¾ turns lock to lock) might be considered high for a sports car, but gives an excellent feel of the highway. Power steering is *not* available, but overdrive is the stock transmission on the Darrin-designed roadster. All in all, the KD-161 should be of interest to those who want a car that's fun to drive, and easy to service. If Kaiser-Willys engineers and sales people decide to produce this car in supercharged form it will be very competitive to the Corvette in performance.



Built for Kaiser-Frazer, the Darrin body may forecast the plastic sports car K-F promised for this year

Glass-Fiber Sports Car Has Sliding Doors

You'll never recognize the chassis beneath the long, low sports body of glass fiber designed by Howard Darrin. It's the little Henry J, dressed in luxury. Sliding doors eliminate the designer's concern for curb height. When the handle is turned, the door slides forward. There has been no commitment about production runs on this body, it being the only one of several plastic models that Kaiser-Frazer had commissioned to be built for the Henry J chassis.



DETROIT SPORTS-CAR STORY

By John Bentley

Having just come back from Detroit, let me give you a quick run-down on the US-built sports car picture which now features a trio likely to offer serious competition to the European product. Talks with everybody—from sports-car enthusiasts to corporation stylists—helped crystallize the picture.

First, the Chevrolet Corvette which many of you saw at the General Motors Motorama. Except for those projecting rear fins needlessly housing the tail lights, I guess it could pass for a blood cousin of the Cunningham after a 21-day Hollywood diet. The finish is quite good, but then that's true of most prototypes. So is the power-weight ratio of a shade over 18 pounds per bhp (160 bhp for 2,900 pounds), which is theoretically a little better than the stock Jaguar XK 120. Doubtful (certainly for competition purposes) are the Powerglide transmission and the Chevy suspension which don't belong in a sports car. With Mauri Rose assigned to assist in the Corvette's development, something might yet be done about this before production gets under way in June.

The price tag, not yet officially written, probably will read $3,500. How about some wire wheels to cool those Chevy brakes? A corporation official informed me that wire wheels are "on their way out." Ahem.

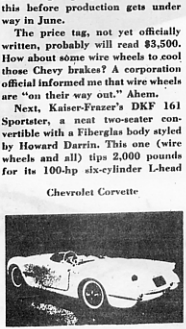
Next, Kaiser-Frazer's DKF 161 Sportster, a neat two-seater convertible with a Fiberglas body styled by Howard Darrin. This one (wire wheels and all) tips 2,000 pounds for its 100-hp six-cylinder L-head engine with an 8 to 1 compression ratio. Lugging a modest 20 pounds per bhp, it will go from 10 to 70 mph in 15 secs., presumably through the gears. You'll be able to buy one in July, but the price hasn't yet been announced. I'd say a good guess would be not under $2,800.

For the third mechanical wonder, we must flit to Glendale, Calif., where Frank Kurtis has evolved a rugged but *real* sports job based on the Indianapolis Offy-powered bomb with which Bill Vukovich so nearly scooped last year's 500 mile race. This one has all the ingredients, including torsion bars and racing brakes, and you can buy it either in kit form or complete with almost any engine and transmission.

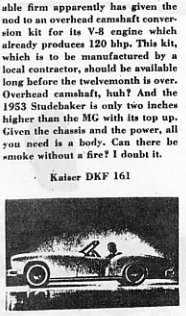
Among several power units tried, the modified Hudson eight Twin-H engine has shown such promise that I wouldn't be surprised to see Hudson adopt the Kurtis Kraft chassis and produce a sports car of their own before many moons. This much I can tell you without having my cars pinned back: Hudson's higher-ups are "very interested" in the idea and the staff's top echelon numbers at least two keen sports car enthusiasts—Roy D. Chapin, Jr. and Frank Spring. The firm's receptivity can also be gauged, perhaps, by its active and successful interest in stock car racing. We'll see.

While in Detroit I got the bloodhounds on the trail of a mysterious Studebaker sports car that people are whispering about, but the scent went cold, cunningly obliterated by official denials. However, this venerable firm apparently has given the nod to an overhead camshaft conversion kit for its V-8 engine which already produces 120 bhp. This kit, which is to be manufactured by a local contractor, should be available long before the twelvemonth is over. Overhead camshaft, huh? And the 1953 Studebaker is only two inches higher than the MG with its top up. Given the chassis and the power, all you need is a body. Can there be smoke without a fire? I doubt it.

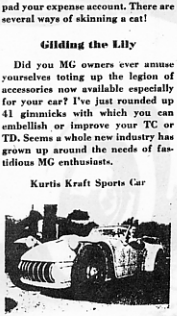
Chevrolet Corvette



Kaiser DKF 161



Kurtis Kraft Sports Car



Dream Girl

In New York, recently, on his way back to Italy from the Mexican road race, the mercurial, irrepressible "Giaonin" Bracco told an amusing story in voluble Italian—his English being confined to "Yes" and "No." Seems that his wife, her suspicions thoroughly aroused, one day asked him point blank: "Who is this beautiful Mercedes you keep talking about in your sleep?"

Loophole

With the Amateur and Trade racing entry controversy billowing out before a strong breeze of sports-car driver opinion, SCCA's 1953 Competition Regulations provide food for thought. I refer to Section 1 (Rule 8) defining "Amateur" status for race drivers. Clause 3 says that "No Amateur shall accept *from any local sponsoring body* (the italics are mine) transportation of cars or person, food, lodging or other expenses involved in attending a race event." This leaves everything as it was in 1952 or earlier, because it doesn't state specifically that a driver cannot accept these benefits from the *entrant* of a car.

Let's say you are Joe Blow, a sports-car driver of great skill and renown. A manufacturer, dealer or tuning shop likes to have you on its team because you win races. You can't accept "wages or other compensation" for the job (Clause 2); but when traveling to Walla-Walla for that 12-hour race, you sure can pad your expense account. There are several ways of skinning a cat!

Gilding the Lily

Did you MG owners ever amuse yourselves toting up the legion of accessories now available especially for your car? I've just rounded up 41 gimmicks with which you can embellish or improve your TC or TD. Seems a whole new industry has grown up around the needs of fastidious MG enthusiasts.

ROAD AUTO AGE TEST

kaiser-

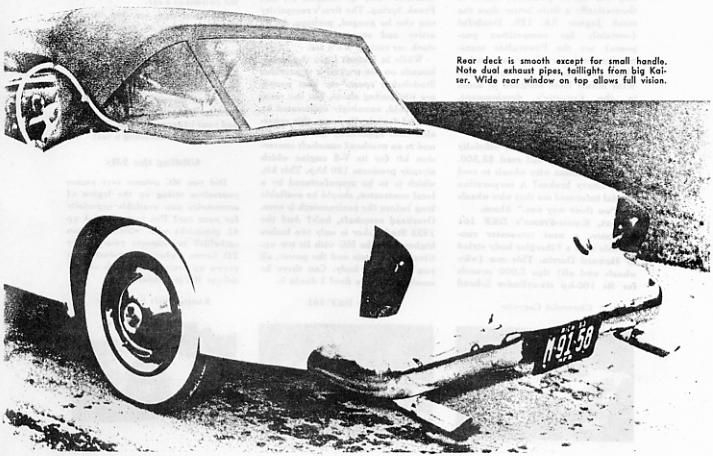
SPORTS

By JOE WHERRY

As new as the sunrise tomorrow morning is this Howard Darrin designed Kaiser-Fraser *sports car* with possibly one exception, and even that's okay —the apparently revolutionary sliding doors. The first car Darrin ever built, a 1922 model that's virtually lost to memory, featured sliding doors. Obviously a wise design step with today's crowded parking in mind, sliding doors are all but impossible in conventional steel bodies because of production costs. The laminated Fiberglas body of this K-F beauty allows this innovation. Lightness, too, is another outstanding feature, and this material, therefore, brings the center of gravity 'way down. Result: exceptional handling qualities. Production plans call for the line to start moving this job down to customers sometime early in the autumn; possibly even as this issue of Auto Age reaches the readers, a few lucky buyers will be having the time of their life in America's first reasonably priced postwar sports car.

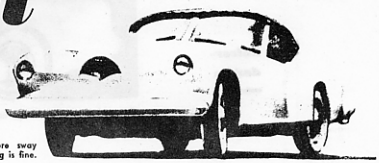
The writer was in Detroit recently; after the usual red tape, Bill Springer, manager of the K-F news bureau, was on the other end of the line. When I asked if a road test for Auto Age was possible, Bill cleared his throat, talked in a muffled voice to someone nearby, said to hold the phone. After a couple minutes Bill S. said if I could be 'out at the plant at Willow Run at 1:00 P. M., he'd make every effort in the meantime to pry loose one of the two experimental jobs at the plant.

To make a long story short, about three hours after our phone conversation, I found myself sitting low, my legs stretched out in front of me and parallel to the



Rear deck is smooth except for small handle. Note dual exhaust pipes, taillights from big Kaiser. Wide rear window on top allows full vision.

darrin CAR



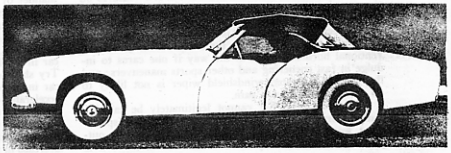
Hard cornering produces no more sway than any good sports car. Handling is fine.

road beneath, and the speedometer indicating a comfortable 90 mph on an uncrowded four lane highway.

A lot has been written in the last year or so about this car; millions around the country have seen it on display, so it's not necessary to go into any complicated detail on the design. Suffice it to say, the only exterior parts of Kaiser-Frazer's current line are the big Kaiser's taillights and wheel discs. Everything else from the seeming small grille (there was *no* overheating in three hours of hard driving on a warm day) to the rear deck is new, glass mat and all. Incidentally, wire wheels will be optional at additional cost.

After getting familiar with the car, and this included the conventional 3-speed transmission and overdrive—unusual on a sports car—we started acceleration tests. The results are not exactly staggering, but we can think of several sports cars with similar power that do no better. The engine, basically a 6-in-line Willys with an Edmonds head and three Holly carburetors, needed tuning. I mentioned this later to one of the engineers and he verified the fact. From about 50 mph on up, there seemed to be a slight ignition lag. Even so, the performance figures are good, true sports driving is not only possible but is virtually unavoidable, and addicts will be delighted to learn that this DKF-161 will do a sharp 90-degree turn at a good 40 mph with so little sway that you have the impression of being in any one of several fine European jobs.

Taking normal highway turns on the four-laner that runs past Willow Run airport at an indicated speed of



Performance Data

Kaiser-Darrin Sports Car

Acceleration (thru gears)

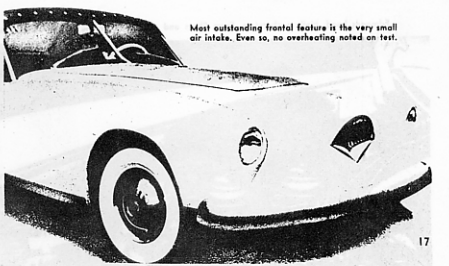
0-30 mph: 3.84 seconds
0-40 mph: 6.00 seconds
0-50 mph: 8.46 seconds
0-60 mph: 13.20 seconds
20-60 mph in 3rd gear: 10.8 seconds

Maximum speed
Approximately 100 mph (true speed)

Brake test From 30 mph: 36 ft.
45 mph: 81 ft.
60 mph: 143 ft.

Fuel consumption (at steady 60 mph)
21.4 mpg in overdrive

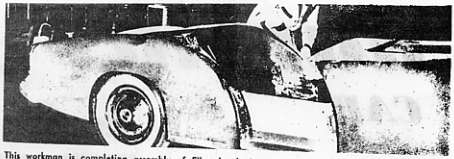
Speedometer error
At 60 mph, 65 mph



Most outstanding frontal feature is the very small air intake. Even so, no overheating noted on test.

kaiser-darrin

continued



This workman is completing assembly of Fiberglas body on special chassis; not on production line.

98 mph was like shooting fish in a barrel. On one occasion we passed a French Comète; the driver of the latter poured on the coal, but, as we approached a corner, he slackened his pace while we took it at full gallop. The DKF has a healthy snarl, accentuated by the *dual* exhaust system, an item every true sports car should have.

Off on a country side road we found the ride to be firm. Over the bumps at no more than 30 mph produced the usual sports car ride—something one has to get accustomed to, but fun when you get into the spirit of driving for pure enjoyment. As speed increases in the DKF, the bumps smooth out. On a railroad crossing there is none of the usual pitch and dive of the so-called sports cars that are being ballyhooed as the equal of the real thing. Braking is very positive with no pitching.

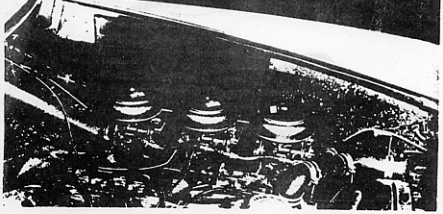
Americans have been promised *sports cars* by Detroit for so long that it's refreshing to have the opportunity to drive the DKF. Even so, there are a few features on the car that are quite common in conventional family cars, yet have no place on a sports car. So here are a few objections: overdrive is operated by lifting and depressing the accelerator in the usual manner; the conventional horn ring gets in the way if one cares to indulge in fast cornering and other sports maneuvers; and the vacuum operated windshield wiper is not likely to do the job in a heavy rain.

Of course the DKF cannot legitimately be called a competition mount simply because the engine displacement would put it in a class where it would be outperformed as far as speed is concerned. Even so it is possible to have a *sports car* without the necessity of its being actually capable of class competition. Sports car driving encompasses facets of driving pleasure other than racing; for example rally driving is a growing sport. If the booming membership of the Sports Car Club of America is any criterion, many persons who formerly drove out of necessity are beginning to learn that driving and maneuvering a car with superior handling qualities over unusual terrain can be pure enjoyment.

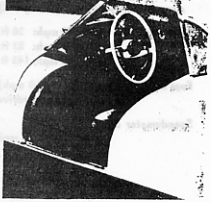
So, because the new DKF actually has the handling as well as the physical characteristics of true sports cars, we feel justified in placing this car in the *sports car* category.

We mentioned three specific objectionable features a couple of paragraphs back. By no means are these inadequacies without remedy. We would politely suggest that the overdrive control be removed from the accelerator linkage and placed on the dashboard after manner of the Austin-Healey and the Sunbeam Alpine. A conveniently situated toggle switch would then function either *up* or *down* with this advantage: from overdrive (or fourth speed) the driver could instantly throw the toggle and, by synchronizing the foot throttle, place the car in the lower third speed upon approaching a corner. Try shifting down, a must in sports car driving, with a car in overdrive when the latter control is linked to the accelerator—to do so one must exert additional pressure on the throttle to kick back into third (conventional high), and while there may be a slight decrease in speed, there is little effective engine braking because any decrease in throttle pressure will

Edmonds head, Holly carburetors, Fram filters and 100 hp fill roomy engine compartment.



Comfortable cockpit has complete instruments.



Kaiser-Darrin Sports Car

immediately and automatically kick the transmission back into overdrive, right where we started on this shifting down process.

Consider yet another instance of the lack of transmission flexibility with a throttle controlled automatic overdrive: we are dashing up a grade in third gear that is just a bit steep for easy negotiation in overdrive when we are required to slightly slacken our pace. This means coming off that foot throttle. What happens? We suddenly find ourselves in overdrive and the engine is lugging a bit. Of course we can easily shove on the throttle and pop back into conventional third gear (high), but we have caused an additional automatic throw of the gear box. A dyed-in-the-wool sports car fan winces at such unnecessary mechanical devices. Most of us would prefer the toggle simply because we would then have full control over third and fourth gear.

The horn ring, to continue, is superfluous on a sports car. It's nice on a family car (I suppose), but we found our sleeve continually pushing against the horn, with noisy results when we were maneuvering this way and that around tight corners. The DKF is not alone in this horn ring matter—these gadgets seem to be growing to greater diameter in many family cars too. For many years those who buy and drive sports cars either in or out of competition have been perfectly happy with a seemingly old fashioned horn button that can be shoved when required. The horn button is out of the way. Many fans have been heard to mention this ring as being undesirable when viewing the DKF.

Lastly, the windshield wipers should be electrically operated. It's been known to rain in the middle of a rally in hilly country, and when it rains under such circumstances, a vacuum wiper often fails to do its job properly when climbing with resulting poor vision.

Do not mistake these observations as indictments of what we believe is an admirable and generally successful project on the part of the Kaiser-Fraser engineers. Here is a car fully capable of providing, at medium price, the sort of performance and general roadability that many of us Americans have long been seeking. We found this car to be comfortable, attractive, and far superior to anything else of American origin that is likely to be in production and available in the next few months with the possible exception of the Chevrolet *Corvette*. We haven't had the pleasure of driving the Corvette, but from all accounts plus our own personal viewing of the car, Chevrolet's possibilities seems to be the only other American job on the horizon in a reasonable price class. As mentioned above, the DKF will be in production as this issue reaches the reader, so it remains to be seen whether it will be the only all-American 3,000-dollar sports car this autumn.

We feel justified in offering the compliments of this magazine to Kaiser-Fraser for an excellent car. As for the Fiberglas body, it's beautifully designed, and as an article elsewhere in this issue deals specifically with this miracle material, we'll just say that we heartily approve. The three beefs we've offered are our honest opinions; they are easily remedied. The writer discussed these points with a K-F engineer who listened politely and agreed in principle. For the exponent of luxury combined with sports, the DKF is an acceptable dish, and the jolly sports car driving fan will approve too. The Willys engine is excellent, takes to souping like a duck to water, and is easily maintained—parts are obtainable everywhere. The same goes for the front suspension (individual coil springs) and the rear semi-ellipticals.

We liked the DKF extremely well—we think the public will too.

KAISER-DARRIN SPECIFICATIONS

Number of cylinders	6 (L-head)
Bore	3⅛
Stroke	3½
Main bearings	4
Displacement	161 cu. in.
Compression ratio	8.0:1 with Edmonds head
Maximum output	100 hp at 4200 rpm
Maximum torque	135 ft.-lbs. at 2600 rpm
Bore/stroke ratio	.9
Valves	L-Head with special Harman-Collins camshaft
Carburetors	Three Holly
Transmission	Conventional 3-speed
Gear ratios	1st: 2.605 2nd: 1.63 3rd: 1.00 Overdrive: 0.7
Curb weight	2,100 lbs.
Power/weight ratio	21 lbs. per hp (0.48 hp per lb.)
Wheelbase	100 inches
Turning circle	35 ft.
Steering (type mechanism)	Worm and roller
Turns (lock to lock)	2¾
Tire size	5.90 x 15
Treads	Front: 54 in.; Rear: 54 in.
Overall height	54 in. with top in place
width	69 in.
length	183 in.
Fuel capacity	13 gal.
Crankcase capacity	5 qts.

WILLYS MOTORS, INC.
KAISER-WILLYS SALES DIVISION
TOLEDO, OHIO

KAISER APPROVED SERVICE WILLYS

Service Bulletin

TO ALL DISTRIBUTORS AND DEALERS:

K-W NO. 276

December 28, 1954

ELECTRICAL

ENGINE PERFORMANCE

1954 KAISER MODELS

An engine miss and loss of power may occur on Kaiser model vehicles equipped with a supercharger if the lead wire from the supercharger kick-down relay switch is not properly connected to the ignition post of the ignition coil.

It is suggested that when any cases of engine miss and power loss are reported by the owner or when any under hood services are performed, that the mechanic check to be sure that the lead wire from the supercharger kick-down switch and the ignition switch wire are attached to the same post on the ignition coil.

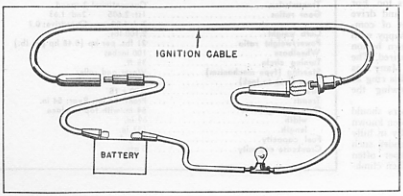
Also, a check should be made to be sure that the ignition cables from the distributor to the spark plugs do not have an internal opening at the spark plug terminal ends.

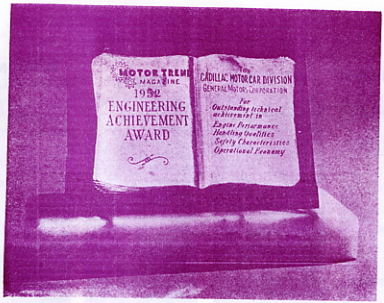
When the car is new and the spark plugs have not had an opportunity to accumulate lead deposits, engine miss due to the above defaults usually will not occur. If new spark plugs were installed without making sure of the above corrections the customers would only temporarily be out of trouble possibly 1500 miles.

To check for an internal opening in the ignition cables the following procedure for testing can be made.

1. Disconnect the ignition cables from the spark plugs and distributor cap.
NOTE: Grasp the boot, not the cable itself, as pulling the cable instead of the boot can cause an internal opening in the cable and will cause the engine to miss.

2. To determine if an open condition exists in a cable, test it using a 6 volt battery and a 6 volt lamp. See sketch. If lamp fails to light when the circuit is completed, replace the cable as an open circuit exists.

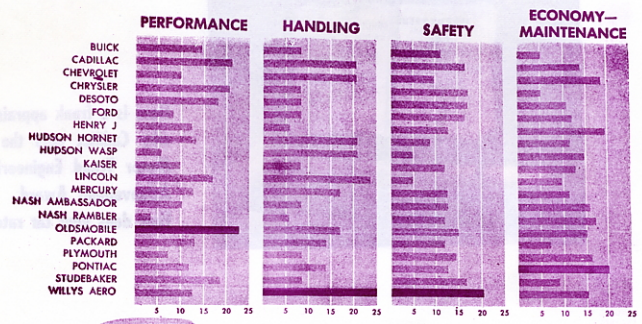


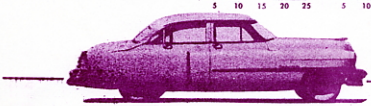


Here is a frank appraisal of why Cadillac gets the 1952 Motor Trend Engineering Achievement Award. How does your car rate?

PERFORMANCE DATA CHART

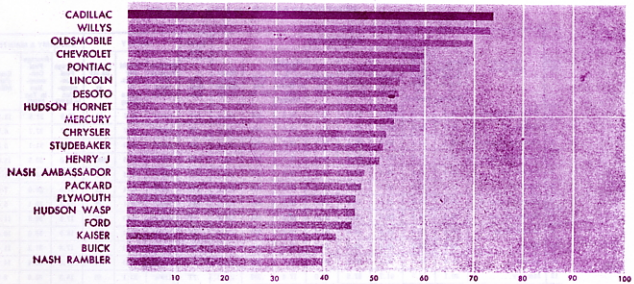
Line No.	Car Make and Model	PERFORMANCE								Handling	SAFETY			ECONOMY & MAINTENANCE				Line No.
		Average 0 to 60 Mile Acceleration in Seconds	Average High Speed Acceleration in Seconds	Average Top Speed	Percent of BHP at Wheels	Pounds Per RHP	Pounds Per Lb.-Ft. of Maximum Torque	RHP Per Cu. In.	Maximum BMEP in PSI	(By Position)	Average Braking Distance in Feet	Weight Per Sq. In. of Brake Lining	Interior Safety Check in Percent	Average Fuel Consumption in MPG	Average Fuel Consumption in Ton MPG	Cost Per Mile	Maintenance and Repair Costs	
1	Buick Roadmaster	20.2	15.9	100.1	80.0	23.2	16.2	.265	131.8	11T	135'3"	20.7	86	13.9	31.5	13.3	175.07	1
2	Cadillac 62	18.4	10.9	109.6	82.6	45.1	14.0	.302	146.6	3T	122'0"	18.7	86	16.7	37.7	6.7	183.00	2
3	Chevrolet-Standard	20.3	19.8	80.9	67.4	52.7	18.5	.286	122.5	3T	121'3"	20.6	43	19.1	31.1	5.3	98.65	3
4	Chrysler Saratoga V-8	19.5	11.3	106.0	84.0	44.4	13.9	.294	142.0	11T	119'3"	21.5	100	15.0	32.5	11.9	192.77	4
5	De Soto V-8	20.4	13.8	98.1	85.0	46.5	16.3	.317	136.5	11T	123'2"	20.3	100	17.3	35.5	11.3	177.76	5
6	Ford V-8	21.4	22.0	86.7	88.2	55.1	18.0	.368	123.5	11T	94'0"	20.4	72	17.0	30.0	7.0	139.71	6
7	Henry J-Corsair 6	20.8	19.5	83.9	63.1	50.0	18.9	.313	124.6	19T	128'0"	19.1	72	23.3	30.1	5.4	113.17	7
8	Hudson Hornet	20.2	13.9	99.2	80.7	53.9	15.4	.278	122.8	3T	119'3"	25.0	72	17.3	34.3	11.4	146.03	8
9	Hudson Wasp	20.9	18.0	97.8	67.5	62.9	19.0	.231	115.0	3T	130'6"	23.0	72	18.9	36.0	10.5	146.03	9
10	Kaiser	19.7	19.2	90.8	50.4	60.8	18.5	.256	126.7	11T	129'6"	20.0	72	17.8	31.2	11.4	120.18	10
11	Lincoln	21.6	13.1	98.3	59.2	49.7	16.3	.299	134.9	2	132'7"	23.5	72	17.4	40.4	14.9	250.79	11
12	Mercury	20.1	19.5	91.7	57.6	51.0	17.4	.282	124.5	7T	119'5"	23.1	86	18.3	33.6	8.0	194.79	12
13	Nash Ambassador	20.6	15.2	95.2	50.0	62.8	17.1	.238	131.4	11T	121'0"	22.1	86	22.2	41.8	11.9	146.21	13
14	Nash Rambler	22.5	19.6	81.3	51.2	63.0	19.2	.243	120.6	19T	116'10"	27.6	86	22.6	30.0	7.3	119.25	14
15	Oldsmobile Super 88	19.0	12.2	104.3	60.0	42.7	14.5	.316	140.5	7T	121'3"	21.5	100	18.9	38.7	8.7	148.48	15
16	Packard 200	20.7	15.9	96.3	57.3	50.9	16.2	.263	124.5	9T	129'0"	21.0	86	15.2	33.3	11.7	186.52	16
17	Plymouth	22.9	23.8	85.6	61.9	55.8	19.1	.275	121.2	11T	100'6"	21.1	72	19.6	32.7	7.6	135.02	17
18	Pontiac 8	21.4	13.9	92.9	57.2	54.2	16.7	.261	127.5	9T	111'2"	22.1	72	19.7	37.3	6.7	126.84	18
19	Studebaker Comm. V-8	20.5	13.7	87.6	74.1	37.0	17.3	.382	127.5	11T	113'4"	20.1	72	16.3	26.7	8.4	143.13	19
20	Willys Aero	20.8	17.2	81.5	60.0	50.2	20.1	.335	125.4	1	113'10"	20.4	100	21.5	29.2	7.5	121.56	20



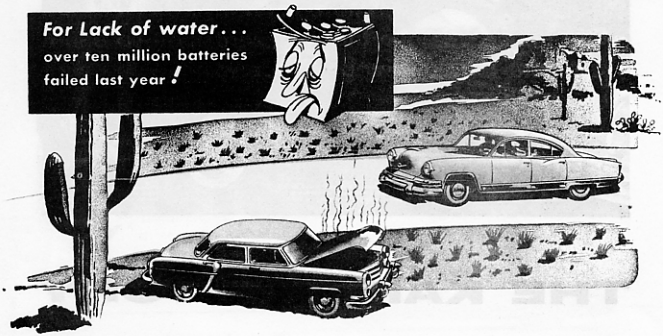


CADILLAC—CAR OF THE YEAR

FINAL STANDING



SAV-A-BATTERY FILLER CAPS



Make all your trips pleasant ones . . . have your car equipped with SAV-A-BATTERY FILLER CAPS

What Sav-A-Battery Caps are

They are new flexi-plastic reservoirs replacing the regular battery caps and holding a reserve supply of water for the battery.

Feed water to battery automatically as needed.

Maintain constant correct water level.

Tell at a glance if battery needs water.

Cannot overflow.

Will not break if frozen or struck.

Just squeeze like a syringe to fill.

How to Sell Them

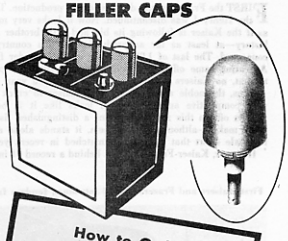
Install a set on every new car. For the small additional cost, the buyer won't let you take them off.

Increase the sales appeal by installing Sav-A-Battery Caps on every used car.

Have a set filled ready to show to every service customer. 9 out of 10 will buy.

60% of battery failures are caused by lack of water.

Sav-A-Battery Caps are low cost Battery insurance.



How to Order!

Refer to your Accessory Price List for part numbers and prices and place your order with your distributor today.

KAISER-FRAZER SALES CORPORATION
KAISER-MOTORS CORPORATION • WILLOW RUN, MICHIGAN

THE KAISER STORY

After nine years, three lines of cars and 750,000 vehicles, an important name is slipping out of the passenger car picture

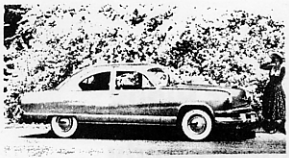
FIRST the Frazer quietly dropped out of production. Then the Henry J was discontinued. Now it looks very much as if the Kaiser is following its big and little brother into history—at least as far as production in this country is concerned. The last of 1,000 Kaisers to fill an order from Argentina came off the assembly line last summer; prior to that, no Kaisers had been built for nearly a year.

Thus, the noble effort of Henry J. Kaiser to crack the very competitive automobile field looks like it is being written off. In this respect, it joins a distinguished list of other makes—although among them, it stands alone as a big-scale effort that has been unmatched in recent years.

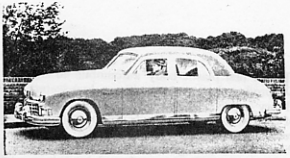
However, Kaiser-Frazer has left behind a record of interesting accomplishments. It can even be credited with introducing some of the current developments in cars. There were some refreshing ideas in styling, along with a number of experimental touches that may have had more influence than many people realize. Some say K-F will stage a comeback, but company officials are saying nothing.

Even before the first car was built, K-F caused wild speculation. There was talk of front-wheel drive and torsion bar suspension. Such features actually were incorporated in prototypes, but production and engineering problems caused them to be sidetracked in favor of more conventional designs. Had Kaiser made the grade, it might have revolutionary cars today. •

First Kaisers and Frazers helped introduce fenders faired into sides of body and horizontal, rather than vertical, grilles.



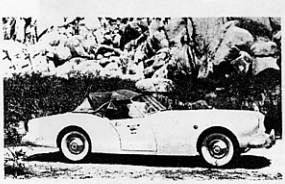
KAISER CAROLINA came out in 1953 with new body lines and was priced at $150 less than deluxe Kaiser. This style, which first appeared in 1951, won widespread attention both in the U.S. and in Europe. Much of the credit for this belongs to Howard Darrin, well-known for his work on the Cord and other famous automobiles, who was associated with K-F from the beginning. The reasons for K-F going downhill are many and complex. Against these factors, two items are obvious: (1) styling of the later Kaisers was as good as any, probably better than most; (2) K-F was only post-war newcomer that made any kind of progress at all.



FRAZER MANHATTAN, shown here in 1949 version, was three inches longer than earlier models and sported a 112-hp engine. Yet it was destined for quick oblivion, probably as a result of rising pressure from more advanced competition like Oldsmobile and Cadillac which emerged with new engines that same year. It is interesting to compare this photo with that on the bottom of the opposite page. In just two years, the Frazer had lost much of its restraint insofar as ornamentation was concerned. Note how chrome on sides and fore and aft is plentiful, although hood is still bare of all decoration.

SUPERCHARGED KAISER as offered in 1955 models was final effort to boost sales. Unit, of course, was the McCullough. K-F never really shone in the engine department, although an aluminum V-8 was in development—and reputedly a honey—until K-F completed the Willys deal; then the project was dropped. Aside from brief use of the Willys F-head engine, the Kaiser (and Frazer) was powered by a modernized version of the prewar Continental engine a good but unspectacular inline six-cylinder. Good subject for speculation would be the Kaiser story had it come out with an engine of the V-8 type which would have given contemporary overheads a run for the money. Kaiser had the body style, but needed a good engine. This, in addition to lack of proper dealership organization, handicapped the company throughout its operations, although quality control did not enhance the reputation of the car.

EXPERIMENTS in production of various types of cars showed K-F had energy and imagination. One of the best ideas, which actually anticipated the recent big swing to utility-type vehicles, was the Traveler, introduced in 1949 (the model shown at right is 1951). Clever use of sedan body with rear deck that opened was neat, but never caught on. The most ambitious experiment, however, was the Henry J (lower right) which was named in a nationwide contest. It was brought out in 1951 as a light economy car to fill what K-F considered to be a serious gap in the price ranges of cars in the U.S. Kaiser also got the jump on other Detroit manufacturers in getting a sports car into actual production first. The car (below) bore the name of Kaiser-Darrin and pioneered the use of fiberglass and sliding doors, but production remained small.

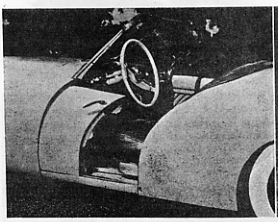


Kaiser Plans Plastic-Body Henry J

THE first plastic-body automobile to be produced in any quantity—a two-seater Henry J sports car styled by Howard Darrin of Hollywood—will make its appearance this year. Kaiser-Frazer plans to make 1,000. Price? Guesses range from $2,500 up.

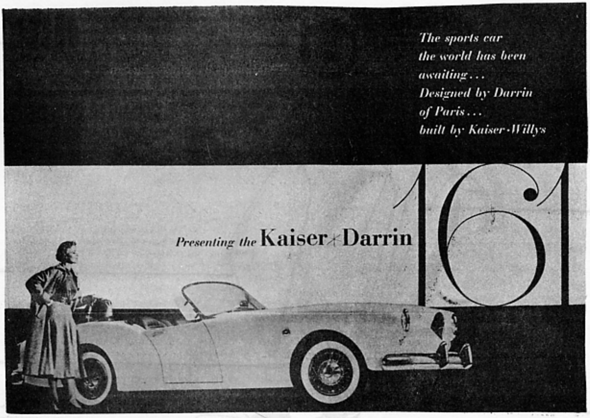
The use of plastic, reinforced by Fiberglas, reduces the body weight 300 pounds under that of a metal car. There are two luggage compartments, one under the hood. Both hood and trunk are opened by knobs on the dash. The convertible top—also push-button controlled—folds neatly into the rear luggage compartment.

RECOGNIZE THIS CAR as a Henry J? New plastic body with glass-fiber reinforcement stands only 34 inches high to top of windshield. Bottom of door is lower than curb height.



SLIDING DOORS are car's outstanding feature. Touch a button and an electric motor pulls door forward inside front fender panel. Motor does double duty—it raises, lowers windows.

SEAT IS TRIMMED to match or contrast with paint job to suit customer. Curved two-piece windshield extends back to door line. A six-cylinder, 65-hp. engine powers the car.



"Under-the-Hood" details and other mechanical data:

Engine: In-Line 6 cylinder F-Head, bore 3.125 inches; stroke 3.50 inches; piston displacement 161 cubic inches; maximum horsepower 90 at 4200 r.p.m.; maximum torque 135 lbs./ft. at 1600 r.p.m.; compression ratio 7.6:1.

Cylinders: 6 cylinders cast integral with crankcase. Cast iron cylinder head containing intake valve gear. Exhaust valve gear in block.

Crankshaft: Forged Steel with detachable Steel Backed Babbitt Bearings. Four Main Bearings.

Connecting Rods: Forged Steel with detachable Steel Backed Babbitt Bearings.

Pistons: Oval ground T-slot aluminum alloy Pistons. Two compression rings and one oil control ring fitted.

Camshaft: Cast iron, supported in Steel Backed Babbitt Bearing driven by gear from crankshaft.

Valves: Intake valves in Head operated by push rods. Exhaust valves contained within block forming F-Head Design.

Lubrication: Pressure gear pump forcing oil to all Main Bearings, Connecting Rods, Camshaft Bearings, and Timing Gear Chain. Squirt hole in Connecting Rod Bearings provide lubrication of the Cylinder Walls. Oil capacity 5 U.S. quarts. Floating oil intake available. Partial flow oil filter optional at extra cost.

Cooling: Forced Circulation by Centrifugal Pump with thermostat control. Full-length water jackets. Cooling system capacity, 12 U.S. quarts.

Fuel System: Regular brand of gasoline recommended. Fuel circulated from rear tank by mechanical type fuel pump. One single downdraft carburetor. Manually operated choke. Capacity 13 U.S. gallons.

Ignition: Coil and battery ignition with automatic advance and retard plus vacuum control.

Starter: Ignition key turn, solenoid switch.

Clutch: Flexible, dry, single plate Auburn clutch. Diameter 8.5 inches.

Transmission: Standard transmission; 3 speeds forward and one reverse, controlled by a floor mounted gear shift lever with synchromesh engagement of all gears. Capacity 1.5 U.S. pints. Automatic overdrive fitted behind transmission available at extra cost. (Dual Range Hydra-Matic) automatic transmission also available at extra cost.

Rear axle: Semi-floating hypoid rear axle. Capacity 2.3 U.S. pints.

Overall gear ratios: Conventional transmission, 4.10:1. Overdrive transmission, 4.55:1. Automatic transmission (Dual Range Hydra-Matic) 3.54:1.

Steering: Mechanical worm and roller. Ratio 15.3:1 overall.

Suspension: *Front:* Independent coil spring controlled by direct acting hydraulic shock absorbers. Frameless stabilizer.

Rear: Conventional semi-elliptic leaf springs controlled by direct acting hydraulic shock absorbers.

Brakes: Bendix floating shoe hydraulic brakes. Brake drum diameter 11 inches. Total effective braking area 178 square inches.

Frame: Reinforced box type.

Wheels and tires: Steel Disc Type wheels; 5.90 x 15 (4 Ply) tires. Wire wheel covers optional at extra cost.

Instruments: Oil pressure and fuel capacity gauges; water temperature indicator; ammeter; speedometer and r.p.m. tachometer mounted on dashboard.

Body work: Armorclad Fiberglas body; open two seater; Deauville styled coupe with sliding doors, full width individually mounted bucket seats; large fully enclosed luggage compartment in rear; detachable side windows providing full weather protection.

Body dimensions: Wheel base 100 inches; overall length 184.00 inches; front tread 54 inches; rear tread 54 inches; overall width 67.56 inches; bucket seat width 24 inches; height over top 50.81 inches; height over cowl 36 inches; ground clearance 7 inches; turning diameter 35 feet; approximate shipping weight, (not including gas and water) 2175 pounds.

We reserve the right to make changes, at any time, without notice, in prices, colors, materials, equipment, specifications and models, and to discontinue models.

Kaiser-Willys Sales Division, Willys Motors, Inc., Toledo, Ohio. PRINTED IN U.S.A.

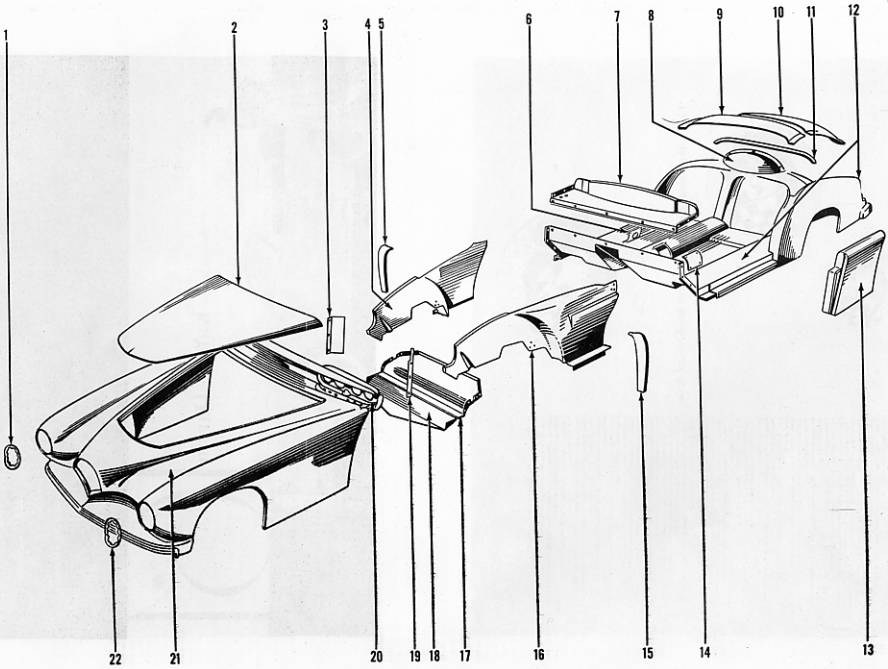

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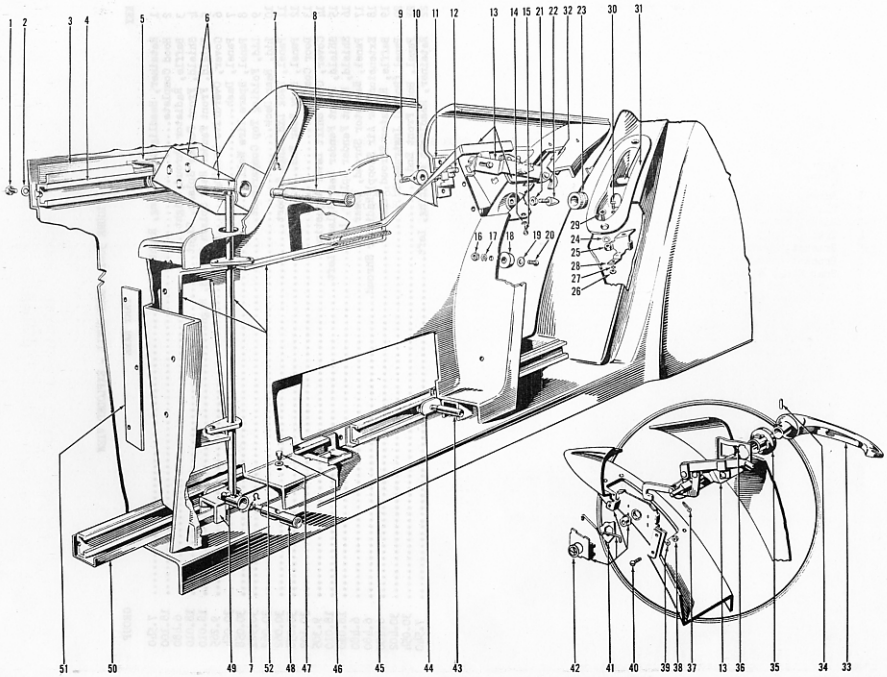
FIGURE 30-1 - BODY SHELL - EXPLODED VIEW

KEY	PART NAME	GROUP
1	Retainer, Headlight Mounting, Right	7.540
2	Hood Complete	18.100
3	Baffle, Radiator Shroud, Right	6.480
4	Shield, Front Fender Splash, Right	18.010
5	Shield, Front Fender Rear Splash Shield, Right	18.010
6	Cover, Overdrive Housing	9.265
7	Panel, Dash	30.054
8	Panel, Spare Tire Well	30.058
9	Lid, Folding Top Compartment	30.921
10	Lid, Rear Deck	30.062
11	Panel, Deck Lid Hinge Support	30.062
12	Panel, Body Rear End	30.058
13	Door Complete	30.102
14	Cover, Gear Shift Lever Adjusting	9.305
15	Shield, Front Fender Rear Splash, Left	18.010
16	Shield, Front Fender Splash, Left	18.010
17	Panel, Radiator Shroud, Lower	6.480
18	Extension (or Air Scoop) Radiator Shroud	6.480
19	Baffle, Radiator Shroud, Left	6.480
20	Panel (Board) Instrument	30.402
21	Panel, Body Front End	30.054
22	Retainer, Headlight Mounting, Left	7.540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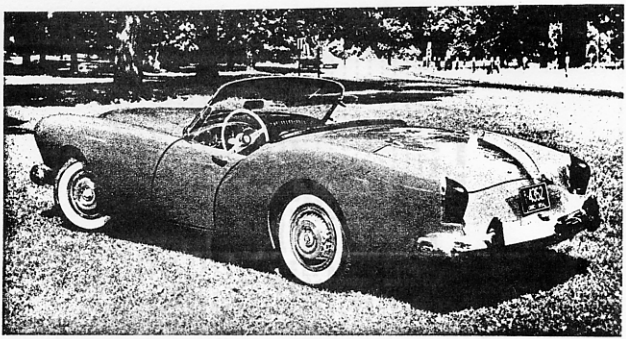
16 17 18 19 20
29 24 25 28 27 26
51 50 49 7 52 48 47 46 45 44 43
42 41 40 39 38 37 13 36 35 34 33

FIGURE 30-2 - DOOR SIDE SECTION VIEW

KEY	PART NAME	GROUP
1	Screw, Track	30.105
2	Flatwasher, Track Bolt	30.105
3	Guide, Runner, Upper	30.105
4	Track, Upper	30.105
5	Bracket, Runner Guide	30.105
6	Bracket Assembly, Upper Runner Axle, Left	30.105
7	Snap Ring, Runner Axle	30.105
8	Axle, Upper Runner	30.104
9	Set Screw, Safety Lock Knob	30.104
10	Knob, Safety Lock	30.104
11	Bracket, Safety Lock	30.104
12	Rod, Safety Lock	30.104
13	Hook and Link, Lock, Left	30.104
14	Lockwasher, Lock Cover Screw	30.104
15	Screw, Lock Cover	30.102
16	Nut, Rear Bumper Screw	30.102
17	Lockwasher, Rear Bumper Screw	30.102
18	Bumper, Rear	30.102
19	Flatwasher, Rear Bumper Screw	30.102
20	Screw, Rear Bumper	30.104
21	Jamnut, Dovetail Plunger	30.104
22	Plunger, Dovetail	30.104
23	Bumper, Dovetail	30.104
24	Flatwasher, Lock Striker Screw	30.104
25	Locknut, Lock Striker Screw	30.104
26	Nut, Bumper Retainer Screw	30.104
27	Lockwasher, Bumper Retainer Screw	30.104
28	Retainer, Bumper, Left	30.104
29	Bolt, Lock Striker	30.104
30	Screw, Bumper Retainer	30.104
31	Striker Assembly, Lock	30.104
32	Cover, Lock, Rear	30.104
33	Handle, Door	30.114
34	Pin, Door Handle to Shaft	30.114
35	Escutcheon, Handle	30.114
36	Retainer, Handle Escutcheon	30.114
37	Cotter Pin, Handle Shaft	30.114
38	Nut, Remote Control Bracket Screw	30.114
39	Flatwasher, Remote Control Bracket Screw	30.114
40	Screw, Remote Control Bracket	30.114
41	Bracket, Remote Control, Left	30.114
42	Flatwasher, Handle Shaft	30.105
43	Axle, Lower Runner, Rear	30.105
44	Runner, Door	30.105
45	Track, Lower	30.105
46	Bolt, Channel to Door Panel	30.105
47	Lockwasher, Channel Bolt	30.105
48	Axle, Lower Runner, Front	30.105
49	Channel Assembly, Left	30.105
50	Guide, Lower Runner	30.105
51	Tapping Plate	30.105
52	Rod, Link and Bracket, Door Actuating, Left	30.105



Those aren't real wire wheels, but snap-on discs. The tail-lights are stock Kaiser units

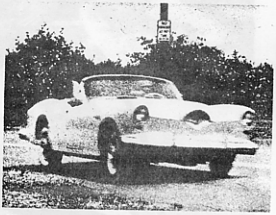
KAISER-DARRIN DKF-161

This limited-production job is a very close approach to a true American sports car

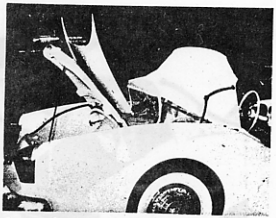
As this book is published, the Kaiser-Darrin has been on the market approximately a year. To this date, slightly over 350 have been sold out of an original production of something like 450 complete cars.

The car's model initials stand for builder Kaiser, designer Howard Darrin, and the 161 cubic inches displacement of the Willys F-head engine respectively. Essentially the Darrin, as the car has come to be called, is designed to please the sort of driver who appreciates superb roadability and moderately high performance.

I have put in a total of some 1,500 miles in four Darrins. Each of them was strictly stock with the 90-horsepower Willys F-head engine, and three-speed synchromesh transmission with overdrive. The engine has now been in service for a good three years. In this age of V-8 engines and overhead valves, the Willys F-head is one of the most reliable



Writer power-drifts Darrin in 2nd overdrive around a wide flat turn at 45 mph



As manual top is raised, the landeau bars straighten out until they can be fastened

■ KAISER-DARRIN DKF-161

and efficient power plants that is built anywhere regardless of size or number of cylinders.

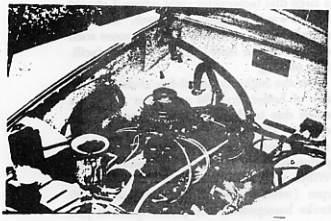
The Fiberglas body is not made by a new technique; this type of construction is now well developed. The auto buying public seems to have overlooked the proven worth of Fiberglas: it'll never rust, and it's easy to refinish with lacquer should the owner want a change in colors.

The doors are an innovation: they slide forward into the body and operate smoothly if one exercises a bit of care to prevent an accumulation of dirt on the channel. The upholstery is Vinyl, a leatherlike plastic that can be cleaned with a damp rag and will wear well. Two people are accomodated very comfortably in individual seats with the covered transmission between them. There's plenty of legroom.

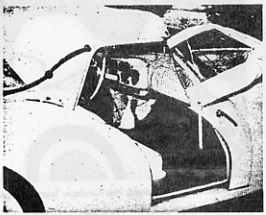
The gear shift lever is mounted on the transmission rise and is accessible by only a slight reach of the driver's right hand from its usual place on the steering wheel —which has a lock-to-lock of only 2¾ turns, providing very quick and easy steering.

The coachwork is excellent despite the fact that Fiberglas requires a large amount of hand work. Tight-fitting side screens with large plexiglas windows fit quickly into place in grooved channels around the folding top. At speed with the side screens in place there is no more wind noise than one would experience in the average sedan; the cockpit is weather tight and will take any storm, yet the side screens are fitted with a zipper arrangement that permits exit without having to remove them.

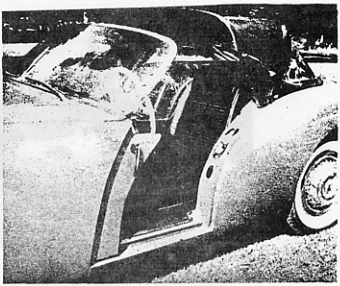
The tonneau compartment is opened by a release in the trunk; the top is pulled forward and attached at the back of the body by three thumb screws and to the top of the stationary windshield by quick release fasteners similar to those used on the ma-



Willys F-head engine uses up every inch of under-hood space, but arrangement is good



Finally, the side curtains are zipped into place above the very unique sliding doors



With top fastened in half-mast position, Darrin becomes an excellent 'coupe de ville'

jority of sports roadsters. I was driving through downtown Manhattan with a friend one day, when a sudden cloudburst forced us to the curb where we erected the top in just 25 seconds. Once the top was up, we put the side curtains on from inside the car. With the top up, incidentally, the tonneau provides nearly as much additional luggage space as does the trunk itself.

At a true speed of 95 mph (the fastest I've personally driven the car) the Darrin is as solid as a rock and much more pleasant. Braking, even at high speeds, results in so very little forward pitch and nose dive that one is hardly aware of hard braking, nor is brake fade evident until after many hard stops from speeds around 60 miles per hour.

Acceleration, while not hair-raising due to a comparatively small engine, is certainly more than that offered by many sports cars and domestic family sedans and convertibles; the *dig* is enough to enable the Darrin driver to clobber the crowd when the light turns green. There's a beautiful exhaust rap at 2000 rpm.

The overdrive control displeases me; whereas the throttle control of the Borg-Warner unit is okay for a passenger car, replacing this feature with a dashboard control on a toggle would make for much more responsive control when driving the car like an out-and-out competition machine.

Another item that can be dispensed with on a real sports car is the half horn ring on the steering wheel. Of course there's a need for a rear view mirror, but this item, placed in a clumsy position on the cowl, hides the right front fender. A sports type mirror on the left exterior side of the cowl nearer the driver would provide a better rear view when the top is raised and would not obscure the forward vision in any way.

Although the crash padding of rather dull plastic on the right side of the dash panel is good, it does create an annoying reflection and could cause obscure vision, especially at night. The instruments are well grouped and are intelligently selected with a large dial tachometer right where it should be. I would suggest, however, that the manufacturer provide a strap, or some such device, on the inside of the door to facilitate closing.

On the highway an all-day cruising average of better than 60 miles per hour is a cinch due to the low piston speed of this engine. Theoretically engineers strive for (at top revolutions per minute) a maximum piston speed of 2,500 feet per minute. The Willys engine does well here, for at 4,200 rpm (when it delivers a maximum of 90 brake horsepower) the piston speed is just