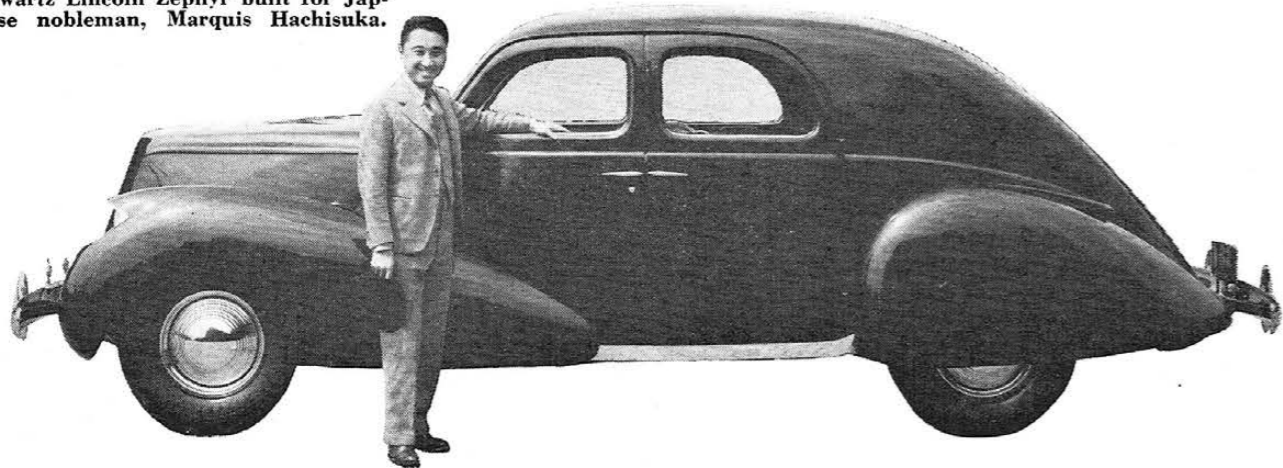


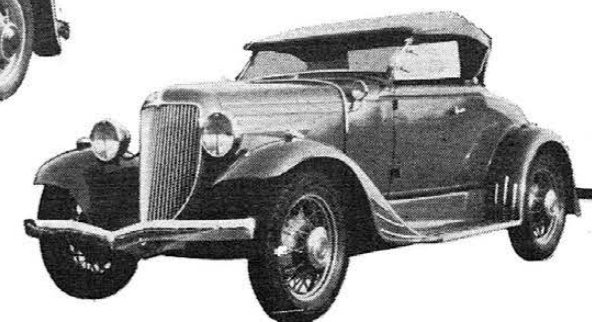
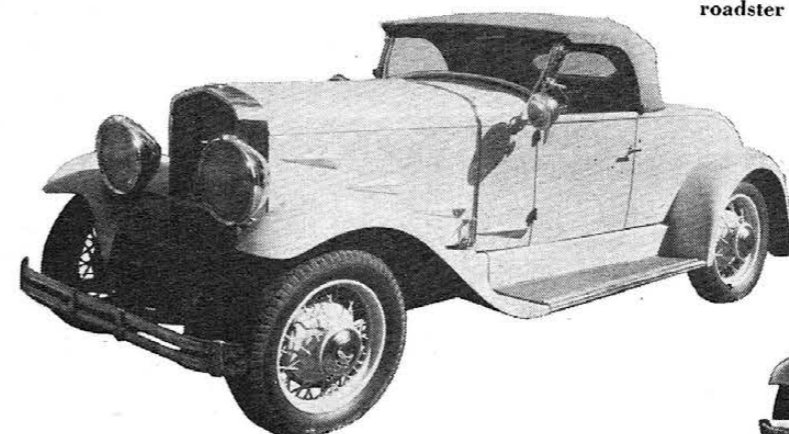
Take a good look at the turbulent Thirties, when the hobby of custom

Modern for 1930's is this Bohmann and Schwartz Lincoln Zephyr built for Japanese nobleman, Marquis Hachisuka.



and restyled cars flowered into an art

This is Model A, but longer wheelbase, fabricated hood, shell and grille, cause roadster to resemble heavier, costlier car.



Frank Kurtis' grille treatment on this 1931 Ford was later seen on production models from Dearborn after four years.

When it became a custom

BY OCEE RITCH

PART II—OF FOUR PARTS

IN THE TWENTIES, we recall, there was a lot of tax-free money going into custom cars on two levels: the quite wealthy, movie stars and executives who commissioned body builders such as Murphy, Bohmann & Schwartz and Don Lee Special Body Division to create designs suitable to the big chassis of Rolls Royce, Pierce Arrow and Duesenberg. At the opposite end of the economic scale, Southern California youngsters were dressing up their Fords, Dodges, Maxwells and Buicks in an effort to make them look higher priced . . . or, at least, distinctive. Out of this period came the chopped windshield, French top, smaller wheels and many chrome plated goodies.

The early Thirties promised no luxurious living and the swank automobiles such as the Cord, Marmon and Ruxton

which appeared on the scene met the fate of all out-of-phase creations. Actually, if you were lucky enough to get a car (as a teen-ager in those days) you took care of it and didn't trade it off merely because the fashion had quickly changed. So, we find a new approach to customizing.

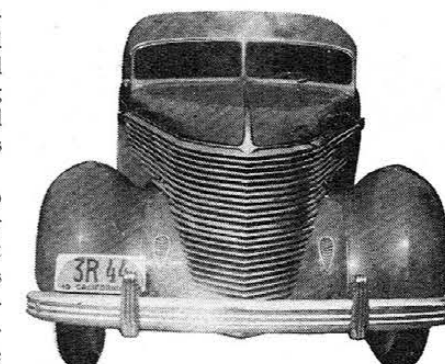
Taking Frank Kurtis, again, as an example we begin to get the idea of the depression times.

In 1930 Frank was in possession of a 1928 Model A . . . bought new and somewhat restyled with a low top and windshield. When the '30 Fords arrived at the showrooms, young Kurtis quickly made a deal. Not for a new car, just for the fenders. The '30 fenders, if you remember, were longer and more graceful, and, being longer, called for more car. Frank solved this problem by mounting the A-Bone's

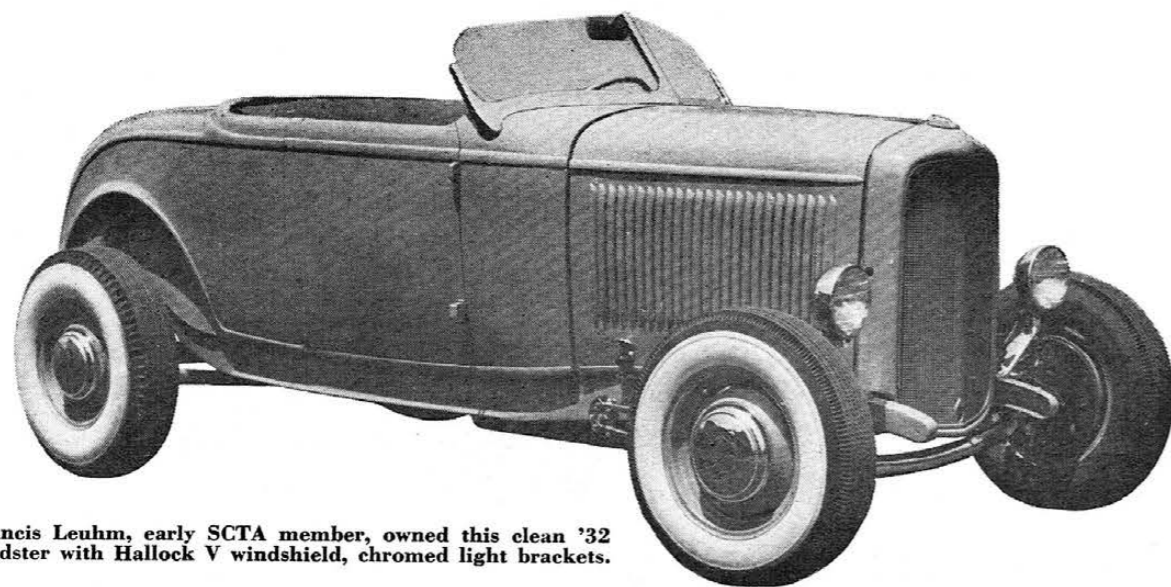
transverse front spring on a perch in front of the cross member . . . race car style. He now had a longer wheelbase, and this, in turn, required a different hood. In the end, the Model A received a complete face lifting: fabricated radiator shell, grille, hood, Cadillac headlights, 18-inch wheels and rear-mounted

As might be expected, this little jewel was sensational. There was nothing "hung on" it, except a spotlight, and a new trend in smoothing the lines of stock cars was under way.

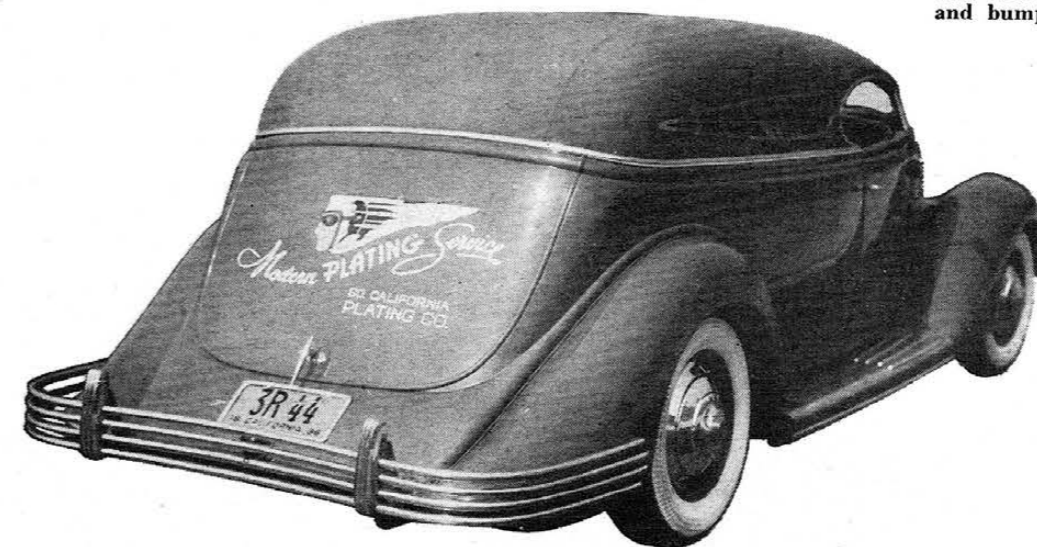
The first "Z-Iron" of record popped up about this time and became known far and wide as the "Downey Ford." Built by Frankie Lyons, a resident of the Los Angeles suburb of Downey, this innovation employed a modified Model T engine and invariably was top car at the



Southern California Plating Co. saw advantages in customizing and employed a man full-time to restyle its trucks. Like this 1936 Ford, radical chromed grille and bumper attracted much attention.



Francis Leuhm, early SCTA member, owned this clean '32 roadster with Hallock V windshield, chromed light brackets.



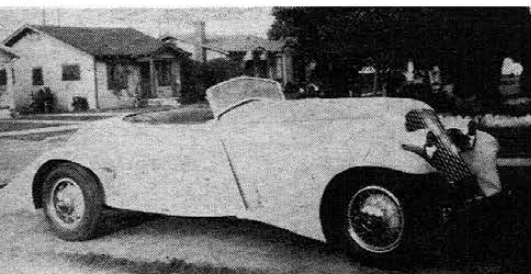
MOTOR Life, May, 1955

MOTOR Life, May, 1955

early Muroc speed trials. It ran casually on the streets, too, but was unpopular with law enforcement officers in the area because of its wonderful, cracking, twin straight pipes that ran down from the engine under the door and then up over the rear axle.

Z-Iron, the method of lowering the center section of a frame where the body mounts and leaving the front and rear ends of stock height, is aimed, of course, at lowering the body. This technique was employed for a number of years until "channeling" was invented. Jimmy Summers, a well-known automobile painter around Hollywood who did a great deal of the custom paint work of the time, is generally credited with being the first to do this intricate rod.

At any rate, channeling, especially of the '32 Ford, swept Southern California custom circles. The process—one of cutting the floor of a body so that it will



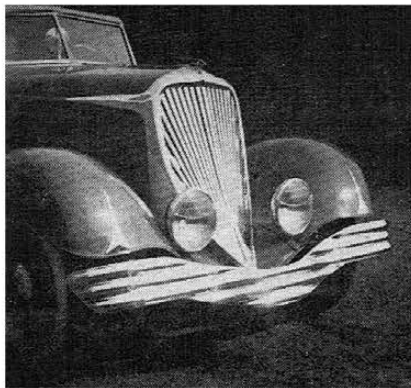
Speedster, built up from LaSalle frame, created sensation when Kurtis drove it through the Midwest in the early 1930's.

drop down over the frame rails—provided a pleasing effect. The frame rails then are concealed and a belly pan added to complete a smooth job. It also becomes necessary to remove the seat frame in order to bring the driver and passengers down proportionately.

This major body work wasn't as big an item in the early Thirties as the building of bizarre grilles.

One of the leading lights was Leonard DeBell, of the Southern California Plating Company, who built most of the race-car shells and other chrome necessities. To advertise his place of business, Leonard kept George DuVall busy hammering out new curves on his delivery trucks and plating fancy front ends. These creations were widely admired, and as widely copied. It is also believed that one of the plating company's trucks, a 1931 Ford, furnished the design for the startling grille which distinguished the radical Hudson Terraplane of that era.

The 1935 Ford shell was heralded in the custom work of Frank Kurtis on his '31 A-Bone, along with the skirted fender. A sharply slanted low windshield, French top and solid-side panel hood made a remarkable roadster.



George Du Vall created this grille for his Ford, believed to have been the inspiration for the Hudson Terraplane.

This was the usual procedure throughout the Southland. Build it, change it, swap it, rearrange it, but not too much from-the-frame-up activity. Bohmann & Schwartz, who had succeeded Murphy in the trade, more or less had the luxury business cornered.

Marquis Hachisuka, a Japanese nobleman, placed an order for a Zephyr town car and Bohmann & Schwartz accommodated him with a regal bit of restyling. The features, which appear modern today, included sharply recessed and Frenched headlights, sweeping fenders and the transverse grille. The nose was smoothed (actually a whole new hood was built with solid side panels), the upper portion of the grille was removed and paneled in and a low, wide air intake was provided. This look was one of the distinguishing features of the Lincoln Continental when it hit the market a couple of years later.

The fenders on this Lincoln were given a treatment which brought the front pair back into the doors and made the rear fenders completely removable. No skirts for this creation—the entire rear fender could be taken off quickly and easily to provide access to the wheels. Privacy was assured this relative of the royal family by elimination of the small rear side windows. Upholstery and interior were on a par with the handsome exterior.

First inset license plate was fashioned by Frank Kurtis in 1936 on an early Airflow DeSoto, was widely copied later.



One de luxe vehicle which presaged things to come was the speedster Frank Kurtis built up for Don Lee. It was a monster, utilizing a big Offy under the hood, which made it a striking resemblance to the mid-Thirties Cord. But it was so noisy that pleasure driving was not the proper term to be used in describing its operation. The fenders concealed retracting headlights and its lines bespoke real speed on the road.

Streamlining was actually becoming important at this time, with top speeds approaching 100 and cruising speeds of 55 mph practical. The 16-cylinder Cadillac sported a V windshield, making it possible for a roadster owner to have this same distinction.

The '32 radiator shell and grille became an immediate best-seller for transplanting to any car, as did the '34 . . . which could be reworked into the popular "heart shape." The smaller diameter, larger tired wheels, which would fit earlier models, were also sought after.

Lowering the stock car began to pose some problems at this time, along with such esoteric considerations as white leather upholstery and headlining. With the emergence of the flared fender came the fender skirt, followed immediately by the fender skirt lock. The nosed-over hood (ornament removed), planed deck (trunk handle removed) and interior release latches came on at about the same time and grew in popularity.

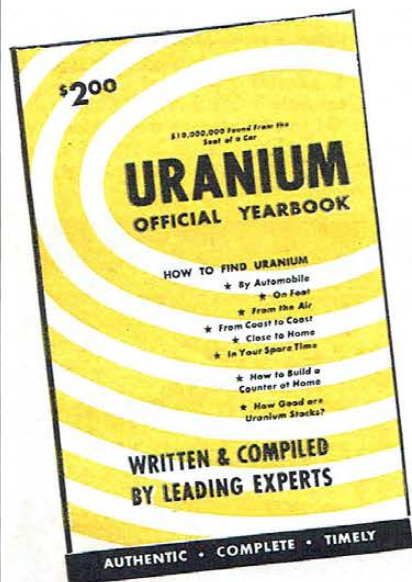
After the radiator filler cap was put out of sight on production cars, everyone wanted an alligator-style hood which led to the solid front and dropped grille. The perversity of human nature is no doubt in some way responsible for the tendency to substitute a blank piece of body metal for one which has been carefully punched full of holes at the factory and to louver anything which comes out smooth. The side panels of '30 through '36 automobile hoods can be cited as instances. Any custom work seemed to include this step.

By this time, custom work had spread everywhere. As late as 1934, however, a special could cause a traffic jam in the Midwest, Frank Kurtis recalls. He drove his much-reworked speedster-bodied La Salle into the grain belt on a visit and was besieged by the curious wherever he halted. This car was almost entirely hand formed, based upon Frank's ideas of what cars should look like. The effect came on pretty strongly in the near-white paint job. No running boards, channeled over the frame and a rakish front end distinguished it from its stock contemporaries.

As the Thirties drew to a close, the move toward enclosure of all parts and other customizing methods were aimed at smoothing, cleaning up and sharpening the lines Detroit provided. The work which was done on '37 through '39 Fords and Chevrolets when they were new still

(Continued on page 64)

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SEARCH FOR SAFETY

(Continued from page 47)

provided the worst possible conditions which might be encountered because of the unyielding nature of the wall. A car-to-car headon at the same speed would not create as much damage possibly because of the mutual-penetrating effect... sort of like pushing two hairbrushes together with your hands.

With the area well dampened down, the push truck containing the remote control mechanism for guiding the car and the recording apparatus rolled down the road shoving the test car up to a predetermined speed and cut-off point. The truck then slowed down, paid out the electronic cables and was stopped at the time the sedan struck the wall. To coordinate the necessary motions and to be sure the sedan would hit the barrier at the desired speed took a lot of rehearsing. The fact that each of the crashes produced usable scientific information is a tribute to the Institute.

What have the researchers learned?

Not enough, yet, they say, and estimate that another five years of continuing research will be necessary to provide them with the answers they seek. A few interesting disclosures have come out, however and make interesting study.

For one thing, the bumper is not a significant factor in taking up the forces of a front end smash. The steering column and wheel are dangerous because they are attached to the frame and when it collapses backward they are forced into the driver. The grille and front wheel assemblies bear their own weight, so to speak, in a wreck and absorb approximately that amount of the stress. The frame seems to bear as little as one-half the total load and may only have to absorb one-third the kinetic energy generated in the crash.

From their research it appears that the front of a car can be collapsed to the fire wall without transmitting more than 30 G to the intact portion. If properly restrained, the occupants could survive such a crash unless the motorists' compartment was collapsed. The passenger dummy in a 25 barrier smash, without the benefit of any belt, struck the windshield with a force estimated at 200 G. The driver dummy, whose weight approached 4,000 pounds (two tons) during the collision, stretched a nylon shoulder-loop belt so that his head barely contacted the steering wheel. Tensiometer readings showed that approximately 1725 pounds was being borne by the belt.

As test information is analyzed it is released by the institute, but due to the time lag in auto production it may be months or years before the facts are applied to design. In view of the fact, though, that we can hardly expect fewer accidents in the future, the industry should incorporate changes which will make the chances of injury less. •

WHEN IT BECAME A CUSTOM

(Continued from page 50)

looks good. Even today's most expert customizers will view a photograph and admire the work. Sedans and coupes began to come in for restyling, particularly after the advent of the club coupe, where mostly open body styles had been preferred before. This restyling of the closed car accounted for a boom in sales of body lead which some artisans tried to substitute for hammer and muscle. Fortunately, good taste won out and the lead barge sank of its own weight.

No one can be found to accept the blame for chopping the first '32 coupe. It just suddenly appeared on the streets one day. To say that top-chopping was carried to extremes would not be far from the truth. As with any fad, it could be carried too far, and it was. The usual yardstick for determining how much window area to leave was a giant malt or a soda glass which, more often than not, formed the basic diet of the builder. If you could get barely a full malt glass through the window while parked at a drive-in, the top had been chopped right.

At first glance chopping looked like an impossible task, but the acetylene cutting torch was an ingenious tool. A determined amateur stylist could wrought no end of changes. Sometimes the side windows didn't fit when rolled up, but the coupe owner was probably getting more draft through holes in the firewall and floor than he needed anyway, so an ill-fitting window was a minor inconvenience.

With the lowered steel top came new sensitivity to interiors. Upholstery shops did a fine business in splashily colored materials. The Carson Top, a removable fabric-covered steel pseudo-convertible type, came into being. They were so finely done, inside as well as out, that the renovation of the seats and trim became the primary step in many expressions of individuality.

Among small touches, it's safe to say that the inset license plate holds top spot. This bit of body work was first performed by Frank Kurtis in 1936 on an Airflow DeSoto. It, more than any other single feature, marks the *California Car*.

By the late Thirties the customized or restyled car could be spotted anywhere. Lowered, de-chromed, with smooth hood and deck, plus set-in plates and maybe a chopped top—all these caused it to stand out in traffic and attract the curious who gazed on its sleek, upholstered interior and chromed dash in wonder.

The look of the future was about it and its lines created an impression of speed. No wonder that the movement spread. And Southern California will take the blame.

(NOTE: This is only the second in the series of articles on custom and restyling of automobiles. Others, also by O'Cece Ritch, will appear in following issues of *Motor Life*.) •