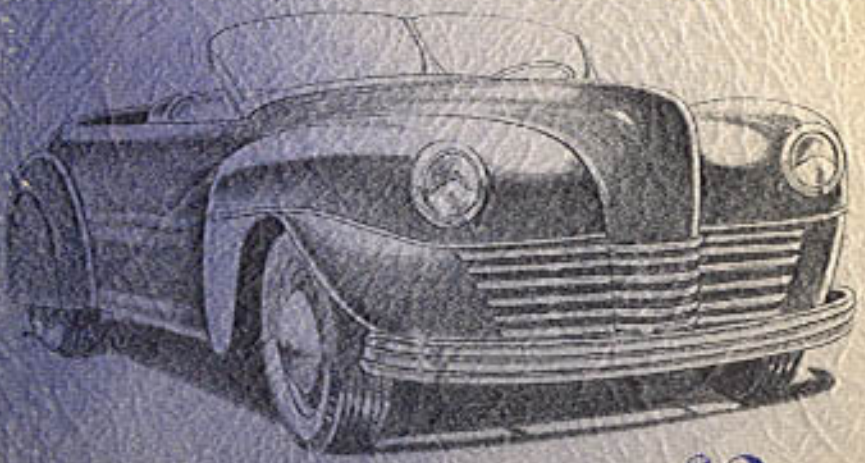
DAN POST'S ORIGINAL

BLUE BOOK of custom RESTYLING



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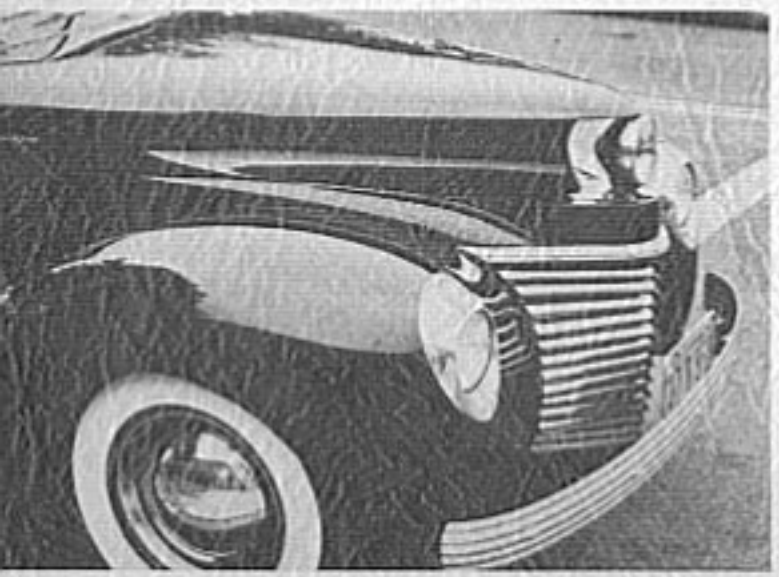
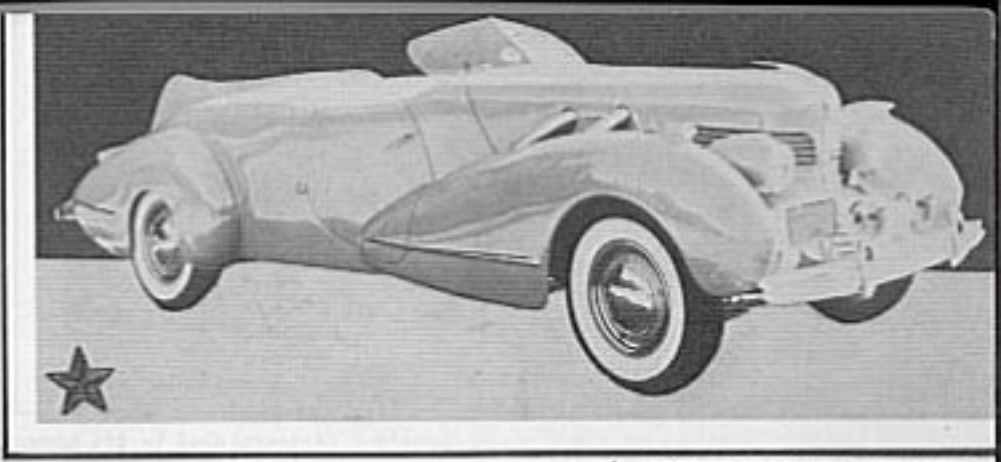


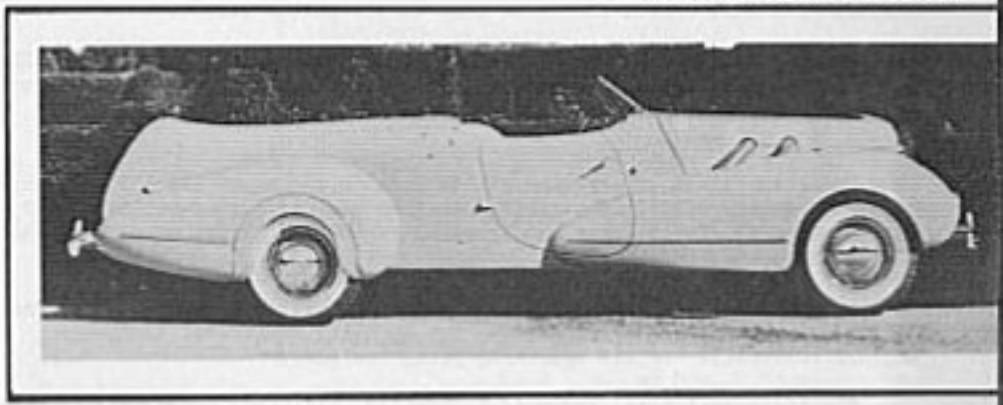
BLUE BOOK
of
CUSTOM RESTYLING

Post Publications
Arcadia, California

MODERNIZED BY BOHMAN & SON



BODY BY BOHMAN & SCHWARTZ



Sport-Custom Cars

HOW THEY CAME TO BE...

WITH ITS open-car climate 'round the calendar Southern California, capital of the motion picture industry, hub of top midget racing, and playground for nearly every sport, has been the natural nursery for the sport-custom car.

Though coachmakers all over the country have been kept busy since the industry's infancy with orders for one-of-a-kind limousine bodies, enclosures for touring cars, and an occasional customizing treatment on a roadster, or the once-nippy "speedster," not until the middle thirties did the custom sports car come into its own in the form it is known today.

Support of the new trend came two-fold from Hollywood. While movie scripts like THE YOUNG IN HEART and TOPPER called for custom cars, many of the stars themselves ordered specially-styled models.

A decade ago Pasadena coachbuilder Maurice Schwartz, then a partner in the firm of Bohman & Schwartz, constructed the "Topper" car for Hal Roach on a Buick chassis, following a design by Anthony of Hollywood. Many theater-goers across the country came out of TOPPER remembering little more than the dream speedster. At a stroke this stimulus spawned a fresh, car-design-conscious generation—and gave youth to the infant custom-sport industry.

SOON FOLLOWING came the Phantom Corsair. Distinguished by its unusual provisions for safety and comfort at high speeds, this is undoubtedly one of the most fabulous custom cars ever made in the United States.

Featured prominently as the "Flying Wombat" in the motion picture THE YOUNG IN HEART in late 1938, this futuristic sweetheart vied for honors with Paulette Goddard, Billie Burke, Janet Gaynor, Douglas Fairbanks, jr. and Roland "Topper" Young.

Under the close supervision of its creator and angel the late Mr. Rust Heinz, a prototype of this striking aluminum car was custom-built in 1937, using a Cord 810 front-drive and Lycoming engine, at a cost of approximately $24,000.

Originally intended as a pilot model for limit ed production, the Phantom Corsair plans were terminated on the shocking accidental death--in another automobile--of its sparkling young designer.

The instrument panel includes tachometer, oil level gauge, oil temperature gauge, battery charge level gauge, manifold vacuum gauge, compass and altimeter-barometer. Dos-a-dos seating inconvenience is offset for back seat passengers by the existence of two bars in the rear compartment.

Layers of cork and sponge rubber line steel crash boards in all areas where injury might occur to riders during accidents, creating a soundproof and shockproof interior.

BODY BY BOHMAN & SCHWARTZ

A RARE COLLECTOR'S ITEM! AN UNUSUAL OPPORTUNITY!

Post Publications, Arcadia, California, has available a limited number of the ORIGINAL, Phantom Corsair advertising catalogs.....

The fascinating car shown on these pages featured in a photo-loaded, custom-idea-packed brochure! THIS IS NOT A REPRINT!

WHILE SUPPLY LASTS...$1 postpaid

BUILT BY General Motors' experimental styling section in 1939, for its vice-president in charge of styling, Mr. Harley J. Earl, a trim Buick, later christened the "Fireball," featured much that later came out in various General Motors production models.

Readily recognized as forerunner inspirations are the Buick grille conception, gunsight-radiator ornament, tack-on fenders and high-crowned, dramatized tail-lights. The grille and ornament came out on later Buicks. The tack-on fenders and sweeping tail lights were pioneered in production in similar fashion on the Cadillac.

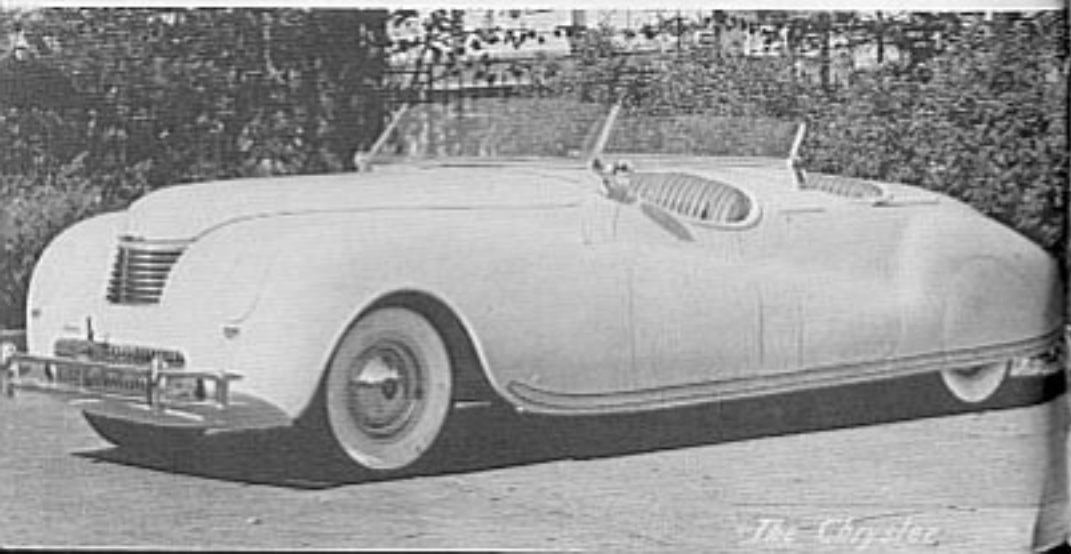
Innovations at the time, later general practice in a number of cars, were the concealed gas filler door, curved-under body and fenders, electrically operated window regulators, and bumpers embracing license plate mountings. The "Fireball" also boasted disappearing headlights, a completely concealed top, special 15-inch wheels, and air-cooled brakes.

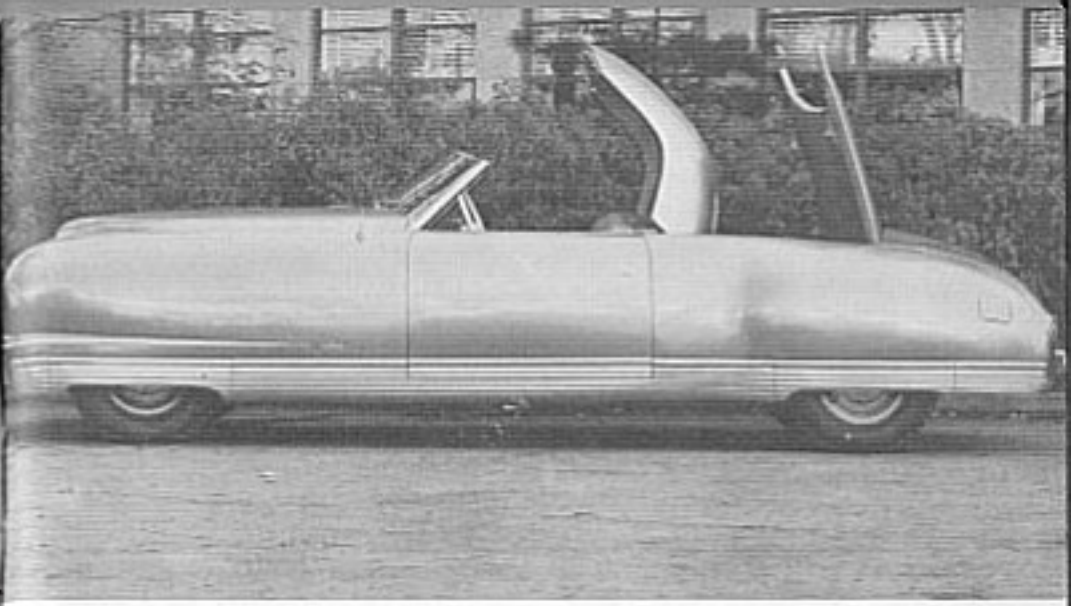
BODY BY GM EXPERIMENTAL STYLING SECTION

BODY BY LEBARON

WHILE CHRYSLER engineers heralded the THUNDERBOLT and the NEWPORT during their joint debut at the New York automobile show in the fall of 1940, as "new milestones in streamlined design," it took a number of years to bear out this early assertion. Later styling trends of the industry suggest that these two cars, while never put in actual production, did influence future models.

Some of the body features were used in modified form in the 1942 lines of Chrysler Corporation, and later by several other manufacturers. The ultimate front-end treatment, featuring bumper-grille integration, was pioneered here. Post-war "pontoon-side" styling, too, is distinctly reminiscent of these cars.

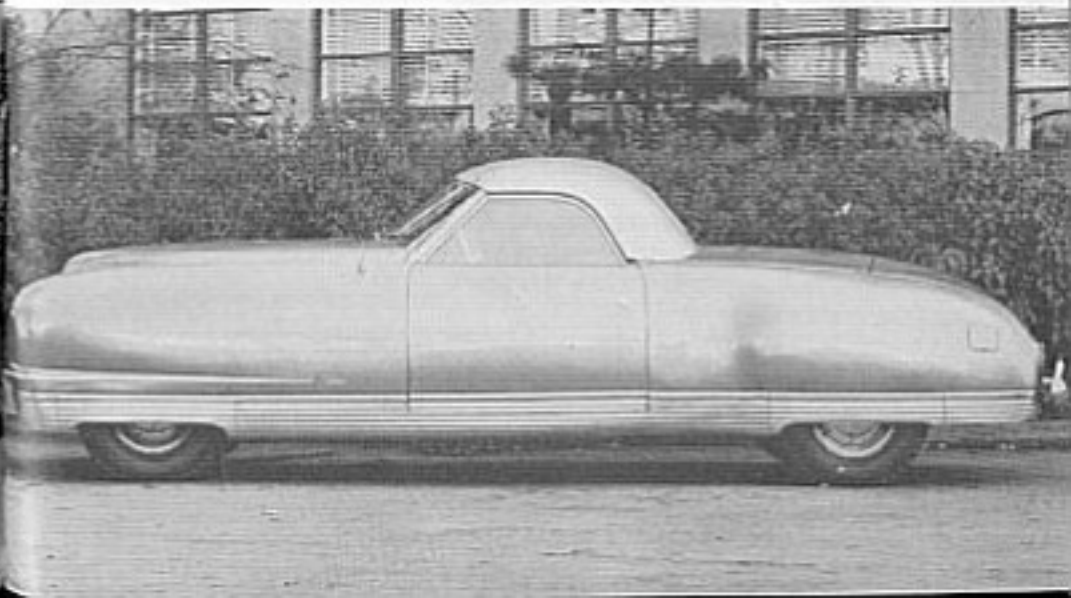


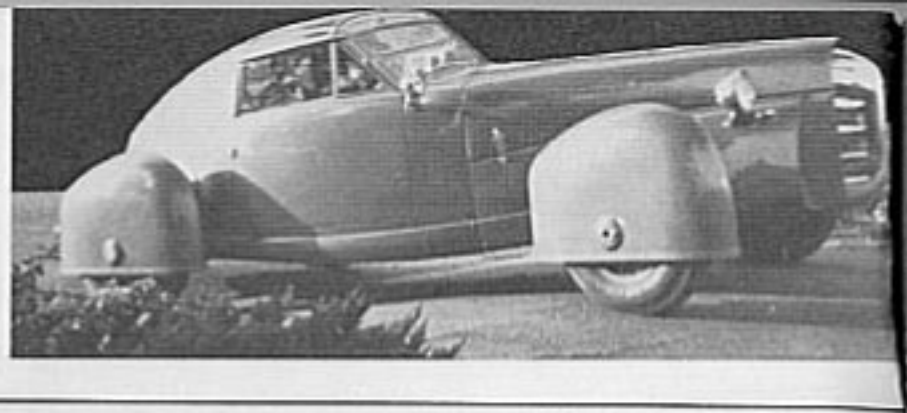


Six THUNDERBOLTS and five NEWPORTS were built—all purely for exhibition purposes. None of the cars was sold as "new". While no actual price was ever put on either car, it is said that Chrysler would have had to have gotten $8300 for the THUNDERBOLT, if sold as new. A tour of dealers' showrooms throughout the country followed their introductory showing, and it estimated that over six million persons saw them. Later they were sold to the public, several going to Hollywood stars and other prominent figures, bringing as high as $6000, as used cars.

The THUNDERBOLT featured a push-button-controlled, electrically actuated, one-piece, all-steel top that vanished into the rear deck when desired.

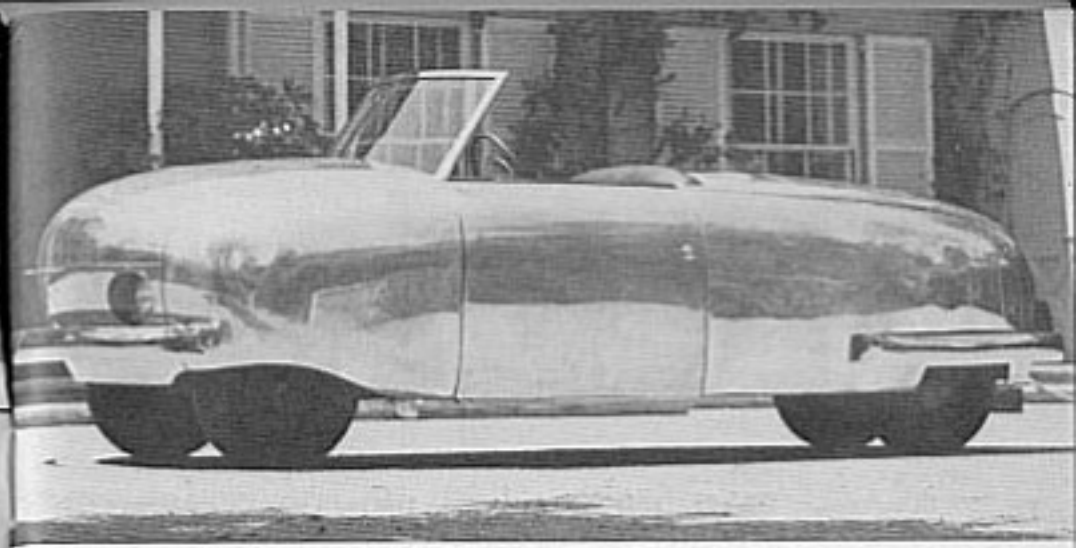
Designed by Mr. Ralph Roberts, solely to show what Chrysler people believed was the coming trend in body design, and not to predict mechanical innovations, both cars utilized the standard 1941 eight-cylinder chassis, the only unique feature being the LeBaron bodies.





THE AMERICAN Sports Car Company produced a pilot model of a proposed limited-production car of unusual propensities soon after the war. Constructed by Derham in Pennsylvania, the country's largest contemporary coach-builders, it was called the TA500 and featured development by Mr. Gordon Buehrig—recognized as the designer of the classic 1936-37 Cord, and a number of other automobiles. The car was never produced, meeting a frowning public which failed to note in the TA500 its unique accent on safety and handling ease—themes which necessarily created a somewhat startling silhouette.

BODY BY DERHAM

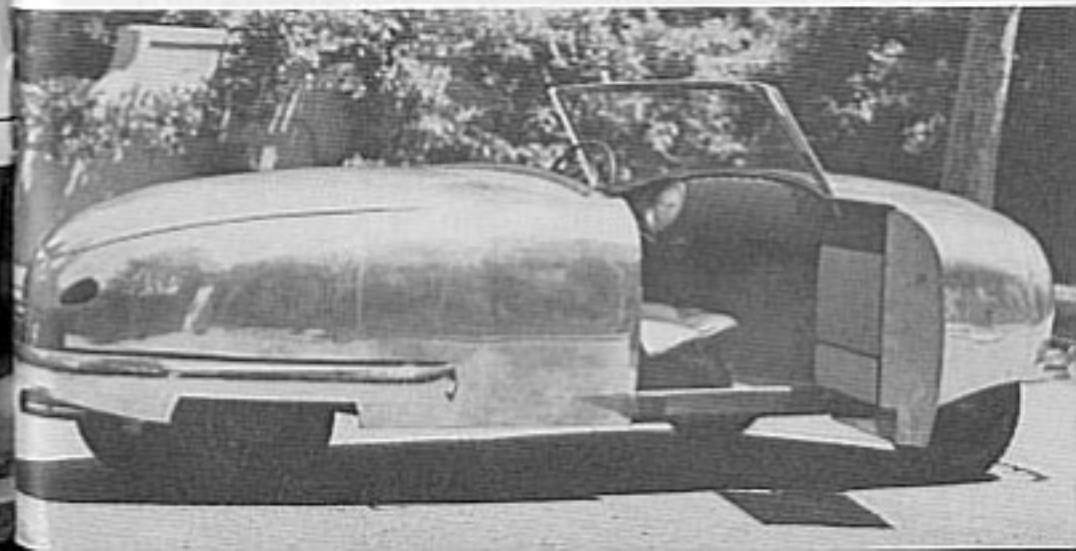


THE ROCKET, Newson Pacific Corporation's projected bid for the low-priced ($1500) market, is an aluminum single-seater of light (2000 pounds) weight, boasting a number of unique features and body lines of striking simplicity.

Designed and built by W. S. Newson who, since forming a California corporation at 8671 Melrose, Los Angeles, in 1944, has developed the Rocket, has borrowed much for his pilot model from aircraft engineering. The car carries a tubular frame with polished aluminum skin panels.

Power enters the rear axle by an unusual gear train running from the rear engine over the back axle, down, and into the differential from a position aft of the axle. Extreme stability in cornering at any speed is claimed for the flexible Rocket.

Modifications for the proposed production model include a broader rear tread; extension to a 109-inch wheelbase; 15-inch wheels in place of the experimental prototype's 12-inch wheels; individual wheel suspension in the rear, as well as the front, and optional engines from a light 4 to a powerful 8, with possibly even an Offenhauser adaptation, according to its designer.

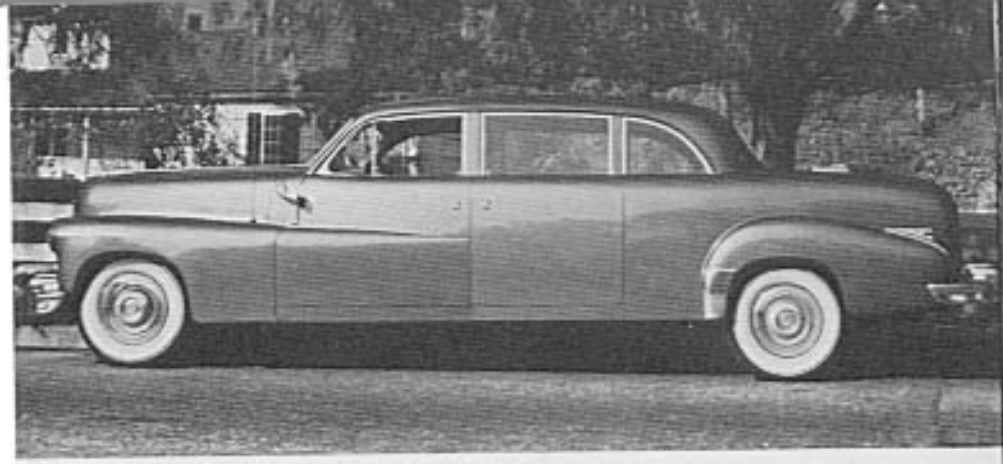


BODY BY COACHCRAFT

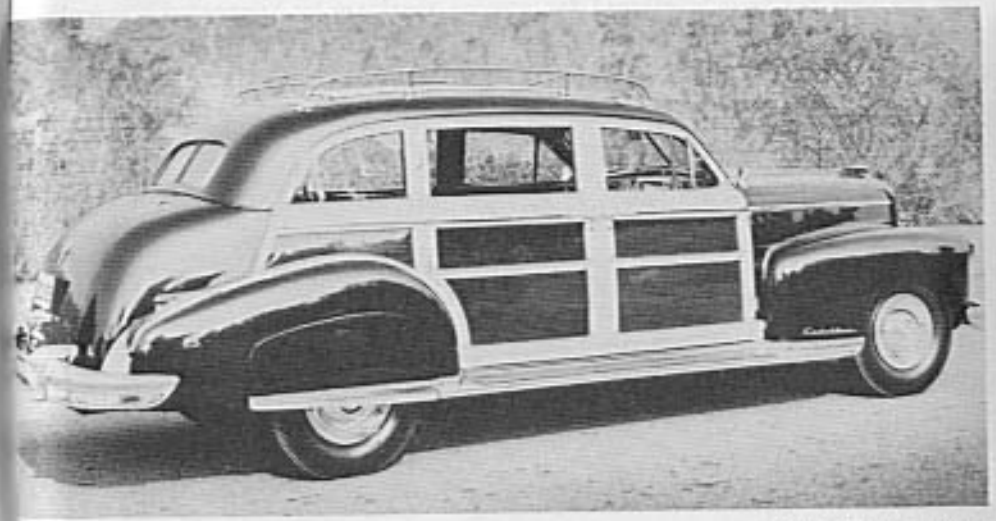
COACHCRAFT, LTD., Hollywood coachbuilders, have a variety of unique automobile bodies to their credit. Coachcraft craftsmen take old world pride in their work, many of them gaining their apprenticeships abroad.

Like Maurice Schwartz they are masters of the wood superstructure. Coachcraft specializes in custom-building station wagons while acting as home port for wayward station wagons of the garden variety. Preston Foster a decade ago commissioned the company to build a complete "Town & Field & Stream" wagon for him on a special heavy-duty Studebaker chassis. This camp model virtually makes use of every cubic inch of available space, in some cases reusing the same area in several different ways. An eight-cubic-foot refrigerator, running on 110 volt current, and a full-size bed are among the convenient features built into this special Coachcraft creation.

A cloth-covered metal top of several optional conversions, the Coupé de Ville has been rendered by Coachcraft on a variety of running-gears. A late car of this type was built on a Lincoln chassis for Henry Ford II, who took delivery of the car personally when in Los Angeles on business in 1947. It carried one of the very first new eight-cylinder Lincoln power-plants.

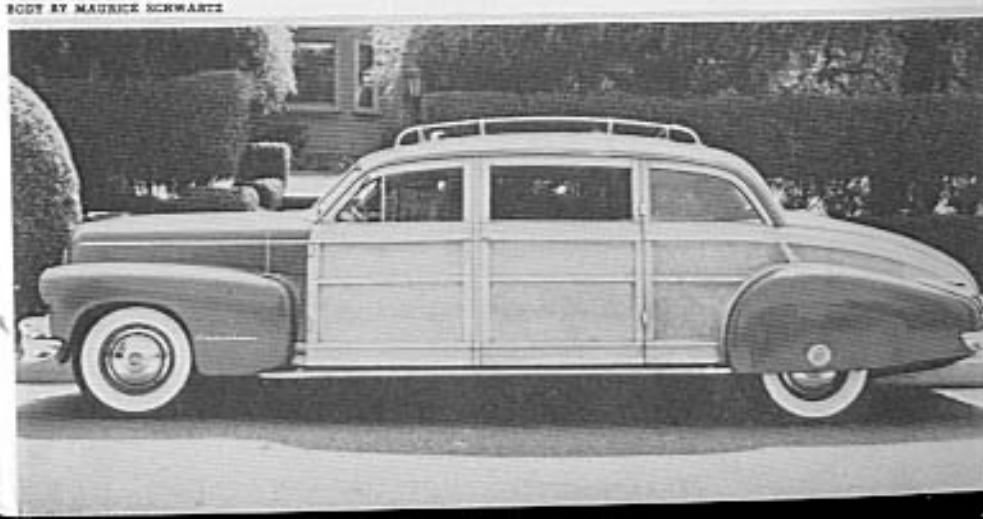


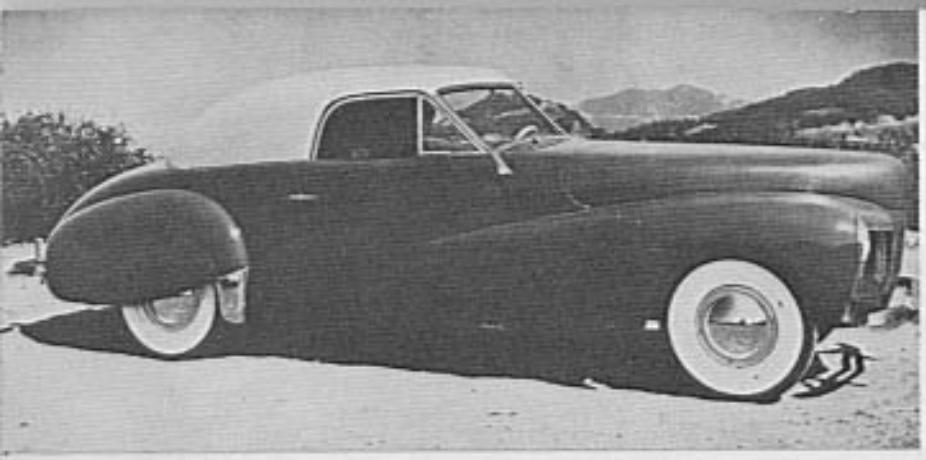
BODY BY COACHCRAFT



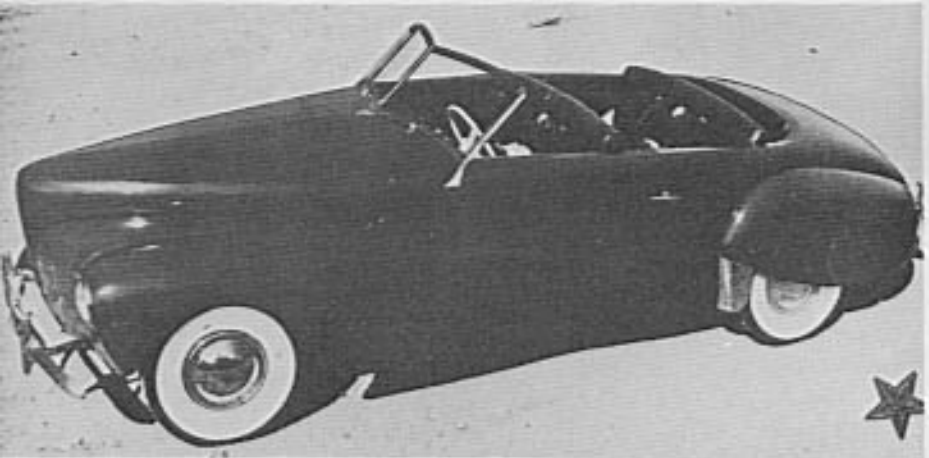
BODY BY MAURICE SCHWARTZ

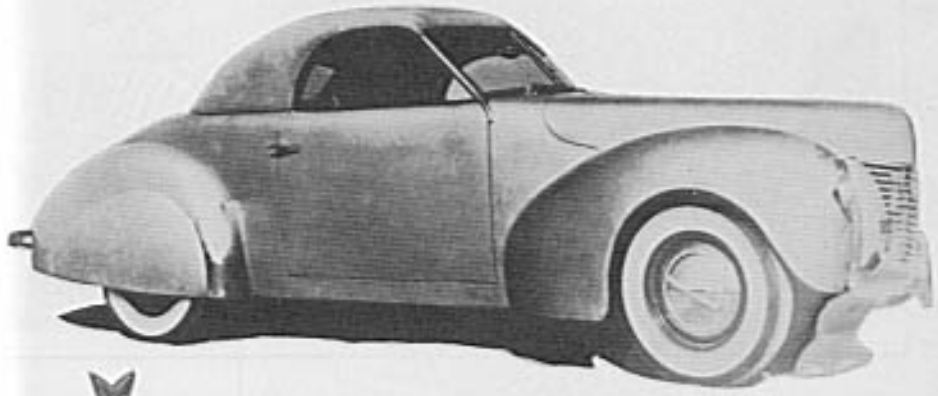
BODY BY MAURICE SCHWARTZ

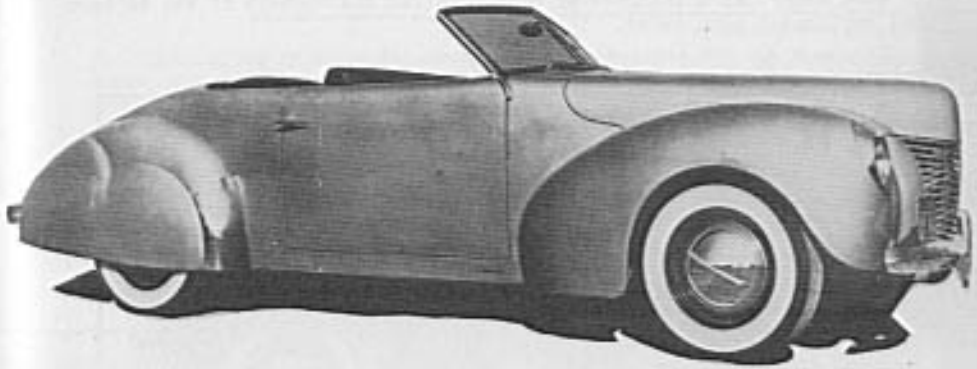




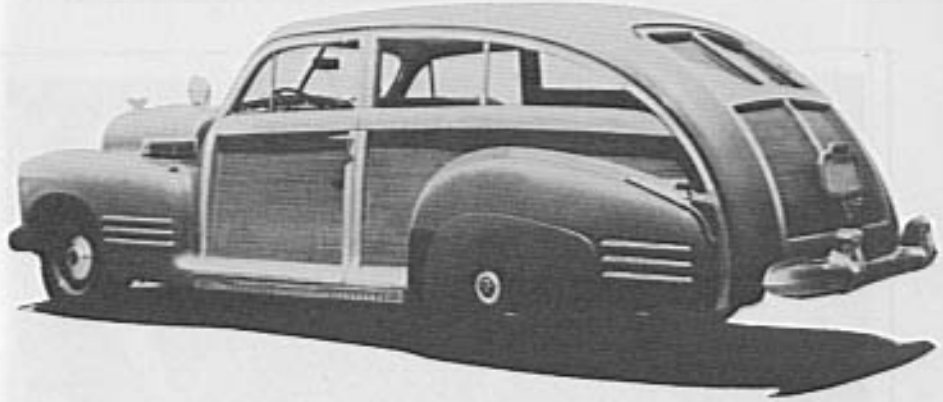
Another Coupé de Ville is shown here on a 1941 Mercury chassis. Note how the body has been lengthened for greater wheelbase by increasing the depth of the cowl section—between the dashboard and hood bonnet...





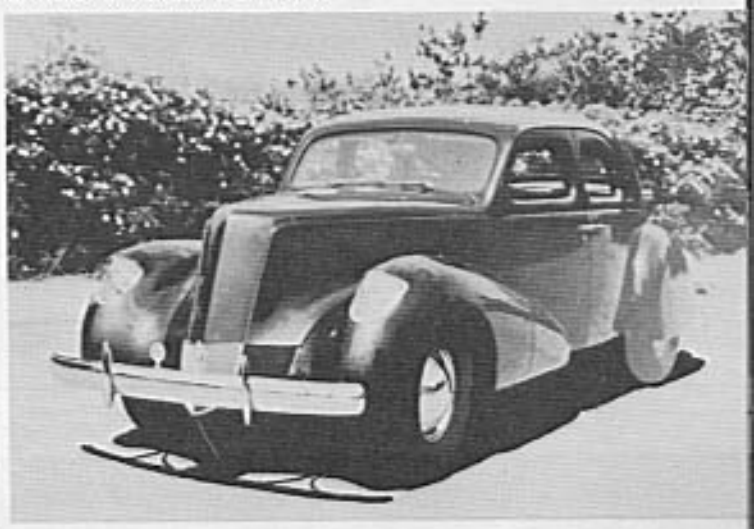


BODY BY COACHCRAFT

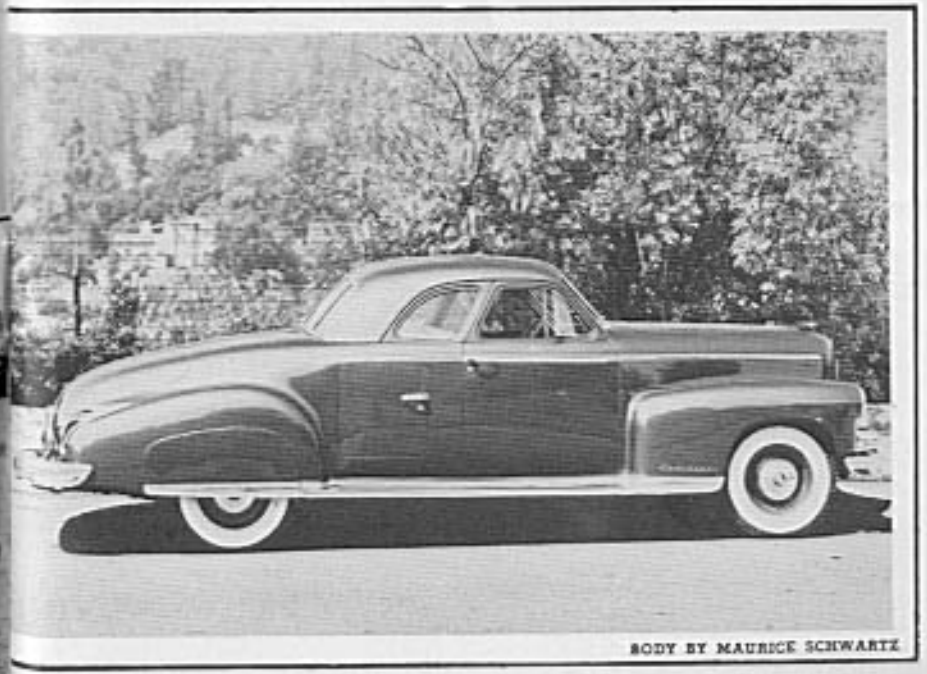


THIS SMOOTH, flowing speedster was proposed to appeal to discriminating Ford owners as a change-over body. Called the "Comet" it was to have been duplicated upon order.

RESTYLED BY ROHMAN & SCHWARTZ



INNOVATIONS IN production model design sometimes are the result of custom car styling trends. Schwartz produced as early as 1936 fade-away fenders of the tack-on variety later used by General Motors. Coachcraft made several cars with fade-aways shaped from part of the door panel years before the Packard Clipper pioneered it on the assembly line in 1941. Jimmy Summers has stripped off superfluous chrome since the days when manufacturers started putting it on. Today factory-produced cars are rolling out with less-and-less of this gaudy, non-functional, rattle-provoker. Is it merely coincidence that the 1949 Mercury convertible carries a rear-deck/fender relationship and general contour that reflects Summers' 1940 Mercury conversion?



BODY BY MAURICE SCHWARTZ

RESTYLED BY BOHMAN & SCHWARTZ

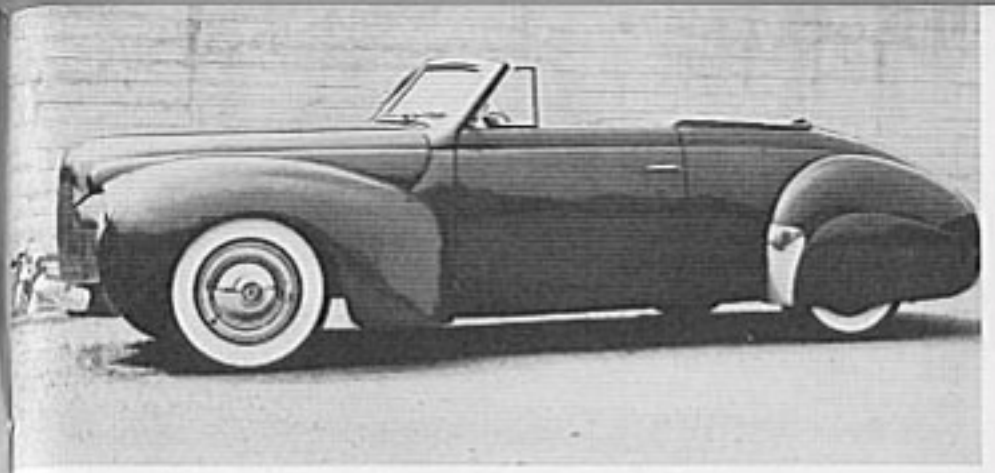
RESTYLED BY BOHMAN & SCHWARTZ

OFTEN GOOD metal men lack the taste to create attractive, unlabored designs. Not so with master metal craftsman Jimmy Summers, who has gained national recognition for his rare blend of design-wise approach, inventive construction and par-excellent fitting and finishing ability. One of the first Californians to open a custom automobile body shop, Summers of Hollywood has been building special sports models for 20 years.

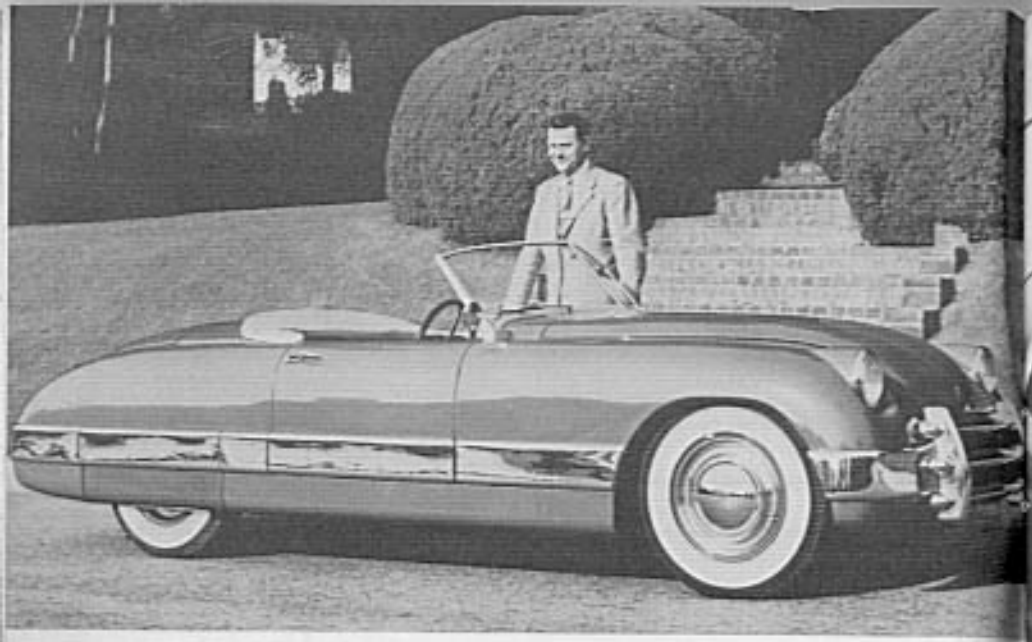
Redesigned from a 1940 Mercury convertible, his own car serves as an excellent ad for his custom body shop. The body has been channeled and now envelopes the frame, lowering it by 6 inches on the frame. Further height was reduced by adding a low, padded Carson top so it is nearly 9 inches lower than the stock car.

RESTYLED BY SUMMERS

THE CARSON top, now as much a part of custom convertibles as sans chrome styling, is a steel-framed, convertible-style, cloth-covered top of unitized, non-convertible construction. Thickly padded, this visually, ribless top is generally fitted to a cut-down windshield, lending much to customize any model. For sun and breeze the top can be lifted off and stored. Typical of the custom-style specialists, the top shop makes no other modifications. Other specialist-shops tailor springs to lop off inches of height, build special mellotoned mufflers, and modify engines for increased pick-up and top speed. Most body shops sub-assign their top, spring and engine jobs to these specialists.



RESTYLED BY SUMMERS

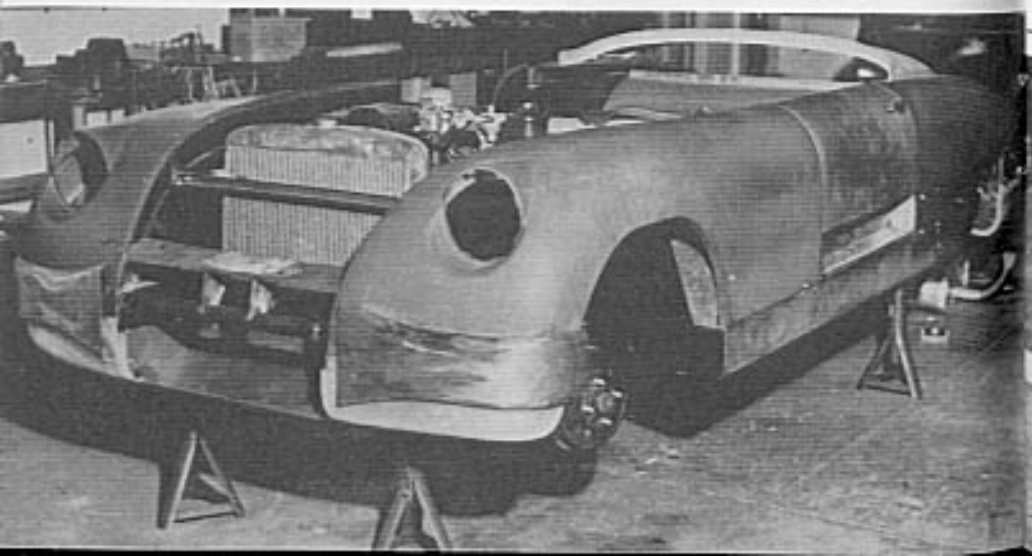


OF THOROUGHBRED strain, this lightweight Kurtis Sports Car embodies speed, handling, comfort, safety, and styling characteristics crystalized by a decade of extensive experimentation in the custom racing stable of Glendale's Kurtis-Kraft.

Finding maintenance on imported sports cars both uncertain and expensive, and their accommodations for passenger comfort and safety rather on the lean side, foremost racing car builder Frank Kurtis determined to correct the situation.

Refreshing to a generation swamped in the bog of bulbous wastes from the "new look" in motoring, his trim sportster was conceived in function...

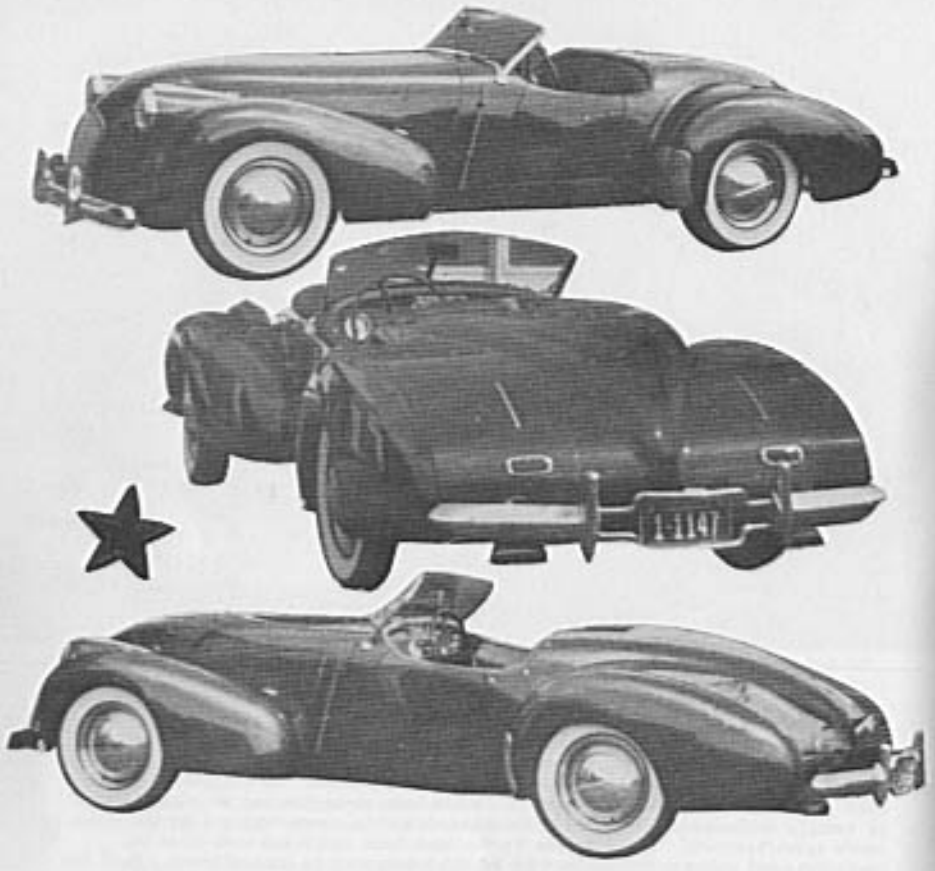
Clean lines are the result of practical approach and dispension with non-functional ornamentation. Practical all-around bumpers are supported adjacently by a box-girder body-frame unit which effects a substantial weight economy over the usual body and frame layout, while giving unusual strength and rigidity to the car. Bumper, guards and grille are integrated into an attractive unit of rugged construction.



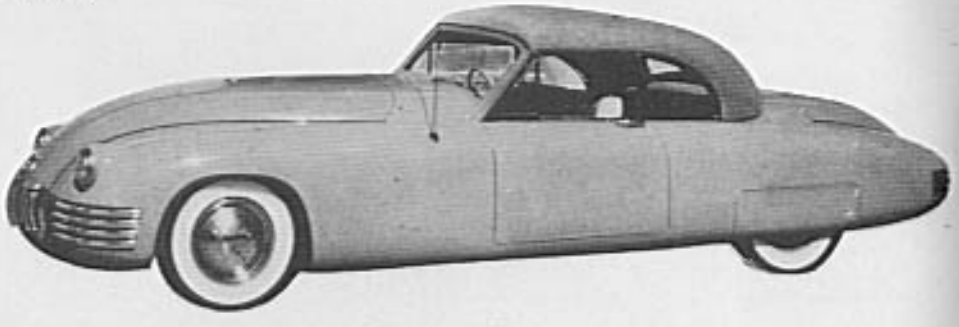
Early models featured light, tough fiberglas body panels, though later cars carry steel panels. While this material gave all-around satisfaction, it was dropped because of its much higher production cost.

Currently in limited production, this lithe-performer was originally developed to employ Studebaker components. It has been re-engineered to standardize on readily replaceable Ford parts, though each car is power-tailored to the customer's specifications. Units of the Kurtis have been completed with Olds 88, Chevrolet, and other power units. 82 to 190 horsepower is thus offered. With the latter, the Kurtis sports car becomes the most powerful American road car per pound—ever put into any nature of production.

Little over four feet in height, the 100-inch wheelbase Kurtis sports car is potentially capable of hopping up to around 130 mph. An honest package, offered optionally in kit form for the hobbiest-mechanic, the Kurtis has proved to be 23 hundred pounds of keenly premeditated sportisfaction...



THIS SLEEK channeled speedster, conceived on a Ford chassis a decade ago by Frank Kurtis, is still a style leader in its class...Below--a 1948 Kurtis-Kraft diminishing tear-drop experimental job on a Buick Roadmaster chassis from which the X-member was removed and box rails substituted, to create a lower cockpit position. Built at a cost of $17,000 its basic shape proved a difficult one in which to attain harmony of line.

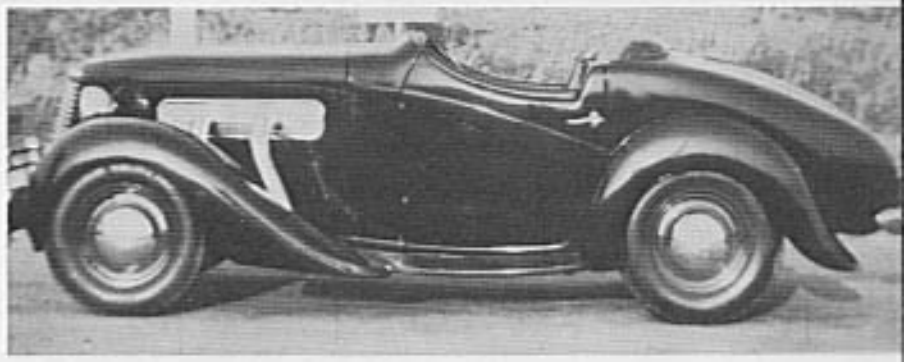


RESTYLED BY HARRY JOHNSON

WHILE CUSTOM body specialists, like Schwartz, Coachcraft and Summers, reconstruct a car from the wheels up, often building the entire body from full-size blue-prints, a compromising group of private owners and body-and-fender shopsters, with an eye to distinctive design, modify and rearrange stock parts to create custom models. Sometimes they go as far as the professionals to achieve their custom conceptions in royal fashion. Often they achieve awe-inspiring combinations; but occasionally they turn out jobs that do not appear to have been particularly inspired, style-wise.

It is with this group of amateurs that this handbook will be concerned. Photographs of many types have been included in this book. Some are trim testimony to what good taste and workmanship can add up to, others may appear awkward-and-lumbering examples of what NOT TO DO. Most will be readily recognizable--in spite of many misleading grilles.

Observe how few cars have retained their stock bright-work, or chrome trim, thru their face-lifting operations.



REPRESENTATIVE OF the professional restyling skill demonstrated by some individual hobbyists is this American Austin roadster reconstructed with rare finesse and finish by Harry E. Johnson of San Pedro.

APPROACHING THE realm of the custom from several structural theories, assuming various style criterions, efforts of these several custom car factions are nevertheless allied in their single aim to produce automobiles of distinctive personality thru unique design, cars unlike those of their allegedly "offensive" road-sharing kin that have nothing more than assembly-line personality, which might be shortened to "AL/P".

What YOU Can Do

OVERVIEW...

REMODELING AN automobile body calls not only for mechanical talent but a natural sense of design and balance. In the details of finish the quality of the job is judged for the rest of the car's life. This talent can be developed by anyone with a knowing-eye, and a "know-how" pair of hands.

On rebuilding your car, originally-designed parts and those taken from other models, will give the custom appearance. Whether prominent grille-work, or incidental ornament, the excellence of redesign passes the acid test when the repositioned parts are not readily recognized and associated with their original locations elsewhere. This is the challenge to be faced in each alteration, for any job worth doing is worth doing well.

Even with this premise some changes are bound to be made for the sake of change rather than for a distinct improvement in style since the original contours often show lack of inspiration, in which case you cannot make a silk purse from a sow's ear.

In this shop outline smoothing-down and finishing-up data is largely left up to you. Photographs are for the most part self-instructing and methods of installation will vary with different models and combinations of parts. While a section treating specific model changes is included, general discussions apply to many models. Such sports equipment as spot-lights, chrome wheel-discs, special mufflers etc. are not discussed as these are considered stock for custom jobs and it is assumed that they will auto-matically be used where applicable.

"It is better to create than to be taught; creating is the true essence of life." Combinations of design, possible with the following custom sugg-estions are limited only to your power of originality and ability to adapt.

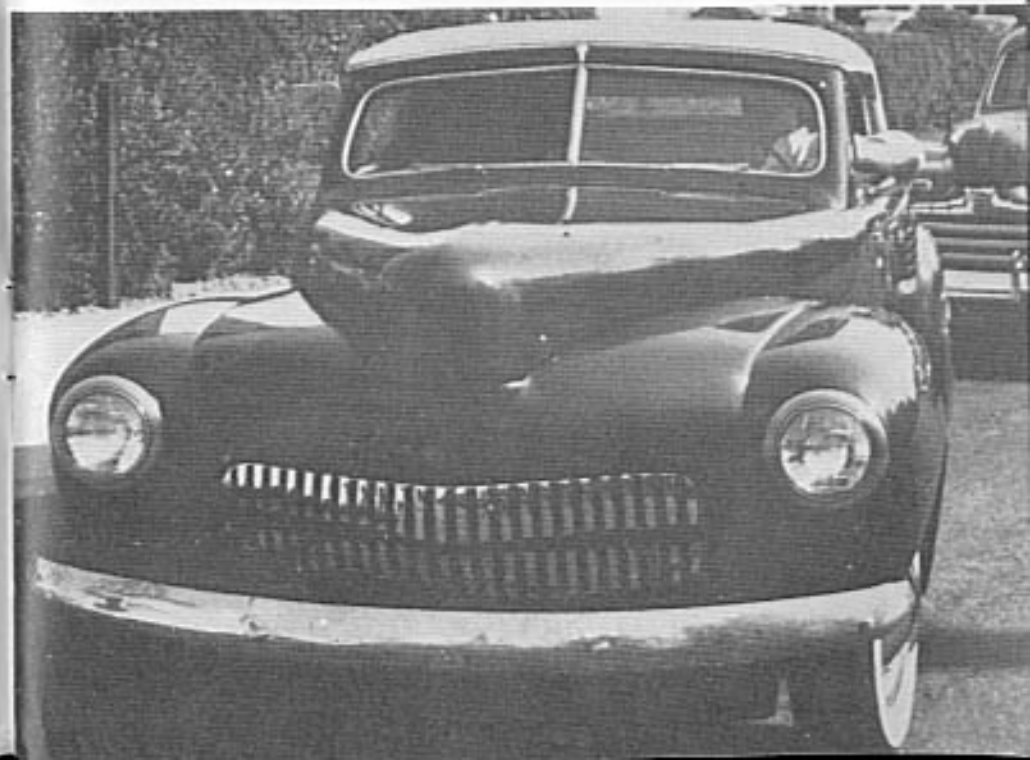
OPTICAL AND THRUST VALUES IN REMODELING...

Optics should be a prime consideration in your style-change undertaking as every car model lends itself in one respect or another to optical illu-sions—some good and some bad. The remodeler must determine the favorable and the less favorable points. Alteration is then directed to highlight the finer values and to camouflage the less attractive ones. Most important of these quirks of engineering design are the pointers which give the car apparent length and "road-tightness."

Dual equipment is a must for both exterior and interior appointments. Every fixture should also be as nearly flush as practicable.

Today car colors offer a more inviting variety than ever, since super-irridescence can be added to any but black. It is generally agreed that a small car should have an attention-commanding hue, while a larger model should be graced with the dignity of a darker shade. Even so, the individual decorator should make his own decision. California custom cars were once generally black, then came the maroon craze, then a spatter of Sherwood Green ('46-'47 Buick light-bright green) then Harmony green and Balsam Green ('47-'48 Stude convertible green) and golden bronze. Refined, highly-aluminumized custom mixtures of bronze, green, blue and red are the current selections.

Metal white sidewall rings, or white wall tires and chrome beauty rings give character to wheels.



A gross fault of many repainted cars is the lack of consideration for a particular model's adaptability to two-tone treatment. Dismiss the thought of a two-color job if your car doesn't have a decided bead or groove all the way around the belt or other desired border line.

If you have an inclination toward two-toning your Plymouth, De Soto or Chrysler '40 model, for example, think twice. In spite of the car's lack of lines for such treatment, you can improve the job by installing a Dodge '40 deck door, which carries the bead around, so you have an unbroken dividing line. Even so it looks terrible. The most beautiful dual-tone jobs can be made on torpedo trunk models. Such painting is an important factor in the road-tightening illusion. On many models with suitable front-end trim two-toning can be taper-toned along the top of the hood after the manner of the Buick.

When chrome is plained from some surfaces, the rule of consistent theme in redecoration indicates that you should not load shimmer elsewhere. The same rule should be observed in balancing added chrome. Extra chrome should be kept close to the road.

HOW.....

TOOLS FOR restyling work are largely the tools already around your garage. In addition, the rudimentary body-and-fender tools are requisite. A leather-covered sand bag is ideal for a hand-forming anvil. Of course, welding facilities make most customizing operations not only easier but more satisfactory. For many this is necessary.

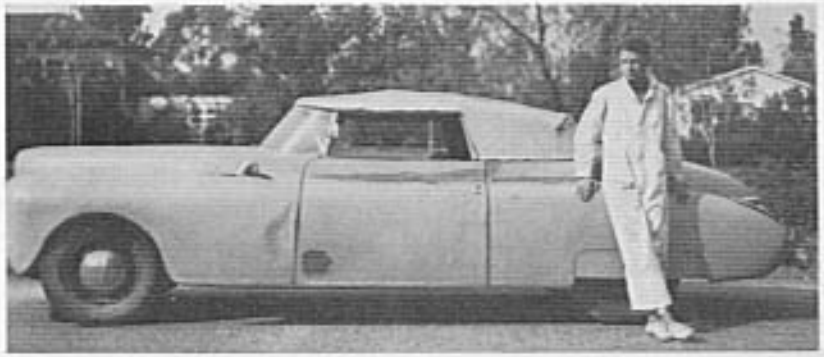
Rough changes, made by bolting, or preferably welding, are blended into the body contours by the application of much body putty or solder-lead, which is used to fill in cavities and joints. This is then filed down to general shape, sanded, primed and finished. Though these fillers are used widely because they are the easiest thing to use, they present one outstanding draw-back--their impermanency under vibration and stress. In time, when used in such places, they will generally tend to crack and work loose.

A fully permanent and solid alternate method of filling is by building up with layers of weld. However, the high temperature necessary in this method is apt to warp or wrinkle the thin body parts, even in the hands of an expert welder. For work of this nature, if done, an electric arc welder is more satisfactory than a gas set-up as it will localize the heat better, being quicker in action.

All initial tacking should be unitized by firm bolting, or by welding whenever possible. A solidly welded joint may hold body putty or solder indefinitely.

Holes in the body left by the removal of decorations, etc. can be filled in the simplest manner by leading in. Using a small piece of tin against the hole on the inside, solder it in place from the outside. So the plug of solder will be unable to work loose, countersink the hole lightly from the outside, using the tip of a drill of greater diameter than the hole, before using the lead. File and sand over and refinish. A well-done job will be undetectable.

Another method recently meeting with wide approval is the use of Metalume, a metal-impregnated fabric which bonds itself to the metal and after hardening can be ground or sanded as a part of the original surface. This is also excellent for covering up high parts of grilles, etc. as explained later. Properly used this material will turn out results for the layman that will not be distinguishable from metal work of a high quality.



LACQUER IS the finish for a fine custom job. It is hard soon after application, while an enamel or synthetic job does not harden for six or eight months during which it is readily scratched and gouged. Metalli-Chrome lacquer, a DuPont product that will not chalk is superb and is available in a fairly broad range of colors. A number of coats will be necessary for a high, smooth finish since it does not spread thickly like enamel. The final coat, thinned of color pigment by as much as 3/4, will enhance and deepen the appearance.

Re-dimensioning The Overall Concept

LOWERING BY SPRING TREATMENTS...

Years ago, in the heyday of the Model A, springs were de-energized by heating with an acetylene torch about two inches from each shackle. When properly done, the car's light weight of about 2300 pounds brought it down about 2½ or 3 inches on the running gear, making a nice job.

For uniform lowering, a drop-limit-stop block was placed on the floor under each corner, rising to the lower level desired, before the operation was begun.

Coil springs may also be de-energized by heating near one end, though requiring great care, while a segment at one end can be removed without detrimental effect.

In later Fords, and other models featuring the transverse spring, lengthening the rear spring shackles lowers the car. These can easily be made by using the original shackle bars for patterns and simply cutting the holes in stock of the same type about 2/5ths farther apart than the stock. These can also be purchased ready prepared for changing.

A more satisfactory method, without harmful effect to steering and riding qualities, is the rearrangement of the spring shackle eyes. The mounting eye, which is the curved end of the bottom leaf, is curled into a ring below the leaf in the stock position. By properly heating this section the eye can be reversed to curve up, instead of down. Thus the spring will mount with the body relatively lower to the ground by about two inches.

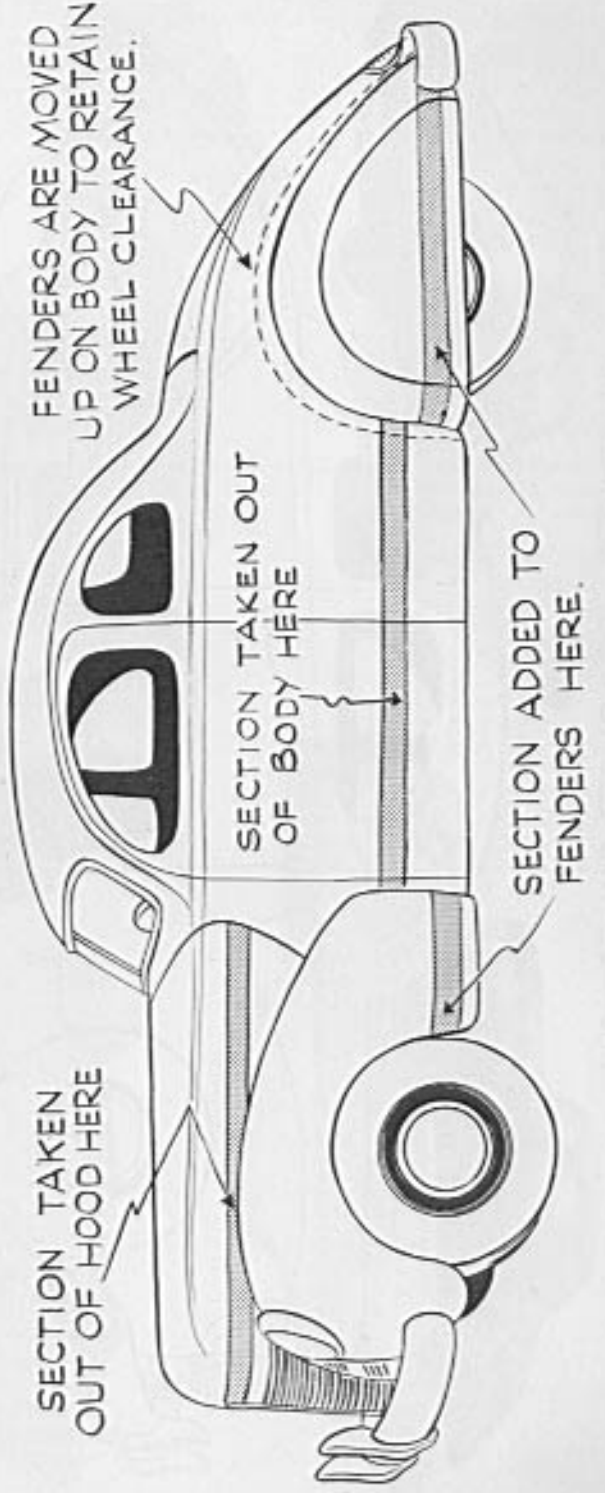
A two-inch block of steel, mounted between the spring assembly and the axle housing by means of longer U-bolts, will cause the same effect in a model with elliptic springs. Lowering block kits are now made for most models.

When the body is lowered by one method or another, the relation of the fenders to the wheels is changed. On the front turning wheels the wheel-wells in the fenders may have to be reshaped to clear the wheels in their full range of travel.

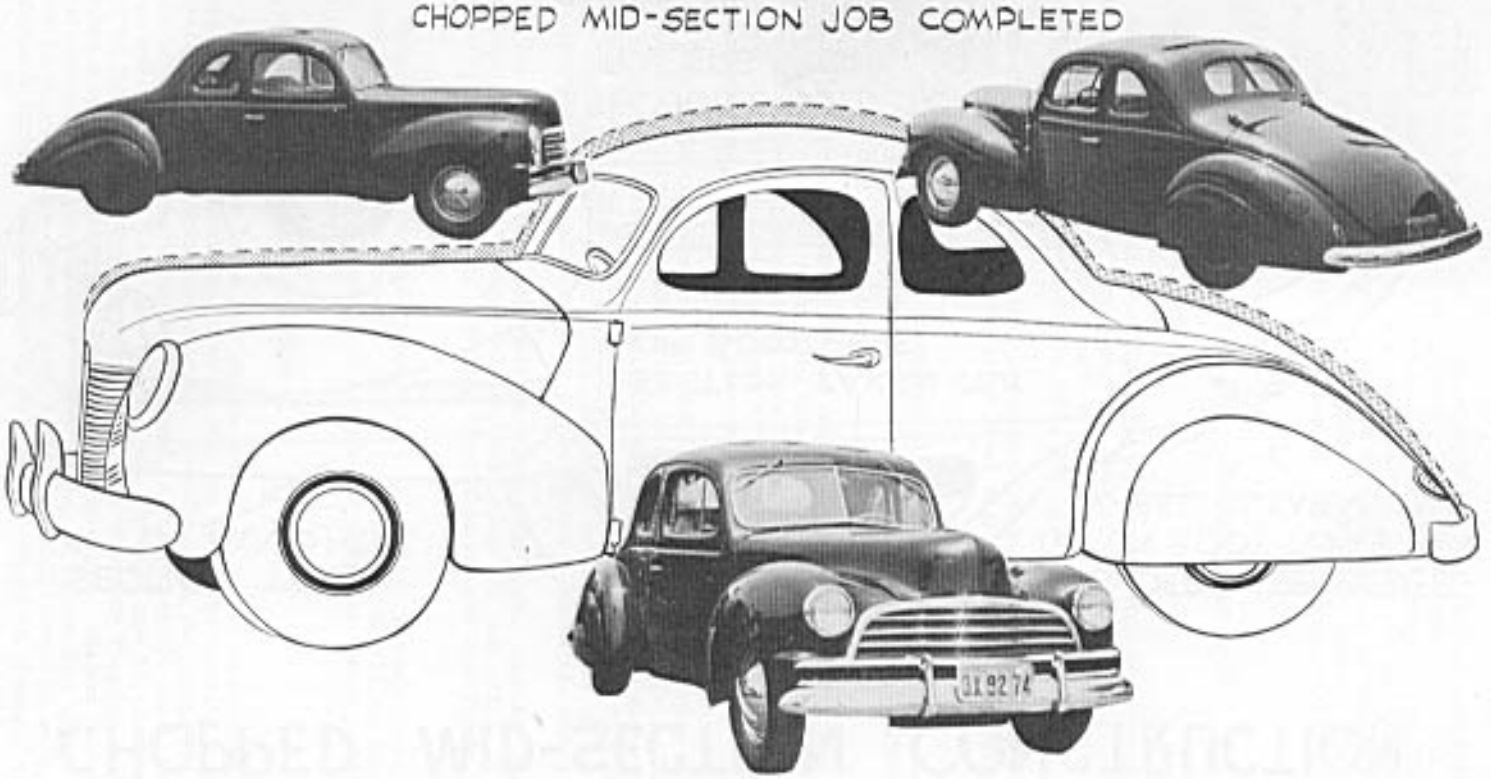
LOWERING BY BODY SECTIONALIZING...

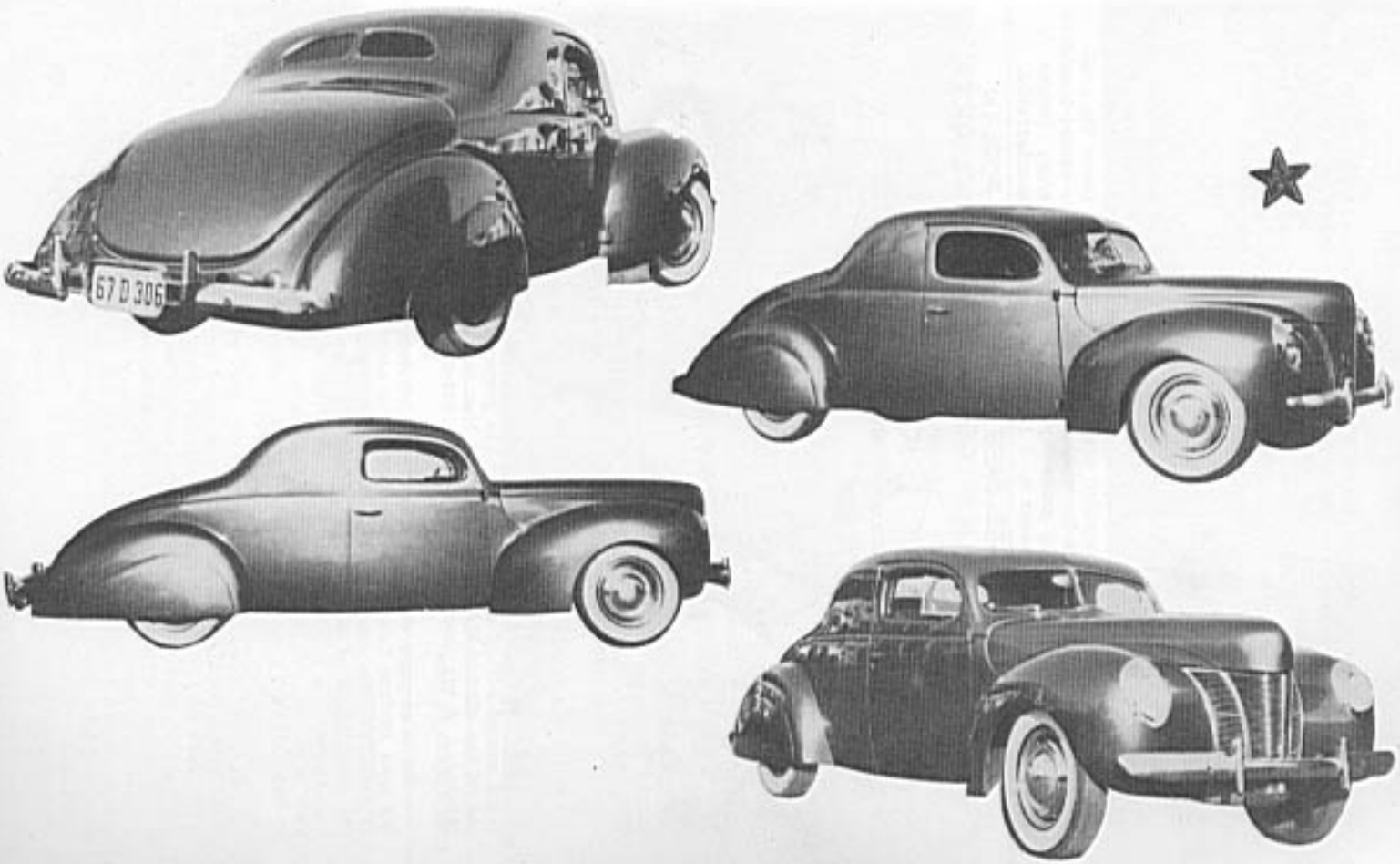
Regardless of how low a body may be lowered by spring treatment it retains its stock proportions. Cutting down the height by removing a section laterally will alter this relationship. Depending upon the characteristics of the body under surveillance this lateral, or near-lateral, section should be cut out in an approximate low-middle area. In some case it may be all right to cut it from the bottom edge, but never of course when the bottom edge has a special contour desired in the finished job. Fenders must be repositioned higher upon the body in some cases, in others they appear higher by virtue of the deck and cowl being relatively closer in to them. Sometimes a strip is added laterally near the botton of the fenders, or

CHOPPED MID-SECTION CONSTRUCTION



CHOPPED MID-SECTION JOB COMPLETED



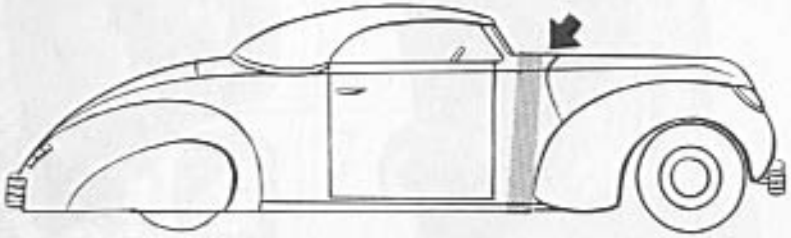


often on the bottom edge, to deepen the fender vertically. This job is the opposite of the operation on the body, in that here a piece is added, in the body it is taken away. The hood bonnet must also go under the torch for a lateral removal to fit the new body and fender relationship with its lower cowl but remaining fenders. Photographs showing results of this type of undertaking are pleasantly recognizable elsewhere in this book.

LENGTHENING BY BODY SECTIONALIZING...

Body length can be gained with least effort in the cowl area by cutting it nearly vertically in two, generally just behind the firewall, and adding the desired inches in new metal, to coincide with the wheelbase lengthening. The stock door and hood operation are not effected, except where the hood bonnet in new models covers the cowl. In this situation the bonnet itself receives a lengthening strip cross-ways, at the windshield edge. Length added in the hood gives greater hood length, an improved characteristic.

LENGTHENED WHEELBASE COMPENSATED FOR IN BODY BY ADDING SECTION IN COWL AREA



LOWERING BY CUTTING DOWN CONVERTIBLE TOPS...

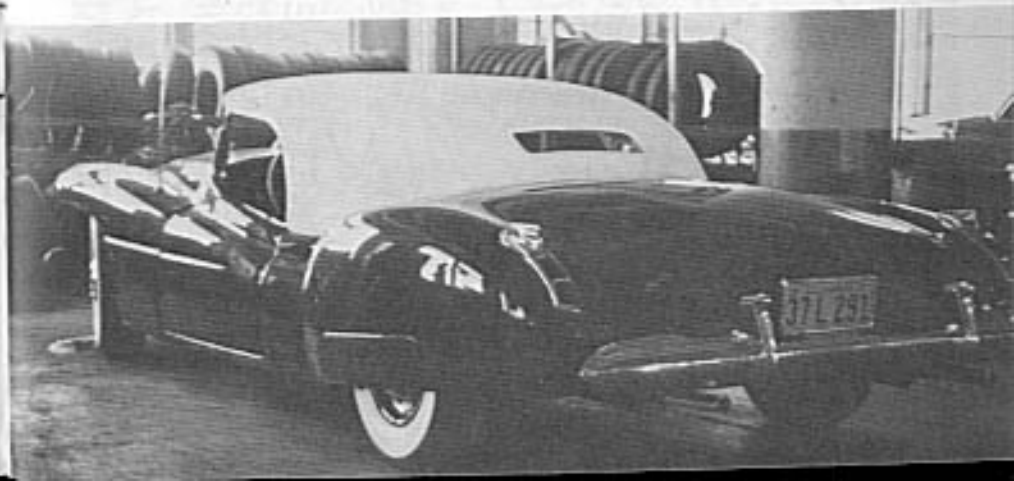
Convertible windshield frames, generally cut down about three inches, should be chopped on the vertical members, and an equal section removed from each pillar. Rewelding, refitting of the cut-down glass and refinishing, complete this initial undertaking in cutting down a top.

On older cars with wooden top ribs, with metal fittings, the job of lowering the top proportionately, and attractively, was not such a difficult thing to do and was managed by simply unscrewing the ribs, sawing the right amount off of each bottom end (in proportion to what had been taken out of the windshield for height) and then remounting them on the steel fittings. A top then was fitted to the briefed ribs and windshield.

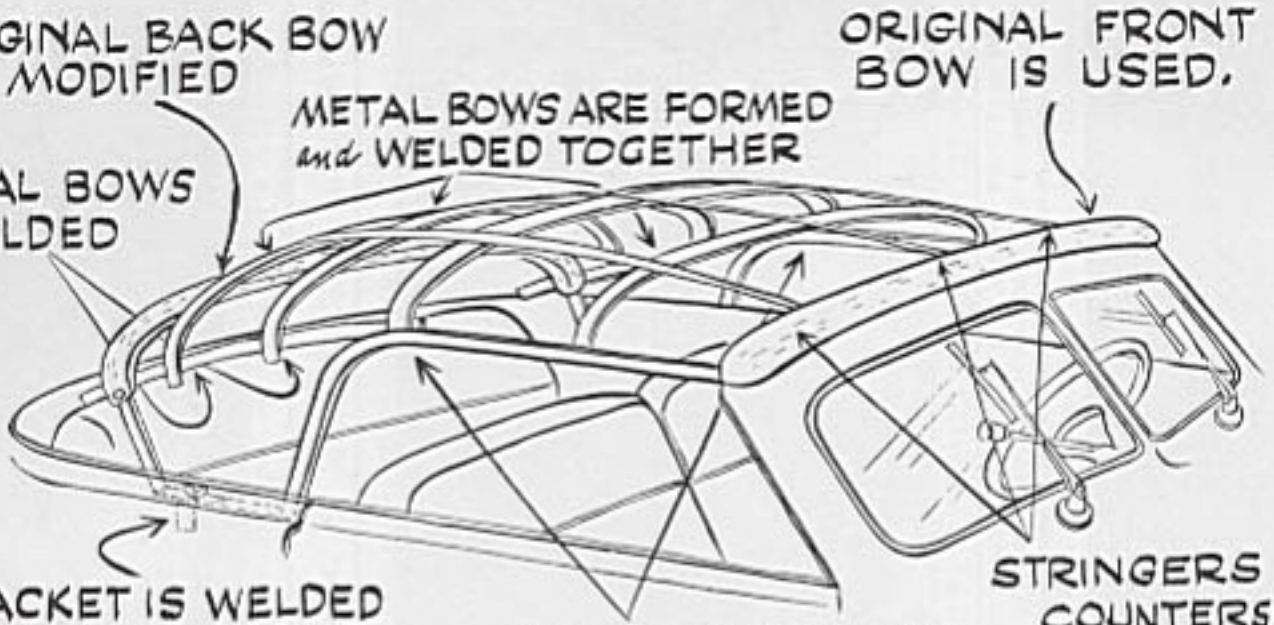
On later cars where the ribs are all-steel, and of special contours for neat folding into a limited space, the nearly-impossible undertaking--of retaining the convertible feature in a cut-down top--is abandoned. Thus the development of the padded "Carson" type top has met with wide popularity. This is a thickly padded, unitized top which is very low and attractive in place, but which will not fold down. It must be removed as a unit by being lifted off, then stowed somewhere other than within the car.

In this padded style, briefened original ribs may be used together with a number of light steel rods which are added by welding to the ribs to form a unitized steel network and skeleton for the padding. This style is constructed so that individual ribs are not evident. Thick padding can be built up from spread out, glue-soaked newspapers. These are laid out over a drum-tight piece of duck stretched in place over the ribbing. Layer cotton is added after the newspapers, or can be used thickly to eliminate them entirely. Over this a waterproof cloth top is permanently laid. Inside a headliner is generally tailored from artificial leather to match or harmonize with the other trim.

BODY BY GERALD RUTH

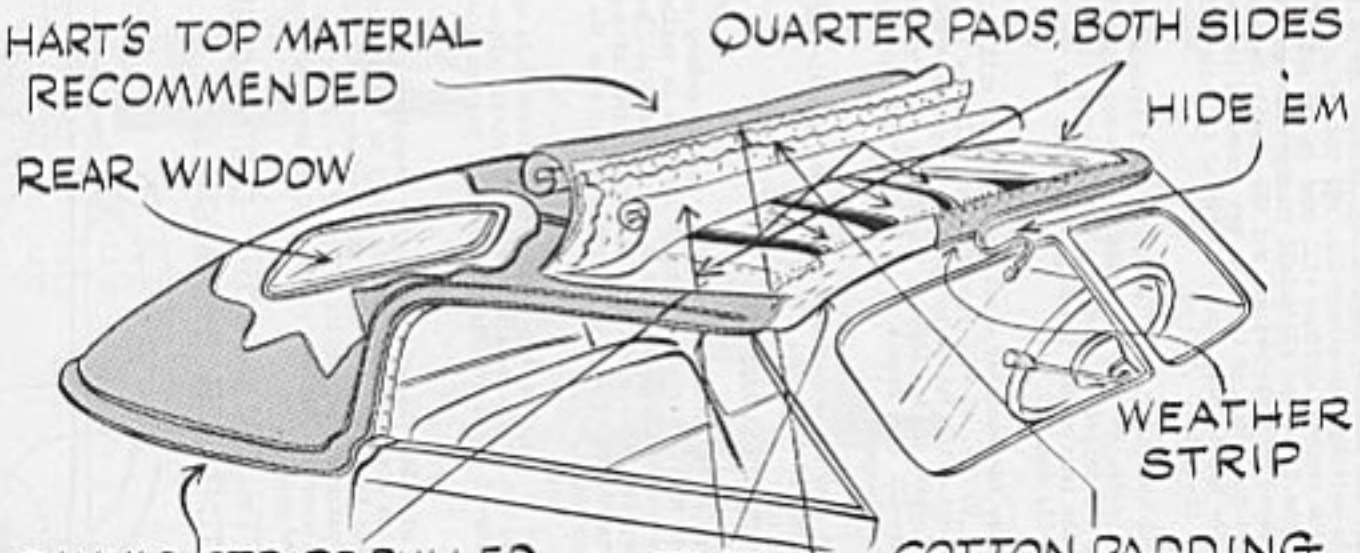


CONSTRUCTION DETAILS OF PADDED TOP



TOP CAN BE MADE TO COME OFF, OR STAY ON PERMANENTLY.

DETAILS ON COVERING A PADDED TOP



LOWERING BY CUTTING DOWN HARD TOPS...

Though an expensive and involved undertaking, nothing can be finer than a lowered hard top. In cutting down a hard-top, cut the top off horizontally so that the chop, and the removed section, will come in the sides of the back window. Next cut the doors and windshield in about the same lateral area. Complete the lowered door windows and cut the already removed top in two---crossways at about the point of the rear top corner of the coupe door, or at the point where the top is most nearly identical in contour on both sides (fore and aft) of the cut.

Now mount the front half of the top, with its front extremities being the chopped windshield posts, so that the windshield is roughly finished, with the top seated in the proper relationship to the doors. Now mount the rearward top piece so the rear window is roughly finished and the fore and aft sections are laterally equal.

Depending on the new rear-quarter slant the top piece will either overlap, requiring trimming to fit, or will present a gap. In the latter case, by addition of extra sheet metal this opening can be closed and the top welded into a complet lowered unit. Leading in, filing down, sanding, priming and painting are all that remain to be done. Final painting should cover all traces of the change.

Slight lowering of seat and steering column, where practicable, add to the comfort and appearance in this job.

LAYING A CLOTH BONNET OVER A HARD TOP...

Though an expensive installation, with a threatening up-keep cost--like any other cloth done--it will deteriorate through exposure to weather. To care of fitting features--distinct line or bead around the belt line, and a bustle-back, being imperative--the cloth overlay gives a very attractive final effect. The advisability of this job depends solely upon the model's adaptability to such treatment.

If you have decided to cut your top down, a cloth overlay is an excellent addition to the job, and at the same time a labor saver, since padding is used and the necessity of expensive finishing-off of the rough weld is eliminated.

Possibilities are excellent in this change for deceptive padding on the sloping rear surface, thus giving a more flowing sweep to the slipstream of the model. This also can be arranged to more than compensate for the added height of the ribbing feature. The trailing edge of the padded top can be extended back, and down over the turtle-back several inches, netting a unique appearance of new grace.

CAB DEPTH EXTENDED IN CLOTH COVERED TOP JOB BY PADDING.

CHOPPED HARD-TOP CONSTRUCTION

GREY AREA SHOWS STOCK HEIGHT OF TOP BEFORE CHOPPING.

1½ to 2" CUT FROM TOP HERE ALONG DOTTED LINE. SECTION ADDED HERE.

TYPE (B)

TYPE (A)

½ to 2" CUT OUT HERE SECTIONS ADDED HERE

An unsual style, particularly in cut-down tops, is met by slight rises, side-to-side, in the padding, spaced to simulate convertible ribs. This was recently introduced on the non-converting Kaiser Virginian. These mock-up ribs can be made from thick rope, unmarried toward the ends to fair smoothly into the body, and cemented in place under the padding.

Crank or slide-operated quarter windows may be arranged as fresh air scoops when these quarters are covered in a cloth overlay job on a sedan, or coupe having open-up type quarter windows. In this job a narrow slit the height of the window is constructed facing forward as an air scoop. Inside, a corresponding vent is built into the new headliner--which completely covers the quarter window--generally at the rear of the window. Operation of the crank or slide regulates the flow of fresh air from the air duct.

A METAL FAIRING OVER A STOWED CONVERTIBLE TOP...

A beautiful body change, suggesting a deeper rear deck, can be made by replacing the conventional cloth snap-on boot with a metal boot, faired into the body, and finished in body color. The cover-piece can be stored in the aft compartment, when the top is up. A rack, attached stationary on one side of the compartment's interior, with wing-nut fasteners, will serve well to stow it securely. Material for this cover can be obtained inexpensively from a wrecking yard, and is best cut from hood bonnet or turret top of a wreck, damaged at other points, unless aluminum or copper is available for handforming. After cutting, forming, welding, and leading, an excellent effect is attained.

Windows

FILLING QUARTER WINDOWS...

A pair of unwanted quarter windows, expertly filled in, is one of the most conspicious single changes you can make in customizing your body. By utilizing a discarded section of a door panel or turret top for material, it should be an alteration well within the means of anyone appreciative of the values of the change.

While the same skilled workmanship may be put into the job on two differing models, the finished job on one may wholly please, and the other appear harshly out of place. This is the important consideration. To begin with, your car body is either of a style lending to such treatment, or a model designed without a thought to the change. When the filling is made on the latter type, no matter how proficiently carried out, it will only be an undisguisable weak-spot, as far as appearance goes, obviously displaying the operation performed. Certain characteristics of the styling cannot be ignored in this change. Decide at the outset whether or not your car can take it.

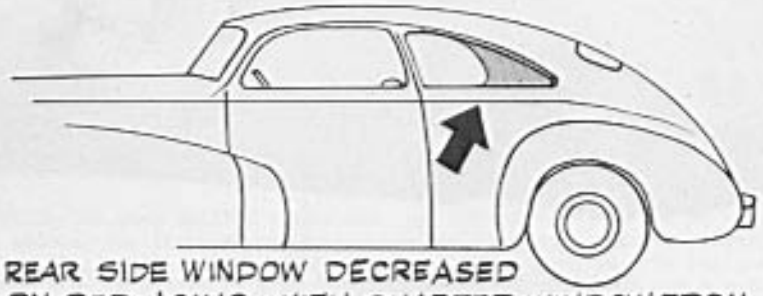
Absence of the framing-strip, or bead, around the window, and also of the conventional drain trough above quarter windows permits a simple and beautiful conversion. An outstanding example of this type is the Lincoln Zephyr '36 thru '39 four-door sedan. Another style that takes the change nearly as well is the type, popular among a number of makes until the post-war changeover--and remaining in one or two of the new-look jobs--which has a straight back (no trunk lump) and a drain continuing down to the top of the trunk lid. The streamliner sedan body of GM,'41-'48 "B" body, makes a good job with filled quarters of the type having a drain above continuted to the trunk door.

Vertical rear door aft sides in the window section ordinarily do not make as attractive a filled-quarter job as the type having slanting sections at this point; though expensive custom jobs have been made like this since the beginning of the closed car, many of which are superb in effect.

Important is the removal of all traces of the drain-strip if it is the type terminating at a point above the quarter window, and not in general keeping with the slope of the top. This strip covers a body seam, and so calls for leading-in after removal. Retained, this drain would frame and betray the filled-in area despite fine craftsmanship.

SHORTENING DEPTH OF COACH REAR SIDE WINDOWS...

A coach model can be customized into a luxury-coupe by filling the rearward half of the back side windows. This alteration is carried out in much the same way as the quarter window conversion, differing only in the following points: More work is called for on this job, than on the quarter window covering, as the rear vertical-curve section of the window frame must be duplicated from a junked model, or cut out and fixed in the new position farther forward on the stock window frame. The remainder of the changeover job is made exactly as described in the method for quarter window filling. The complete quarter window section of a scrapped five-window coupe, or four-door of the same model makes the best inlay to supplant the stock opening. However, where the leading vertical edge is not of the same slant, a consolidation of the stock window frame, and substitute section, must be formed to fit. In the case of the GM sedanette line, either full-filling of the rear quarter windows, or a shortening of the depth of the stock view plates, is an especially worthwhile undertaking. When this is performed it creates less aft visibility. Hence either filled quarter windows, or decreased rear side windows lead to another job to compensate for this disadvantage--the increasing of the rear window area.



REAR SIDE WINDOW DECREASED BY REPLACING WITH QUARTER WINDOW FROM 4 DOOR SEDAN OF SAME MODEL.

INCREASING THE REAR WINDOW...

The larger window referred to above brings the new look to an old model while increasing safety thru greater visibility.

Remove glass to prevent accidental breakage and, using a reversible template, mark out the desired widening on either side, following the GM shape trend. Refit original glass and from a properly curved piece from a wrecker have a pair cut to fill the new-cut extra side areas of the rear window. This cutting will require an expert as the glass is probably tempered and many times tougher than regular safety glass. It becomes pea-gravel when broken. A vertical chrome molding, after GM practice (specifically Cadillac) will serve as molding for the joints between the original and the increased area. If the original glass has curved sides these should be cut to vertical or diagonal sides for perfect joint with the new glass and for good fitting of the chrome molding verticals.

RESTYLED BY KERMIT HOVEY

DECREASING THE REAR WINDOW...

While decreasing the size of a back window may detract from all-around safety in a measure it does add a style-note. A small rear window has always been considered an elite "must" for custom-built limousines. It gives a certain up-to-the-minute handsome note to a sleek dark car. Recognizing this fact, for years many ways have been devised to cut down the size of back windows, and very often the laboriously achieved result has been a botch job. The method here described will net a perfect finished product.

Remove the glass from window and make a cardboard template of your present rear window, making sure the pattern is large enough to fit just inside window curvature of body, so it is on the same plane as body surface when held in place firmly. It is better to have it too large, at this stage, than too small. Take the template to a wrecking yard and select a car with suitable rear window--this section is rearely damaged in accidents. If the glass happens to be broken, it can be simply replaced by cutting down the pane taken from your stock window. For the privilege of hacking this rear section from a worthless body the cost should be nominal. Now, cut the rear section of body containing the small window to size of the template. It is a lowering effect to center the new window slightly below the vertical mid-section of the original opening. Weld the new section into your old window, being careful to make the grafted piece flush with the rear surface of the body. Finish and upholster; and the product will be stunning.

For slightly curved surface rear windows, where a smaller opening is desired, an excellent rear window unit is that from the deluxe Studebaker '36-'37 coupe. By increasing the V-angle split down the center, it can be altered to fit any reasonable curvature. (Inverted and mounted as adriver's side windshield, this unit is also adaptable as a hot-rod accessory.)

An incidental alteration is the lowering of the rear-vision mirror from top of windshield to bottom sill, or midway up the center-post. This can be carried out on any V-windshield model, with a low rear window, not having an obstruction, such as a high seat back, in the line-of-vision.

Fibre-type sound-deadening material should be mounted in any body panel-ing after the job is completed and just before interior trim is put in. This material goes a long way toward quieting body rumbles. If no sound-deadener is handy thick tar may be spread on.

Fenders

Especially popular lately has been the practice of leading-in and fair-ing off between fenders and body, giving the appearance of a single piece to the whole width of the car, yet leaving the deck lid operative. Though un-handy when changing fenders--they are theoretically not meant to be changed anyway--many new models, Ford and Chevrolet among them, now come from the factory with fenders welded in position.

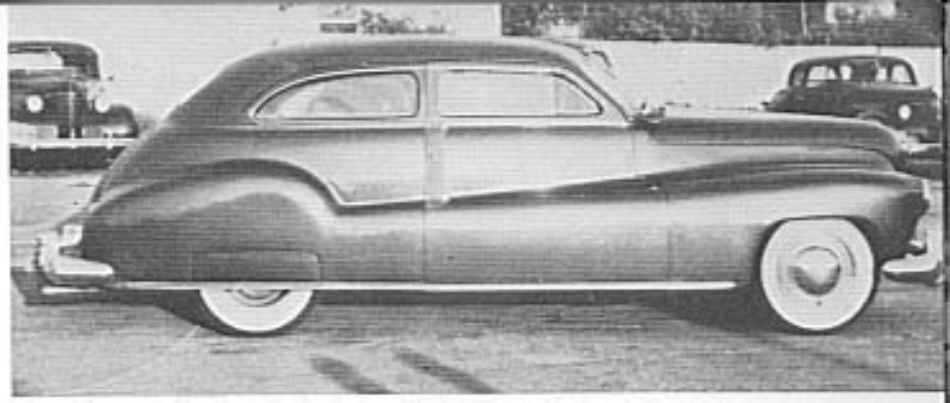
GAS FILLER CAPS...

An exposed gas filler cap can be tucked into the body neatly by adapting the gas cap door lid from a discarded fender of the late type.

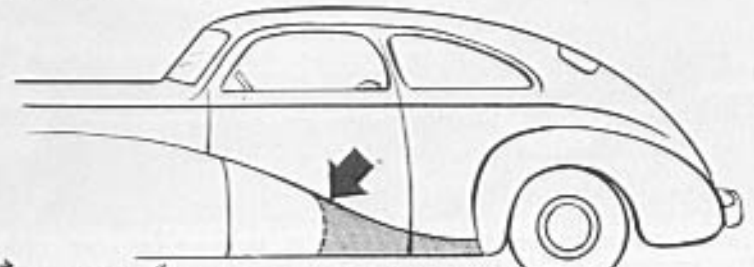
Complete absence of a visible filler can be achieved by relocating the filler within the rear deck, and filling over the original fender opening.

FAIRING "TACK-ON" FENDERS INTO THE BODY...

Terminating on front door panels, fenders of the "tack-on" variety, made popular on the GM '43-'48 lines, may be enhanced by the addition of a piece



of sheet metal fitted to the rear vertical section of the tacked-on fender, giving it a gentle, more pleasing fairing into the door. Leading in, filing, sanding and finishing complete this alteration for a longer, richer, more unitized effect.



"TACK ON" FENDER LINE CONTINUED AFT INTO BODY, BY ADDED SECTION & LEADING

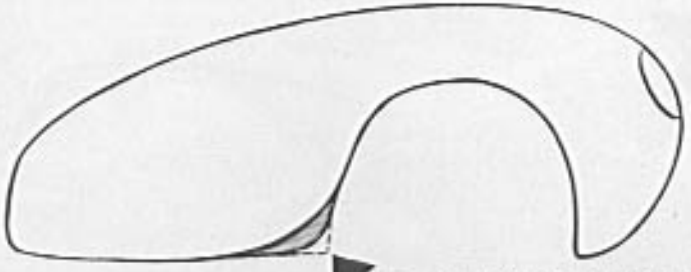
Any leading on doors, of course, creates a vibration factor to be considered, since lead here sometimes cracks in time. Lessen this chance by readjusting the spring latches in your doors to eliminate need for slamming to close.

"TACK-ON" FENDER EXTENSIONS...

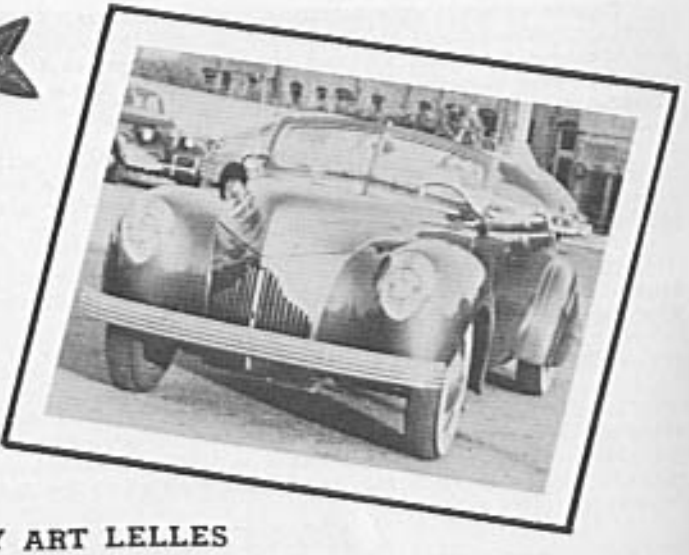
To exactly simulate the fender styling of 1946-48 Buicks, where the front fender fades gracefully into the rear, a fender extension can be built up from 20 gauge sheet stock, for other GM models with the 1942-48 "tack-on" fender. The extensions are also desirable for covering up damaged or rusted-out door and body sills. Use the fender-cap (fender piece mounted on door as a pattern to shape up the extension to rear of door. Then carry the same sloping line on to the rear fender across the quarter panel. Properly constructed these will not necessitate removal of the upholstery.

RE-CURVING THE TRAILING CORNERS ON FENDER-APRONS...

Though it is but a change for the sake of change, a simple alteration in the trailing lower corners on fender-dresses of late models, which have a plain bottom (no direct connection to running board or running strip on the outboard curve---for example the middle-thirty Chevrolets would not work---makes a definite customized appearance. The operation is simply a hand-forming operation of the corner into a softer curve. The final effect, achieved by the medium of a wood form-block and rawhide mallet, is similar to the stock style of the Dodge-DeSoto-Chrysler '39 fender-apron.



CURVE OF FENDER APRON SOFTENED FOR CUSTOM EFFECT.



RESTYLED BY ART LELLES

SEMI-RUNNING BOARDS...

With high front fenders, having a decided crease at the crown (such as the Ford '35-36 style, etc.) a very handsome effect can be accomplished by altering the running step to about half its stock width, so the outboard edge is in line with the fender crestline. Actual trimming can be done on either the inboard or outboard of the detached running board unit, depending upon conditions of the model, but the final product roots from the body, solid to the reverse crease, where it fairs off. To complete the change, the front fender bolt-holes, and other undesirable features, exposed by the alteration, can be leaded-in, and faired into body and running strip. Complete removal of the running board requires a filler-strip to hide the undercarriage. This should be chrome-plated, or body color, never aluminum.

DISHING FENDERS (BOBBING OFF)...

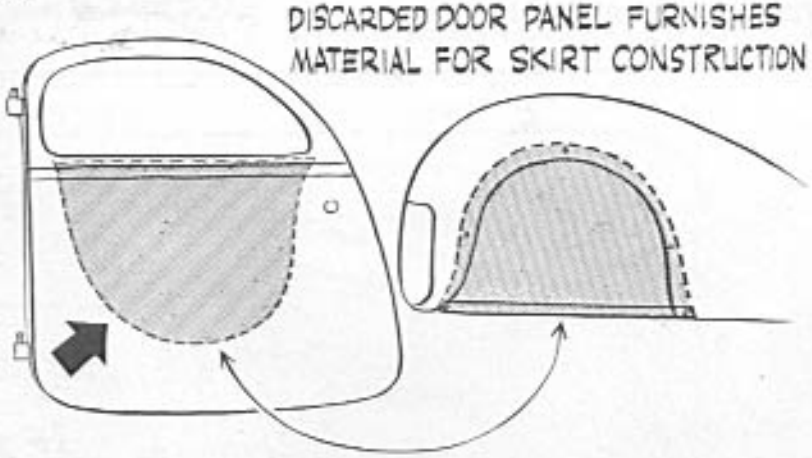
Though not applicable to cars of recent vintage, fender-dishing or "bobbing", on models of the Model A Ford era, is one of the simplest and most sporty alterations that can be made. The generous trimming is made on lower outer corners of fenders, fore and aft, for a V-shaped overall appearance when viewed from either end.

Sketch out the part to be trimmed off with chalk, using your most graceful eye. Leave enough to deflect spattering mud so the fender will still serve as a mud-guard. Then make a flexible cardboard template, so that left and right fenders can be duckmd to match exactly.

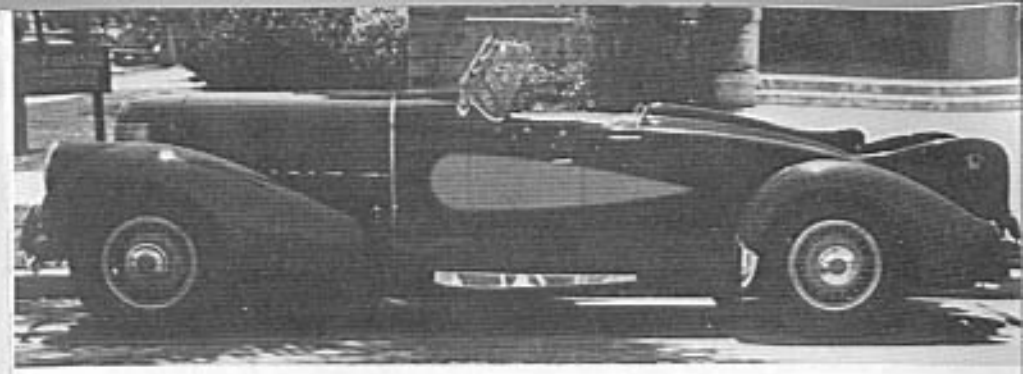
Since this alteration makes your fenders into virtual knife blades, fender dishing is outlawed in certain states, making it advisable to check your local ruling, before plunging into the job.

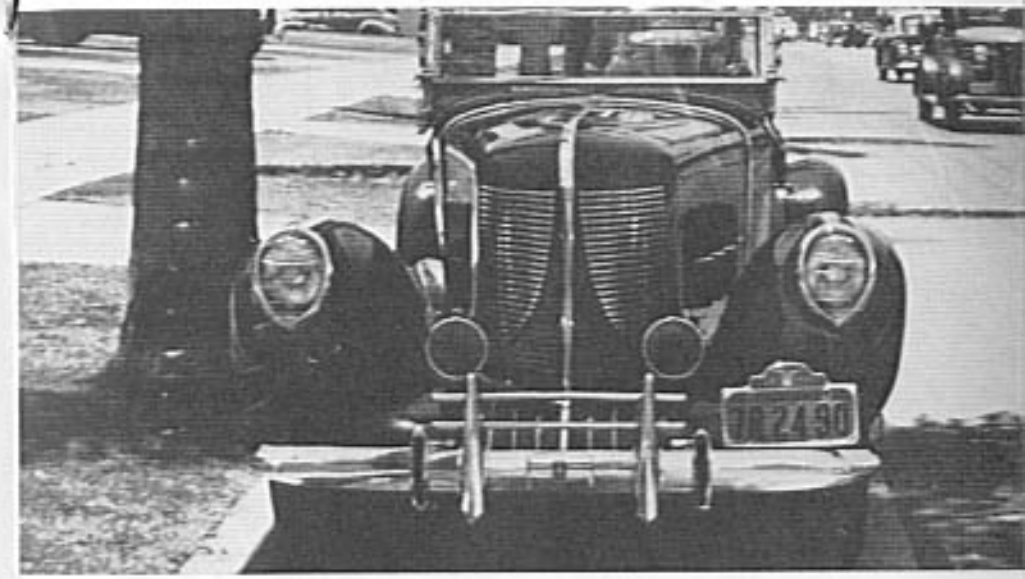
SKIRTS FOR REAR FENDERS...

An attractive non-protruding rear fender skirt can be installed on any older model. Even those fenders having a rear down-sweep which is just as vertical as the front up-sweep (such as the Model A Ford and cars of that vintage) can be skirted, this type being mounted on the underside of the fender.



Trace the outline of your half-circular wheel opening on a piece of newspaper and, allowing an extra inch or so around the curve, cut this pattern out. Trace this on the door panel upside down so that the ridge, or bead at





the belt line below the window may serve afterward as the point to crease the skirt on its straight bottom edge. Be sure to reverse the pattern on the other door so your skirts will be a pair. Cut these pieces out with a torch and handform the beaded loweredge, using a sand bag covered with leather as an anvil. Turn or roll this straight edge so it will form a smooth bottom. Mount these skirts underneath the fenders and secure by spot welding or metal screws from the outside. For tire changes on many models removal of the skirts will be unnecessary, when using a bumper jack.

Flush-mounting skirts for later models can be similarly cut out except that the edges on these are bent to 90° from the outside plane, in a series of tabs, allowing a loose fit, the difference to be taken up by a strip of rubber molding cemented around the skirt from tab to tab. Mounting can be made by an inverted "T" brace, welded to the skirt and wing-nutting to fender bracket points spaced at three points under the fender.

Lights

MOUNTING HEADLIGHTS OF THE DROP-ON TYPE...

A striking change in the appearance of your older model's front-end by repositioning the headlights and adding sealed beams, without the necessity of welding facilities. Broad-breasted, semi-inbuilt lights can thus be added to your pre-fenderlight model by a simple operation.

Buy a pair of drop-on sealed beams (shells with a depression in the under side to nestle onto the fender) and mount them according to the crown of the fenders they fit best. The 1940 Chevrolet and 1940-46 GMC-Chevrolet truck headlight unit is probably the most sweeping and graceful one to use. Any parts house stocks this number.

A difference in contour between the light unit and the fender can be altered best to correspond by trimming the headlight shell till it seats.

BUILDING SEALED BEAMS FLUSH INTO FENDERS...

A high extra-full front fender—example: Oldsmobile '39—lends itself to flush headlights, as there is ample room forward of the front tire to take the full headlight unit. A pair of shallow-shelled truck-type sealed beam units are used in this method, not being visible on the finished product. They are mounted under the fenders and serve as mud-shields and positive-fitting adaptor-rings on the conversion. The purchase of a pair of these lights is not imperative, however, since the less expensive "conversion set" of sealed beams, consisting only of the light units and adaptor rings, may also be used, though affording less under-fender protection.

Holes are cut into the most perpendicular surface of the front fenders and the shells welded into place. If the fenders are slightly crowned with a ridge at the point of new headlight position, affix shell protruding half an inch or so, to assure a flat surface for the sealed beam. Make the slight necessary vertical adjustment and then weld the adaptor-shell into fixed position. Next build up the sides with lead to contour a smooth custom appearance. Final headlight beam alignment can be made between the shell-rim and the light unit.

Many recent jobs have altered stock position sealed beams so that what was the rim piece is now a part of the fender. Note some photos. These are removed from the back, or under side, and increase the intensity of a sans-chrome style theme.

TAIL, LICENSE, PARKING, SIGNAL AND BACK-UP LIGHTS...

Tail, license and parking lights should be added to your job according to your conception of what the part should be like to best blend with your overall style.

Signal and back-up lights are optional, not being required by law, and should be worked out in the same theme harmony.

Flush tail lights are best for repositioning in custom jobs. For a location that is reasonably parallel to the rear-end the flat-mounting Olds '41 is a massive square-cornered light of gothic beauty. Chevrolet '41-'48 tail lights, for the same kind of mounting, thought not as handsome as the Olds unit, are easier to obtain. Used almost universally on revised editions of older Fords, and even on later models, the Ford '38-'39 "tear-drop" light will look good on any parallel-plane rear deck. The Zephyr '40-'41 models also are nicely adaptable. For a plane that slants away, calling for a light with diagonal mounting, the Chevrolet '40 is often used. For mounting on a crowned surface, the Ford '40 is excellent, as are a number of other models easily selected from observation. Purchasing lights direct from the new car dealer stocking them is generally the best source for lights of a desired style, with good chrome.

Dodge '41 tail lights improve the appearance of any 1946-48 Chrysler, DeSoto or Dodge rear-end, fitting the fender-crest exactly. In these cases the original lights may be converted to serve as stop lights, or signal lights, while the added '41 fender-crest lights may be wired for one of the other necessary functions. The blazen deck stop lights may then be removed and the license bumper-mounted.

Round '47-'48 Ford parking lights make a fine universal unit for parking and signal lights.

Round Pontiac tail lights are the latest and finest universal tail-signal-stop units, even surpassing the Ford tear-drops. For a curved mounting place adapt the '48 model unit, for a flat-mounting the '49 type.

Back-up lights can be made to match the tail lights by using identical frames with clear lenses. In the case of '47-'48 K-F and Chevrolet '41 clear lenses are available, identical or similar units having been used stock on the front ends as parking or signal installations. Clear lenses for other frames may be roughly cut by a glass-cutter, then ground to edge shape and polished; or by sawing, grinding and polishing, plexiglas; or by using the flexible mold method and the original red lense as a pattern, they can be cast from clear plastic and polished.

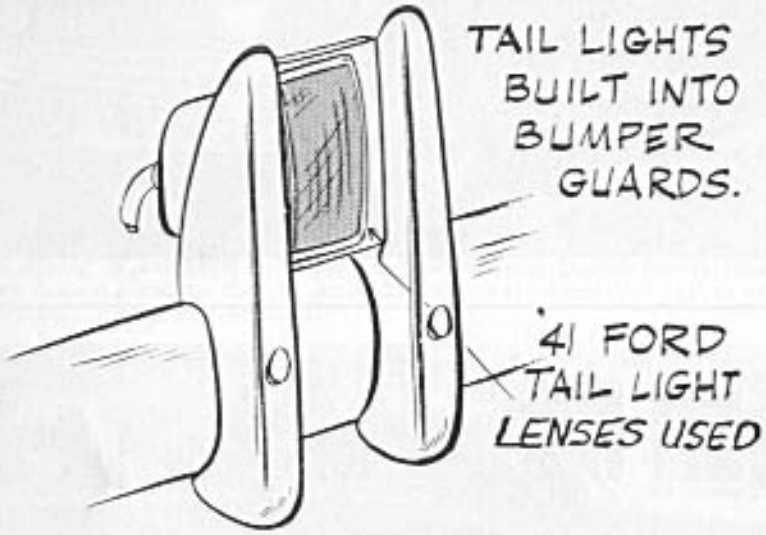
Signal lights, as in late models, can be duplicated thru parking and tail lights by duplicating the wiring diagram for late models and adding a blinker-device.

EMPLOYING VERY narrow tail light lenses--those from the '41 Ford are ideal--a matching pair of tail light units can be built into the bumper guards. This is an especially pleasing effect on jobs where a complete plaining treatment has been made to include such items as door handles, trunk latch handle, ornaments, gas filler, etc.

For each light space two "universal", or similar narrow, plain bumper guards just far enough apart to accommodate the lense, plus slight clearance for a sheet metal frame to hold the lense. Weld the light-and-lense retaining frame to the inboard sides of the guards; then have the unitized piece rechromed. Assemble the improvised light unit, after fitting the lense in

place from the back side (forward in relation to the car). Wiring can be inconspicuously strung along the bumper and under the body by way of a bumper bracket.

Similar light units may be built up for use in front, using clear lenses for parking-signal lights. A good narrow lense for this purpose is the '41 Pontiac parking light glass. Several other lenses are equally adaptable for this purpose.



Generally, license brackets are either designed for flat or curved mountings. There is a wide variety in either contour, many of which are excellent for re-use. Remember which basic mounting type is more suitable for your car. Often later trunk handles, having an integral bracket and light may be installed on older cars of the same make, without alteration.

Rear Deck

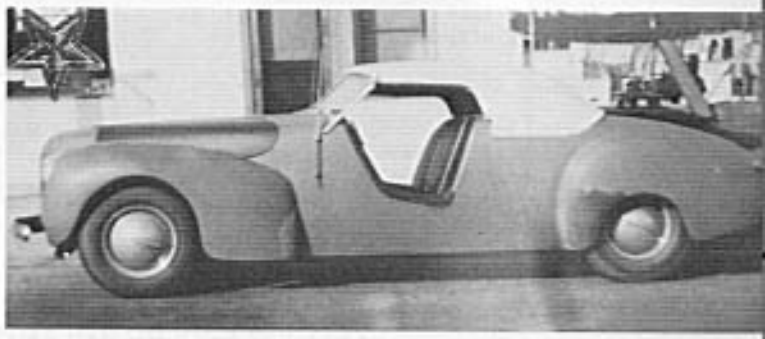
FILLING SEAMS...

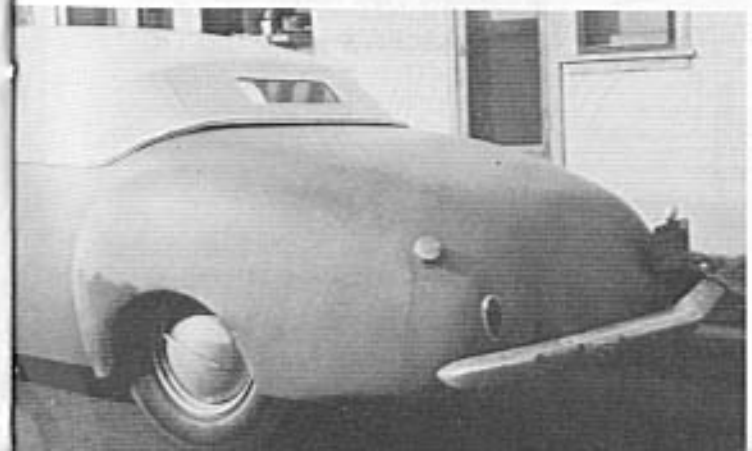
A few have filled in the seams of the rear deck lid, making the turtle-back a solid piece, with no means of accessibility from outside. Though in many ways impractical, access to the spare tire and compartment being thru the cab, the change never fails to excite comment from observers.

However, it seems better to have some measure of accessibility on the deck, for general purposes.

Often a contour change can be made that will add length and character to a rear-deck. This can be managed by welding to the deck lid, or rear of body a blister-type trunk lid such as used on '35-'36 Nash, '36-'40 Hudson, '40 Willys, etc. and molding it in as a part of the rear shape.

Another method of giving a new shape to the bustle, particularly adaptable to such models as the '47-'49 Studebaker, calls for relocating the lid relatively higher than stock. Lift to desired position, measure aperature and fit strip around the lid and weld into place as a part of the lid. This will create a new shut-position, and afford somewhat increased trunk capacity These treatments are both equally adaptable to coupes.





REMOTELY CONTROLLED TURTLE-BACK DOOR LATCHES...

When the rear deck is completely plained, including the opening handle, the type of motor-jack which is used to operate convertible tops, may be employed to open and close the trunk compartment door from the dash compartment.

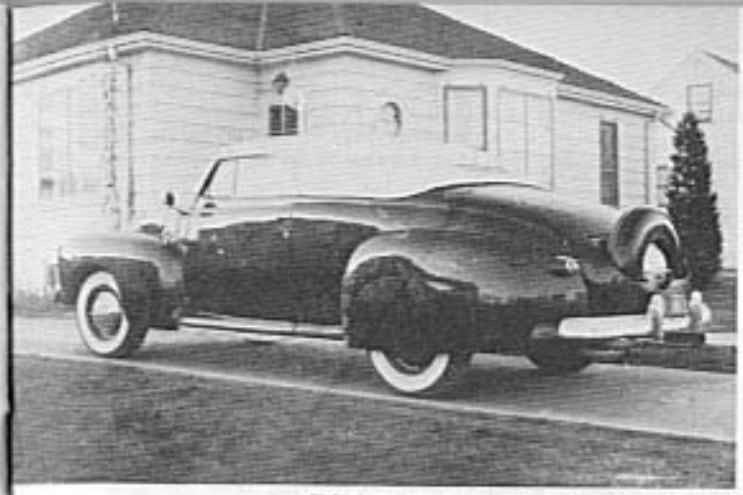
Another dashboard-operated door lid features reversing the mounting position of the trunk lock and the catch, so the catch is on the compartment's door. The lock mounted on the body, where the catch was, can now be connected by a cable to a dash-control. An option is the direct operation of the latch manually by reaching under the rear bumper and skirt to a hidden handle position below the door and bumper-skirt--in the under-body.

REMOVING OR DROPPING THE OUTSIDE SPARE...

Fifteen years ago the first step anyone performed in remodeling his car was to ceremoniously amputate his spare. Actually this was the only step for then he fondly displayed the car about town as a custom job. Of course this whole question of a spare tire--to be or not to be exposed--is a matter of personal opinion, though certain factors generally make the decision for you. The writer is of the opinion that a model stock-equipped with an outside spare looks a lot better, generally speaking, with that tire--than without. The whole rear contour has been designed for a spare and it looks pretty barren without a tire there. Making the rear-end appear lower and more rakish is not difficult, however, and calls only for dropping down the position of the spare to a new angle. Sometimes simply inverting the bracket gives the desired rake to the lowered wheel. Other times the bracket must be cut and welded. On many models, this operation results in need for a different bumper, affording more adequate space for the lowered wheel and tire. A metal tire cover from a '35-'36 Ford is a good covering for a 6x16. This cover may be modernized and simplified by welding a steel disc in the front to create a flat center area. This makes a fine area for mounting the rear license, either flush or surfaced.

CONTINENTAL SEMI-FLUSH SPARE...

On sloping rear decks in coach and four-door models which generally do not have outside trunk doors, such as the Ford '36 no-trunk models, a semi-flush exposed spare gives a touch of European glamour. A 16" two-piece, doughnut-type metal tire cover('35-'36 Ford) is also used here as a covering. A second one is used in another capacity... Flush it into the rear deck by cutting a hole to accommodate and welding into place. A rare and attractive result is the payoff. This alteration is also adaptable to coupes having a sufficiently large rear-deck door to accommodate the whole unit.



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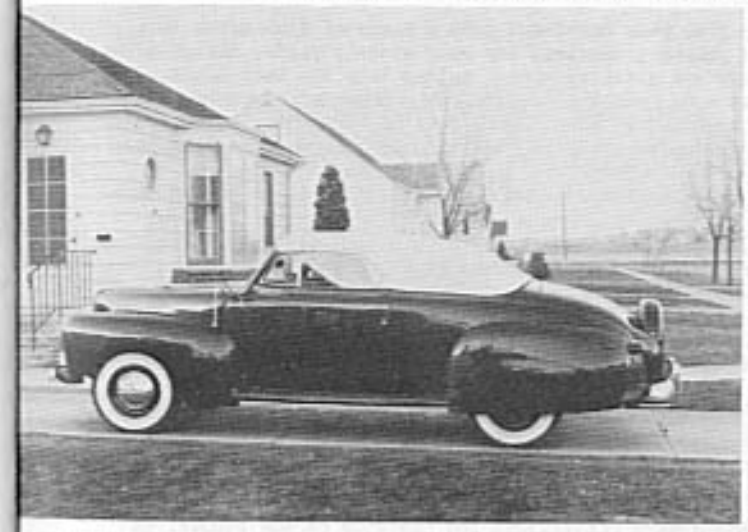


Often a Lincolnesque Continental result can be obtained when a blister-lid—models designated under previous discussion of FILLING SEAMS—is used to reshape the rear to a more nearly vertical surface before semi-flushing the spare wheel mount. Note Ford continental tire treatment in photos.

LICENSE PLATE MOUNTING...

A necessary evil, the license plate requires deft placement in order not to detract from the lines of the restyling job. Recessing by cutting a plate-shaped hole in the deck lid is one long-used method.

In this treatment a track or clips are built inside to hold the plate in position. Plate glass or, for a curved surface, plexiglas, can be fixed just inside the aperture in front of the license tag. The inside mountings must also include at least one three-candlepower light to illuminate the plate.

A variation of this treatment, which eliminates cutting into the lid, adds to the apparent length of the car, in either of two ways:

1—For a fairly flat rear deck, cut down a piece of flat stock to a rectangular shape of proper dimensions for your state's plate, making allowance also for a border and slanting sides, molded into the body lines. V-cuts of about 45° are made in the corners and the sides are then bent like a box and welded at the seamed corners. This unit is mounted in a low center position and is finished off by fairing in with lead all prominent angles.

2—Especially favorable for rounded rear decks, the other method calls for obtaining an extra piece of material by slicing the top from a high-crowned front fender, discarded for wrinkles elsewhere. The piece can be obtained for next to nothing at many body and fender repair shops that normally throw this away. This cap-like section is then curved on its cut edge to the contour of the surface it is to be mounted on. Then a hole is trimmed out in the middle to accommodate the plate.

In either of these variations accessability to the plate and lights can be thru the door from within, or thru a slot in the bottom side, arranged with spring tabs, to retain the plate.

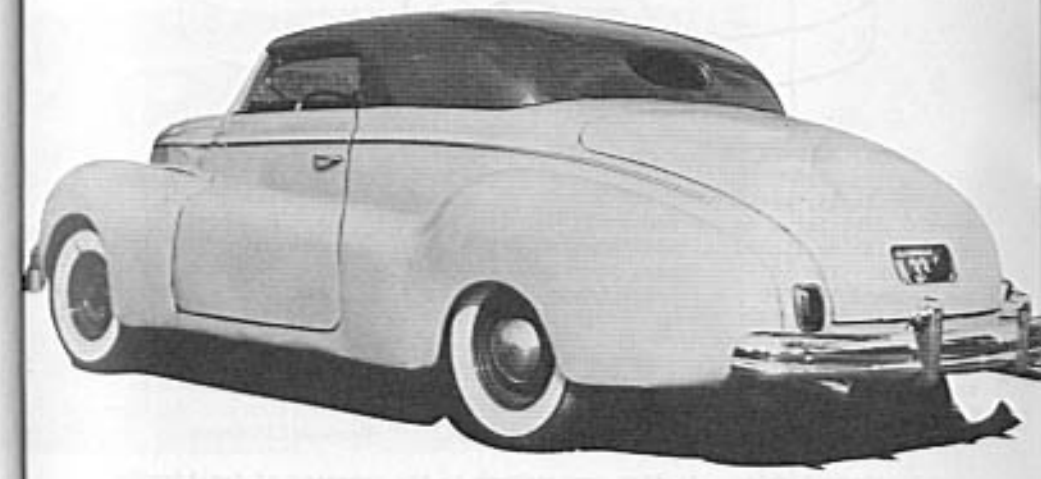
In most states a front plate is required, and though little can be done with it, a dramatization in a centralized low position on the bumper, or just above—depending upon bumper and grille—does improve the car's optical balance.

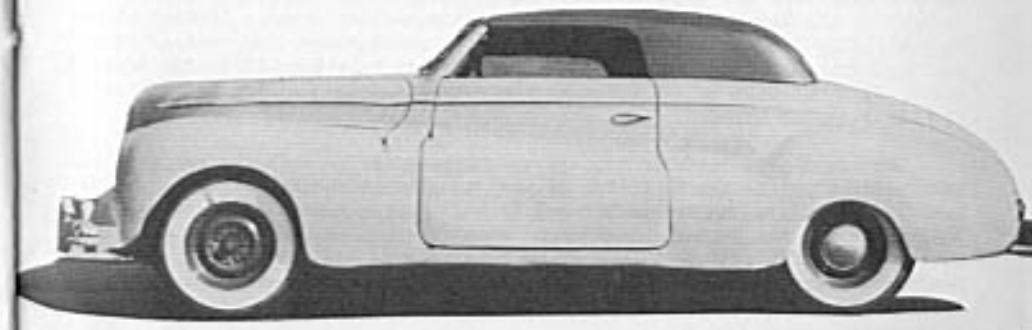
Off-lid mountings, either below the lid's bottom edge—where this is high enough—or on the bumper proper, edged by guards, are becoming increasingly popular among the manufacturers.

Bumpers

WRAP-AROUND BUMPERS...

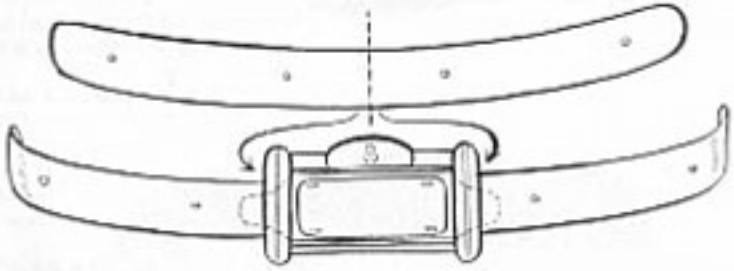
The added protection of wrap-around bumpers can be yours by modifying your present set in the following manner, an alteration which also locates your license plates in low center positions. Remove your bumpers and cut them in two at the center. Heat the ends and increase the curves. Now prepare a sheet of heavy steel—$\frac{1}{4}$ inch or heavier—the shape of your license plate, cutting it slightly larger than the plate, and allowing a tongue on each end to form a tab to be welded under the bumper.





Weld one of the bumper halves to each side of the central plate over the tongue, making the three components a solid single unit. This license mounting plate should be set on a slight slant in relation to the bumper, for better visibility at this low level. Bumper guards should be mounted tight against the center license plate section on the bumper section on either side of it. A chrome channel piece should then be welded laterally above and below the license mount on the plate to frame it. The upper lateral should be roomy enough within its channel to accommodate the light.

WIDTH OF BUMPER EXTENDED BY ADDING SECTION TO ACCOMMODATE LICENSE PLATE.



SPORTY BUMPERS...

The light, springy, fluted DeSoto '37 bumper has been used on many special jobs for a decade and still has that power to set off any car in a distinguishing light. Observe the number of applications among photos in this book. The '47-'48 Frazer bumper, '49 Buick, '46-'48 Oldsmobile, and the Packard '47-'50 are notable among many other more massive contenders for custom use. The '49 Plymouth bumper is destined to replace the '37 De Soto.

Every bumper is in one of two classes--flexible and rigid. Generally the former is rolled steel and the latter a stamping. It is important to keep in mind which will better suit your car. A spare wheel on the turtle-back, for example, generally calls for a curved, or V-shaped, bumper.

A solid, doubly-protective arrangement is the mounting of two identical bumpers, one above the other, with slight vibration clearance between. The V-shaped, curved model, and the V-shaped V-model of the Studebaker 40 and '41 models, respectively, make especially stunning effect when mounted in pairs. The Zephyr '37-'39, which is similar to the Studebaker '41, is equally adaptable for wider models. In any case where the bumper is not wide enough for the car (many late models being super-wide) mount a license plate in the middle by a method similar to that described above, only rather than making a wrap-around effect simply spread the two halves apart to the desired width, then cut both halves again so the total distance between is sufficient for the license set-up.

Late model wrap-around bumpers, of which there are many desirable models, can be narrowed in lateral width, if too wide for an earlier model car. Cut a section from the center--if covered by a license plate, or from points falling behind the bumper guards when rewelded.

Bumper guards, when used, appear most attractive when mounted on the bumper near together in the middle. Certain types create a stately effect when mounted in double pairs.

RESTYLED BY SILVERSMITH

AN ALL-AROUND BUMPER FOR PROMINENT FENDER AND DOOR PANELS...

On new models of the flush body style such as the Kaiser-Frazer, Packard, Nash, Ford, Mercury, Lincoln, and others, a great stride forward in driving comfort can be made by mounting an all-around bumper. This will be a friction bumper, taking the rubs and scrapes harmlessly which otherwise would cause damaged side panels. It will not take beating that your front and rear bumpers normally do; but it will not be required to for the most part. Pieces of straight chrome bumper stock in any desired lengths may be purchased, complete with diamond-shaped chrome studs, from any bus-body manufacturer--and every principal city has at least one of these concerns.

The side strips should be 18.25 above the ground--the recently established standard of the S.A.E. Each lateral section on door or fender should be backed up under the body with a piece of light "U" channel, or angle iron, running parallel on the inside of the doors and under side of the fenders.

Since this side bumper will break a high, plain area in to two shorter areas it will create an effect of road-tightness.

Grilles

REDESIGNING...

Uncontested for maximum style change, by a single job, is a grille alteration. Often only a slight operation, on an already beautiful grille, such as filling in the sides to narrow to a higher degree of beauty, is all that is required.

A radical alteration, as in the substitution of one grille for another, is worth while when the new grille is not immediately recognizable. These changes are taken up later under the models for which they are practicable. For the benefit of your ingenuity in creating an original style for your car here are the most attractive grilles to use:

Cadillac '36-'37...Narrow and massive
Buick '37-'38...Laid down to form wing grilles
Dodge '38...Laid down to form wing grilles
La Salle '35-'40...Can be cut in height to fit
Nash '39-'40...Similar narrow type as La Salle
Oldsmobile '46-'49...Adapts readily to flat fronts
Cadillac '42-'49...Clean and massive
Lincoln '46-'48...Lower lateral sections only

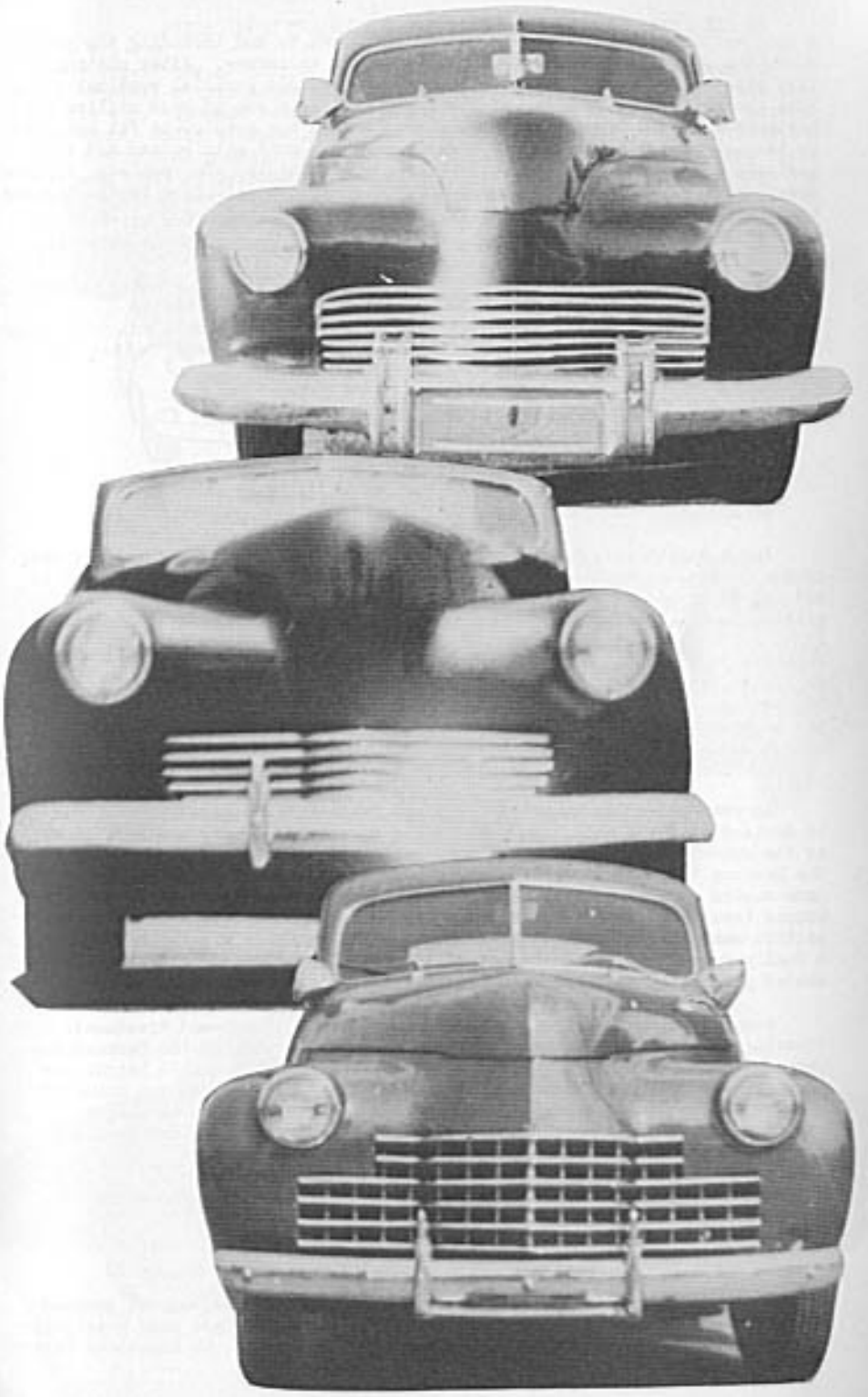
Die-cast grille pieces are far sturdier for replacement in customizing than stampings. All of these listed are die-cast pieces.

A few fender grilles--wing grilles--also serve very well when interchanged, simply for the sake of change.

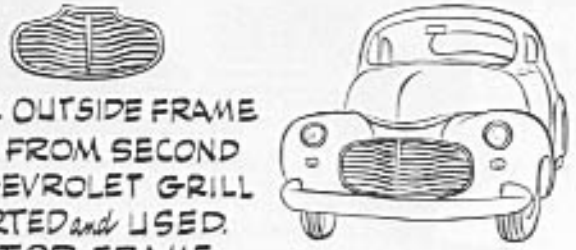
Many grilles have been "face-lifted" by the makers from year to year in a manner simple for the private owner to keep abreast of. The 1948 Buick, for example, carries a grille that fits the 1942 model. Hence a newer-look can be created when desired simply by this substitution.

A UNIQUE CHANGE FOR MOST ONE-PIECE CAST GRILLES...

By a relatively simple alteration on a horizontal-opening grille, having the same vertical contour at the top as at the bottom, an excellent custom front can be created. The job calls for pieces from two stock grilles of the original design. Cut off the top section--Chevrolet '41 is



a good working illustration--on one of them down to and including the point where the shape of the one-piece grille begins to narrow. After cutting, this piece--the lower part--should have more or less parallel vertical sides. Next the bottom-most section of the other grille is cut to best utilize its horizontal bottom frame piece--the lowest bar in the grille--to fit inverted on the top of the first cut piece--thus making a unit with bottom and top horizontal sections identical in appearance and length. To complete, replace the modified grille and cover over the upper section left open by the lowered rearrangement. Many specific grille changes are given later in this book.



GRILLELESS FRONT-END EFFECT...

For a smooth effect on models where the grille is simply a cut out area of the general contour--examples: Ford, Mercury, Lincoln-Zephyr '39--and is not formed by contours building up, or out, to it remove the grille, or grilles, and finish in the fender by filling in or covering over, maintaining the basic curvature, just as though the whole front had no grille. Circulation to the radiator would then be scooped in by means of a narrow slit nearly the width of the car, similar to device on certain Chrysler Motors '42 models, though as much hidden as possible under the bumper. A variation can be made by an integration of bumper and grille as follows.

BUMPER-GRILLE INTEGRATIONS...

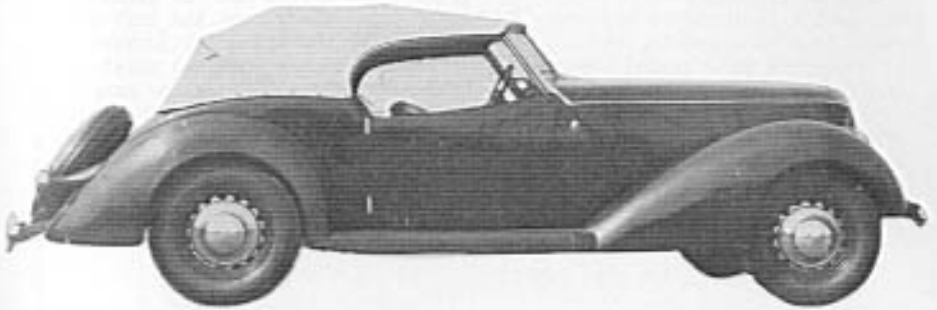
An over-and-under bumper arrangement, with intake space between, can be devised to serve well. Bumpers having an unusual center section, such as the cutout Pontiac '40, or a lower center section (drop-center) such as the Mercury '40, and especially the Chrysler '39, create a remarkably up-to-date custom appearance when mounted one-above-the-other with the higher bumper inverted. This arrangement forms an enlarged aperture in the center section making it a "natural" for locating the radiator air intake. Serving a dual purpose this double-bumper style will also offer additional much-needed protection at those notoriously vulnerable front corners.

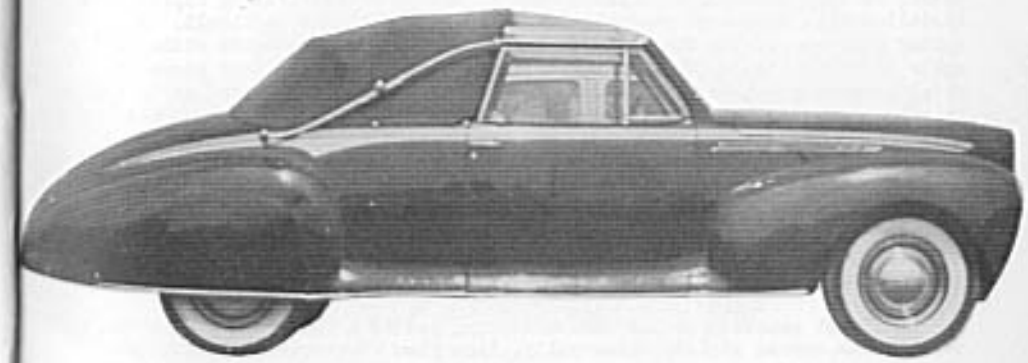
Bumper-grille integrations are the ultimate in front-end treatment. Creating a less "weighted" front-end appearance are the '47-'50 Packard bumpers where the demountable parts can be reassembled with double height, or even triple, with laterals common to adjacent assemblies--the top piece of one bumper becoming the bottom section of the one next above it--hence creating a very broad grille-bumper with perfect integration and unitized appearance, all air-intake being within the bumper widths.

The '47-'48 Frazer fluted-bumper, though not a demountable piece, may be altered to form a similar effect.

ALTERING GRILLE SHELLS...

Most modern grilles are either cast in complete units, or are stamped and bent open from a sheet of steel. The latter type offers many possibilities without necessity of purchasing any extra material. An excellent front-





end example to illustrate both the method of alteration, and the decided change in styling which results, is the Ford '38 deluxe and '39 standard. The grille is in three sections, the lower front-piece, and the left and right hood-side panels, which are punched out on the sides for louvres, and at the front to continue the grille effect to a higher vertical point. By heating the undesirable grille bars--in the Ford '38-'39 case the complete side panel sections, including the louvres--can be re-bent into the position of a smooth, unpunched section, then leaded over. Another method employs a thin sheet of metal shaped to cover the undesired sections. The new plastic covering Metalume may also be used as an overlay. Die-cast units may be altered by removal of every other bar, or one in three, etc. to create a new effect.

UNITIZING HOOD AND SIDE PANELS...

Relatively flat, cowl-hinged hood bonnets, such as the Ford '37 can be welded to the side panels in many cases, making an integral front-end that will lift as a unit, offering improved accessability to the engine. Less prone to rattle, the unitized hood also is more adaptable to smooth construction where it is desired to cover over an upper section of the grille, since the side panels can be sloped outboard and thus land on a higher part of the fenders and filling the dip between fender and hood in older models. This makes the related job of installing a later broad lateral grille a more attractive one.

Repositions & Removals

PLAINING THE HOOD...

Removing the ornament on the hood, a hangover from 15 years' ago when the decoration simply glorified a radiator cap, often gives the whole car a smoother appearance.

If the decoration is non-mechanical, that is, if it does not serve as a latch-handle for the hood bonnet, it can in some models, be re-set farther forward, as in the Chevrolet '39. This is generally more effective than removing it, since it apparently lengthens the hood over the stock--creating an optical illusion.

When the"radiator-cap" is a hood-opening handle, as on some Fords, it still can be taken off, but when this is accomplished, a self-designed hood latch, or lock assembly of a later Ford of the underhood-locking variety, is installed with dashboard control. This alteration is not difficult. A spring hook--to spring the latch to a firm closed position--with either a cable thru the cowl to the dashboard for release, or with a thin piece of metal extending between the bonnet opening and the grille member, so it can be opened at this point by insertion of a thin wedge to make the release, is satisfactory.

While ten-year-olds may look better with their ornaments intact, without exception, the late models are improved in eye-appealby a plaining of the hood--by removal of the dog, bird, cow, or giraff, gracing the nose.

LOWERING, DOUBLING OR REMOVING THE BELT STRIP...

A direct reaction to the chrome-loading era of a few years ago is the recent sans chrome styling. Naturally, this plan of practically complete plaining calls for removal of the chrome belt strip. This can be done on most models. Chrome, being an important factor in the design of most model

cars, must be deftly placed keeping the lines close to the road overall.

When remodeling your car with a moderate chrome theme, one of the most brilliant changes you can make is simply an alteration in the position of the belt strip—lowering it an inch or so. Belt models where the strip does not run on the same line with the door handles, or curve down at the rear into body lines, and where all breaks in belt—doors and hood—are reasonably vertical, can be lowered most attractively. In the case of the Chevrolet '40 strip-and-louvre combination the left piece can be placed on the right, and vise versa, thus when the louvre part is aligned with the louvre holes in the hood-bonnet the belt strip will be lowered.

Remove the strip and measure down an inch or so, depending upon the model's characteristics. Directly below each snap-hole drill another of the same size. Snap belt into new position, piece by piece; body-putty, lead or weld in the original holes and refinish. Result of this change will be one of those phantom effects that will make many an admirer stand back and wonder what has been done to make it more sleek.

An effect that is striking on certain models is made by getting an extra set of chrome stripping of the same model from a wrecker and mounting it just below the stock belt-line with a small space between, making a dual belt-bar. The price of the strip, and the time spent in tracking down a full set may be prohibitive, however, since two or more wrecks may have to be stripped to get one complete set intact. The ideal source of course is the new car dealer—if he stocks the strips desired.

Easiest, and perhaps nearly as attractive as the most involved molding strip alteration, is the removal of the belt strip only on the hood bonnet. The strip is removed, then the forward-most part of the removed strip is cut to approximately 6 or 8 inches in length and reset just forward of the cowl on the bonnet. The length of this piece is governed by the length that will coincide with at least two of the original holes in the hood. In effect, the finished job will appear similar to the stock Chrysler '39, certain late Chryslers, and the Mercury '47. All holes left open are then body puttied and, since both sides of the metal are accessible, this job is more readily accomplished than elsewhere on the body.

A more involved shortening of the belt strip, for cars with necessary or hard-to-fill louvres, which would be conspicuously exposed by removing the chrome belt strip—such as the Chevrolet '40 deluxe—is called for. Leave the strip in place on the front end, removing it only from the front door back. Then remount the last rearward piece with the finished tip on the front door to terminate the molding strip at this point. Fill in and finish over the remaining holes. The effect will not be unlike the stock Packard Clipper treatment.

REPOSITIONING DOOR HANDLES...

A simple repositioning, such as the reversing of door handles, by pointing them to the rear, on front-hinged coupe and coach models, is a neat and easily effected change. Sometimes it is necessary to reverse the sides—left handle on right, etc. as the shanks are not invertible, owing to mounting slots. After the repositioning doors are opened by pulling up on the handles.

PUSH BUTTON DOORS AND WINDOWS...

By installing solenoids in each door to release the latches when you push outside buttons you equip your car exactly like the Lincoln '47 models. If planning this, however, an improvement can be made by locating the button beside the door but not on it. This eliminates the folly of pushing on a

thing that you should be pulling on. Parts are available from a Lincoln dealer. Be sure to take along a friend that can get a trade discount though.

Grasp-and-push handles like Hudson introduced, and which GM later instituted on all models, may be adapted by similar procedure. These call for reworking the whole latch system. The pull type--K-F, Studebaker, etc. is already passé. The rear-deck lid may be arranged similarly.

Push button windows operated by electric vacuum units may be installed if desired--though the available types are not made for long service and hence are not recommended, though the idea is fine.

Specific Model Changes

BUICK...'36--Pair side panels forward to cover grille over about 1/3 to center on each side--to the heavier vertical bar in casting. '37-'38--Fill louvres and add Pontiac '34, or similar, louvres. Build lights into fenders. '39--Flush lights into fenders. '40-'41 lowered by 1½" wheels. '42-8 Cadillac grille can be substituted. '42-'49--Remove every third vertical grille bar per illustration.

CADILLAC...'38--First of those famous 60 Specials. Front end can be covered over part way down to give the new look. Headlights can be easily accommodated in balloon fenders. '39--Remove alternate lateral grille bars. '39-'40--Cover sides of grille to narrow vertical section down center. '41--Counting down from top of grille remove fourth and seventh laterals. '43-'49--Center between each existing vertical division in grille an additional one from stock.

CHEVROLET...'37-'38--Offers favorable lines for two-toning at the swelling on lower front door and continuing imaginary line to rear fender. '39--Cover grille to narrow vertical center section; widen wing grilles. '40--Nice model to load chrome on--or to strip completely. Grille can be made to appear more massive by removing every other bar of grille. '41--Pair hood down to straighten top grille line per photos. '46--Remove the "U"-shaped part of grille and, using an additional "U"-base lateral, mount it above the existing one--spaced as far above the stock one as it is from the bottom of the grille. Cover the yawning hole left by removal of the "U" section and alteration. Another lowered effect can be created by chopping the bottom ends of the "U" piece to mount one lateral lower in position; pair hood down to meet. '47-'48--Replace third from bottom wing grille laterals with a second-from-bottom-length piece thus creating a broader appearance. Pair hood down one lateral by removing the short top one. '49--Add between stock verticals in lower grille six additional ones, one being placed between each original one. To side of front fender add a duplicate lateral chrome strip parallel below stock one, with about 2 inches between. Shorten aft strip terminal section that mounts on door by an inch or so at forward end of door, beforemounting, so overall length will be slightly shorter than original above it. This gives definitely trimmer, lower styling to the side, as the original piece seems high alone.

CHRYSLER...'34-'35--Airflow, if spare is exposed lower it. Cover grille half way down for best effect. '36--All models, cover grille down to horizontal belt line and narrow. '37--All models, remove top combination grille and louvre casting strip and fill in plain. Results of this change are exceptionally trim. Reposition headlights in fenders. '39--Chop body laterally to lower. '41--Three-window coupe, strip grille and belt strip off--if dark blue, green, maroon, or black. Accent chrome if a lighter color. '42-'48--Treat as '41, in three-window coupe models. '42--Remove alternate lateral grille bars. '46-'48--Secure duplicates of heavy bottom position lateral and mount over narrower laterals making total of five heavy laterals

per illustration paste-up. '49--Mount three additional verticals in each side of grille centered between stock ones. Upper outboard verticals will have to be lengthened slightly, or these two positions can be made up of other stock and chromed to match. Note paste-up illustration.

CROSLEY...How did this get a listing: it is not an automobile! Any alteration short of a complete reconception is abortive. You might mount a right rear tail light to balance the off-center left one though--and center the license plate. Don't spend a cent for labor on this car; you'll never get it back. If you can do it yourself lower the whole side elevation by sectionalizing, per sketch, and reshape hood to follow contour of lower fender line. Replace windshield with sport mount, per photos of Coachcraft jobs, and alter door to dug-out type, per MG Midget design. Add exposed gas tank behind lowered cushion seats and finish as an open sports model.

DE SOTO...'34-'37--Airflow treat as Chrysler. '39--Fill four top-most lateral vent-slots of wing grilles for lower front-end appearance. '40-'42--Remove alternating grille bars. '46-'49--Lower grill about three inches or more by chopping off unexposed bottom edge and remounting in a correspondingly lower position. Fair down hood section to meet.

DODGE...'39--Sectionalize as Chrysler and De Soto and plain nose and side panels of hood by filling louvres and removing chrome name-plates and ram ornament. Fill upper grille stamping. De-chrome by removing the wide chrome cover strip down the middle of the grille and filling the exposed seams. '40--Cover upper half of grille, per photo. '46-'48--Add verticals centered between stock position in grille. '46-'48--Lower grille a lateral or two by chopping off unexposed bottom edge and remounting in a correspondingly lower position. Fair down, hood section to meet, per illustration. '49--Add verticals per '46-'48 above.

FORD...'34--See photo. '35--Fair down over top horizontal divisions of the grille with sheet metal and use double the number of cross strips on remaining lower grille. '36--Many treatments are shown in photos. Fill grille to narrow vertical and mount a La Salle or Nash front piece. Sink headlights extra low in fenders. Install parking lights, made from tail light lense rims of discarded Ford-Plymouth '36-'37. Mount flush in the horn openings on the inboard of front fenders. Another treatment: Fill louvres completely in. Take one only of the set of three extra-equipment lateral chrome bar-stripes--you know what they are--and place this in the low position, just as though you were putting the three on. Fair over completely above this division with sheet metal. Narrow remaining grille vertically by filling sides slightly. Leave stock grille in center or chop off a Nash or La Salle grille to fit. '37--Several treatments are shown in photos. '38--Deluxe, fill side panels of hood completely as previously described. An optional effect can be made by bending every-other-one of the remaining grille-bars shut, and finishing them up. '39--Standard series, adapt from '38 deluxe. For deluxe several treatments are shown in photos. '40--Cover center grille over--down to level of top of wing grilles. Then unitize with full width chrome lateral pieces. A good strip to use is the '49 Hudson grille strip which is mounted low and laterally on the step-down model's grille. This is quite flexible and can be given slightly different contours and still remain long enough for an older model's full width. '42--Replace grille with '47-'48 and treat as same. '46-'48--Cover top lateral, or remove and fair down to meet, per photo. '49--Add a duplicate lateral side chrome molding strip immediately below the stock piece. If a "Custom" series the front fender piece will not be the same width, but wider. This must be replaced by a standard piece. An air horn, fog light, or P.A. system speaker, or road spot light can be mounted in center hub of the '49er grille. Extra light to be used simultaneously with headlights is not sanctioned in some states, however. As an auxiliary light it is all right. A chrome tail

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light reveal strip, is also available.

FRAZER...'49-'48--Integrate bumper and grille per illustrated paste-up. Mount side chrome molding from '49 model at height just above rear wheel opening. This will require obtaining duplicate door-width strips above the full set number for mounting on the rear fender sections, as the full set contains only a pair of very brief strips for this purpose, as they are all that is required at sill-level which is what the set was intended for. For '49--Add vertical grille bars between each existing one.

HUDSON...'49--Mount an additional large lower lateral chrome strip and build-up assembly, up midway in the gap above the existing one.

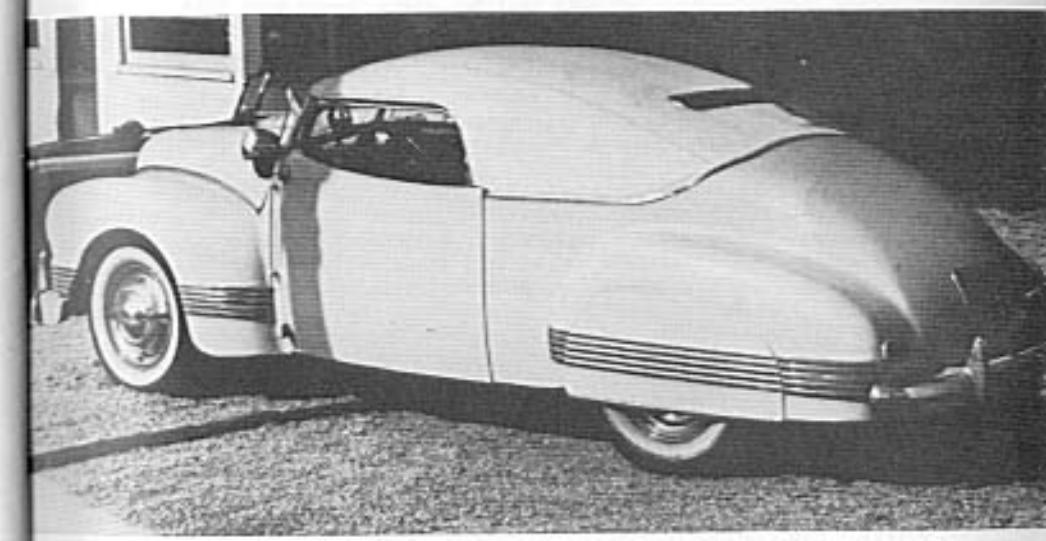
KAISER...'47-'48--Remove die cast section of grille mounted to bonnet. Add chrome side molding strip from '49 model as described in FRAZER above. '49--Add duplicate of '49 sill molding as above. Remove center lateral and place signal-parking lights elsewhere. Replace with two duplicates of bottom lateral piece centered in space thus created between top and botton laterals.

LINCOLN-ZEPHYR...'36--By chrome covering certain grille bars, effect of the following year's model is obtained. '35-'37--Fill grille sides to narrow V-shaped front or cover over top 1/3 of grille, leaving the rest intact per photo. Work lights over into sealed beams. '38-'39--Grill design here is one that started industry's designers in new and refreshing mode, few renderings of which have approached the sheer beauty of this Zephyr. Sealed beam rims from '40 Mercury-Ford require only slight alteration and leading-in for installation on these models. '38-'39--Fill or half-fill rear side windows on two-door models, as previously described, thus creating a roomy sedanette. '38-'41--Remove alternate grille bars. '42--Install '47-'48 grille and treat same. '46-'48--Cover over center grille sections completely, allowing only the broad lateral lower sections to remain. '49--Standard, add chrome side molding strip from '49 Mercury to create double bar effect. Cosmopolitan, remove heavy-appearing chrome molding on front fender.

MERCURY...'39-'40--Coupe can be chopped down in hard-top models more beautifully than most ever models. Carson top convertibles are equally supreme in appearance. Quarter windows on four-door sedans can be filled. Remove chrome and accent plain treatment. Modify depth of coach rear side windows in this model to create a luxury sedanette. '41-'43--Remove alternate grille bars. '46-'48--Remove lower lateral die cast pieces, discard and cut "U" frame, per '46 Chevrolet described above, to accommodate drop in central frame and vertical assembly. Fair down hood to meet. '49--Remove narrow verticals adjacent on either side of each of wide verticals in grille. Fair with lead the sharp front fender line termination on front door into a gentle curve. Grille can be replaced with the very attractive Monarch grille if desired. This is a Ford-made Canadian car. Order complete assembly from Ford Motor Co. Ltd., Ontario, Canada. If a double molding strip effect is desired obtain the complete chrome side strip set intended for the '49 Lincoln Standard and mount as per Lincoln.

NASH...'39-'40--Lower grille by covering portion from top down. '41--Fair over wing grilles and add additional laterals to bottom broad grille to increase air intake capacity and to strengthen appearance. '43-'48--Mount additional laterals above established broad lower grille, after fairing over center grille section. '49--Widen grille by cutting vertically in-two. Weld in center section cut from a second grille of the same type. Die cast welding must be done competently. Resultant wider grille unit fitted into reshaped front aperture will do wonders for the car.

OLDSMOBILE...'37-'38--Can be neatly modernized in two different styles: On sides of grille narrow to width of La Salle or cover several topmost bars of lateral over to lower effect. 6 and 8 cylinder models call for slightly



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different treatment. '39--Full and graceful front fender is an excellent one to build flush headlights in. Narrow high grille sides that wing back by fairing over to create a narrow vertical grille with parallel sides. '46-'47--and Dynamic '48--Remove first and third grille bars, counting from bottom, to achieve a Futuramic look. The Futuramic grille itself may be substituted in these models without too much difficulty.

PACKARD...'47-'49--Fair down center grille aperture after chopping height a lateral or two, per illustration. Grille-bumper integration, as previously described is also a natural.

PLYMOUTH...'39--Fill in one or two groups of stamped louvres from top by bending back and finishing per '38 Ford. Lower or remove name plates. Rework lights into sealed beams. '40--Fair over or reshape flat, several uppermost laterals in wing grilles and use chrome strip on each of remaining. '46-'48--Fair over with sheet metal upper half of grille, per photo, or treat per illustration. '49--Cover upper part of grille and fair down to meet. Double the thin laterals, by adding two more large laterals between existing ones.

PONTIAC...'37-'38--Fill and fair over top strip chrome bars that serve as top of grille and ouvres. Also fill next section down of grille. Rework lights into fenders. '46-'48--Remove second from bottom lateral and move grille assembly down to fit. Fair top areas down to meet. '46-'47--Require replacement of signal lights inboard above bottom lateral to clear bumper guards for visibility. '49--Center additional vertical between each existing vertical in lower air intake aperture.

STUDEBAKER...'38--Extend side panels of hood to narrow vertical grille. '38-'40--Coupe-sedan body style is one smartest stock jobs among its contemporaries. Can be improved by filling quarter windows and drain, making unwindowed rear section nearly half of cab depth. Should also be lowered on frame. '39-'40--Champion, lay pair of Dodge '38 or Buick '37-'38 die-cast grilles horizontally into fenders to supplant stock grille trio. '41--Remove alternate grille bars. When removing fine grille bars of this nature the job is enhanced by later accenting the remaining bars by clipping over them channeled chrome strips which make them more massive in appearance. '47-'49--Champion, '49--Add three laterals to stock grille or untack weld of stock and rearrange, adding only one for a total of three laterals. '48--Remove short center laterals and replace with full width ones. '47--Remove center short laterals and replace with three full-width ones, respaced. '47-'49 Commander, add verticals to total of several times stock layout.

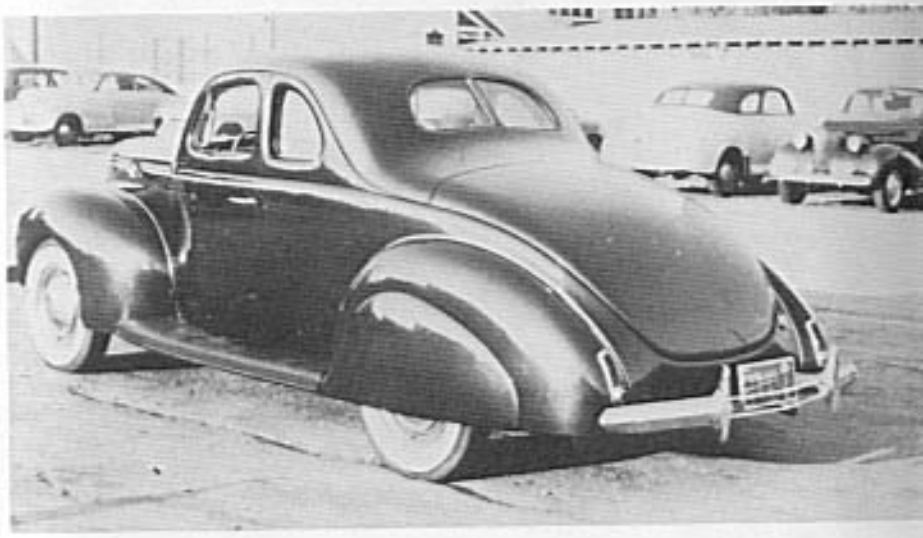
WILLYS...'47-'49--Station Wagon, hand-form aluminum over wood pattern to form overlay for cowl area, per paste-up illustration, to achieve a definitely longer, lower integrated appearance.

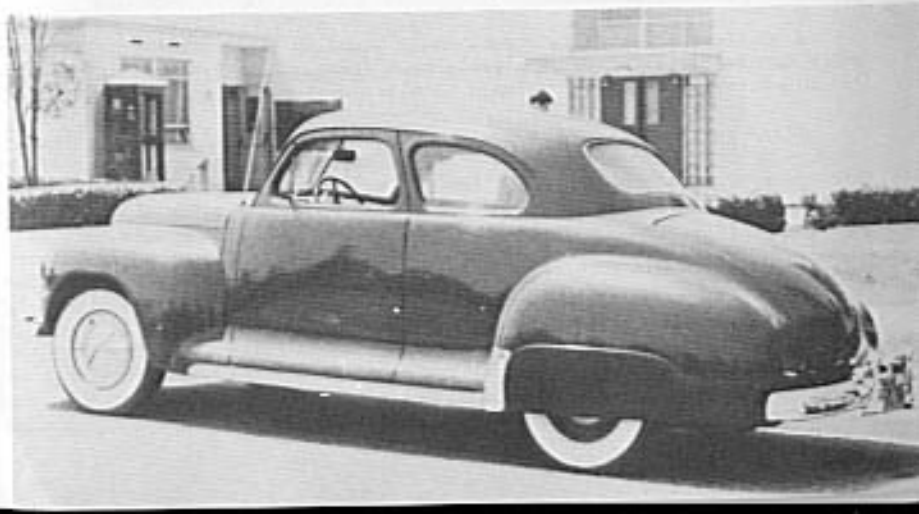
Interiors

INSTRUMENT PANEL TREATMENTS...

A grouping of instruments on the driver's side, with control knobs spread below them--and the rest of the dashboard cleared of everything--makes an attractive arrangement for most models. A speedomether from another model (having the same tire-size and type of cable) will interchange and give an accurate reading. Hence the customizer need not be limited to a regrouping of his stock instruments.

Inside a convertible or other sport job padding serves the dual function of appearing very luxurious, and acting as a safety feature in the form of a crash-cushion. Shaped to the instrument panel by means of several vertical





plywood strips, cut to snug-up to the contour, and tied into a unit by lateral wooden stringer-strips, a light wood frame can be constructed to cover the dashboard, allowing visibility for the instruments. This then mounted to the dashboard by screws from the back side, thru holes drilled at convenient points for a screwdriver underneath. After fitting and mocking up in place, remove the frame and cover with foam rubber, hogs' hair, or similar springy filler. Cover tightly with suitable leatherette by folding the material around underneath and tacking or stapling it there. This is concealed when the final mounting is made by reinserting the screws in the holes previously made when their footing was visible in the mock-mounting operation.

If desired, only a thick ridge need thus be made around the top part of the dash. Much depends on its styling.

Either treatment should include terminal ends not at the dash edges, but faired around by similar methods into the front door panels, in the vein of Buick, Cadillac, Chrysler, etc.

Plastic overlay pieces, such as are stock on '40-'48 Fords, often become cracked. They may be replaced by clear or tinted hand-shaped ones, or by wood with polished natural grain.

Simpler still is a re-use of the original pieces, covering their ugliness with leatherette which can be folded around the back side and cemented. Remounted they become a style note. This partial trim overlay also offers another variation when devising padded cover-panel layouts.

FITTINGS...

Chrome dash control knobs should be standardized. A good universal, with set-screw mounting, is the 1949 Mercury knob. Folding window cranks like those used in late Chryslers add zest and freshness to door panels.

RETRIMMING...

Retrimming door and cowl panels with desired leatherette or trim fabric is a very simple operation. Door panels are generally snapped in place, removal of fittings being the only required step before they can be unsnapped. Cowl panels are similarly mounted, or simply with screws. Recover panel by folding material over to the back all around and cementing it on there with a good trim cement such as 3-M.

CONVERTING SINGLE SEATERS TO CLUB COUPES...

"Room for one more!"

A single-seat coupe is occasionally bound to be overcrowded. Any late coupe can be converted to jump seats or a cross seat. Even earlier models of the mid-thirties can nearly always be altered--though sometimes pretty snugly.

First remove the shelf and other obstructions and appraise the available room. If your coupe already has a divided seat, as Chrysler Motors cars with the spare tire back of the seat, the job will be chiefly one of upholstery. If you have a straight, one-piece seat, make an exchange for slight boot, at a wrecking yard, for the split-back coach model seat of the same make and model. Install. Fill in the gap to rear deck vertically with plywood or heavy fibreboard, at a station slightly behind the rear window. Upholster to the floor all around. Jump seats can be made by sawing a cylindrical, double-ended, fabricoid covered hassock in half and fixing a section in each corner, cut-end down. With scant headroom make the seats quite low. War surplus stores often offer excellent small spring or foam rubber cushions, such as those used in bomber seats, etc. If the model offers adequate room, a shallow

cross-seat may be built in, instead of the corner jump seats. Lay a mat or rubber, for the floor. Your three-passenger coupe will now seat five.

CONVERTING A SINGLE-SEAT CONVERTIBLE FOR JUMP OR CLUB SEATING...

With a single seat convertible of approximate '35-'38 vintage sufficient extra depth can be cut from the top of the turtle back to accommodate jump seats, or even a regular shallow cross seat. The rumble seat cushions may be used. Whatever is installed, it must be put in very low--as much lower than the front seat as possible so that the new top line will be able to retain attractive trim lines, yet allow adequate headroom. On models with a very sloping rear deck the turtle back may have to be built up slightly around the new aft top line--the trailing edge. The rumble seat must be removed, as there will be inadequate space for both club and rumble; footroom in the latter at once being scant. In some cases the club area will cut directly into the rumble lid, in which case the lid should be welded into place and leaded over.

FINEST EXTERIOR CHROME FITTINGS FOR UNIVERSAL ADAPTION...

Any one of the following louvre sets will make a worthwhile custom effect when mounted on your side panels or late model pontoon fenders--in the vein of the Buick '49 venti-ports. Many late models, which rolled from the assemby lines without any type of louvre on the sides of the bonnet, look very well when graced with one of these all-time-majestic louvre groups. Most of them are units, easily demountable and as easily re-installed, the proper hole to accommodate being the principal operation. The few stamped louvres can be cut out and welded to the side panels; use arc welder for this. Best way to get the hole exactly right is to make a pattern from the hole it was removed from by pressing a piece of stiff paper firmly against the edges. This will mark the paper with the precise size and it can be cut out on this indentation and used as a pattern.

CADILLAC '38-'39...Four thick massive bars in groups of 6 and 4 for respective years.
CHRYSLER '35...Large rectangular louvre similar to Pontiac '34 described below.
DE SOTO '36...Set of 6 something like Graham '36, only more tapering and winged, see Graham below.
GRAHAM '36...(Cavalier)...A set of ten vents about 4⅛ x 5⅛ inches, similar in them to La Salle below, but slightly V-shaped.
LA SALLE '35...Set of ten round vents about 4" in diameter which can be regrouped to fit any flat side panel. Any number on a side will make solid effect.
LA SALLE '40...Set of 6 of the Cadillac '38-'39 type.
PONTIAC '40...Set of six slightly off-square vents each with 7 diagonal bars. Size about 3½ x 4⅛ inches.
DE SOTO '40...Set of six similar to Pontiac only less square.
BUICK '49...Set of six or eight round rings, called venti-ports by their ad writers.
PONTIAC '34...This one-piece rectangular, streamline job has thin horizontal bars. It fits tastefully into any flat surface side panel but is pressed out of side panel, requiring cutting to remove and spot on inside to mount, after cutting hole for it to fit thru.

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From the middle thirties till wartime nearly every model was enbellished with some sort of chrome strips. Many of these grille, fender louvre and incidental ornamental finishings are suitable for repositioning on custom jobs having a chrome theme.

From the 8 thin strips that were mounted laterally over the louvre-openings of a Ford '35 to the extra-large, deep side panel mouldings that ran two on a side on the Studebaker '39, there is a wide range of widths, lengths and styles for an equally great range of attractive re-mountings.

Script and gothic lettered chrome plates spelling "Custom", "Deluxe", "Super", "Special", etc. were mounted stock on many models. A pair of the ones desired are readily obtainable from the new car dealer who sold the model. De Soto, for example, has the "Custom" script on a number of its later models.

Production Models Ultimately Influencing All Styling

1934...Chrysler-DeSoto Airflow: Broad hood, sloping deck.
1936...Cord: Fender lights, low grille, advance conception.
1936...Lincoln-Zephyr: Fender lights, advance conception.
1938...Cadillac Sixty-Special: Torpedo 5-window sedan.
1938...Lincoln-Zephyr: Low grille front-end.
1940...General Motors: Tropedo 5-window sedan--"C" body.
1941...General Motors: Sedanette coupe and streamliner 4-door sedan--"B" body.
1941...Packard Clipper: Fenders and body faired into one.
1942...General Motors: Advanced "C" body styling.
1947...Studebaker: First post-war style; engine and seating moved forward for modern trend.
1948...Hudson: Step-down interior with all around frame.
1948...Olds-Cadillac: Futuranic—latest "C" body.

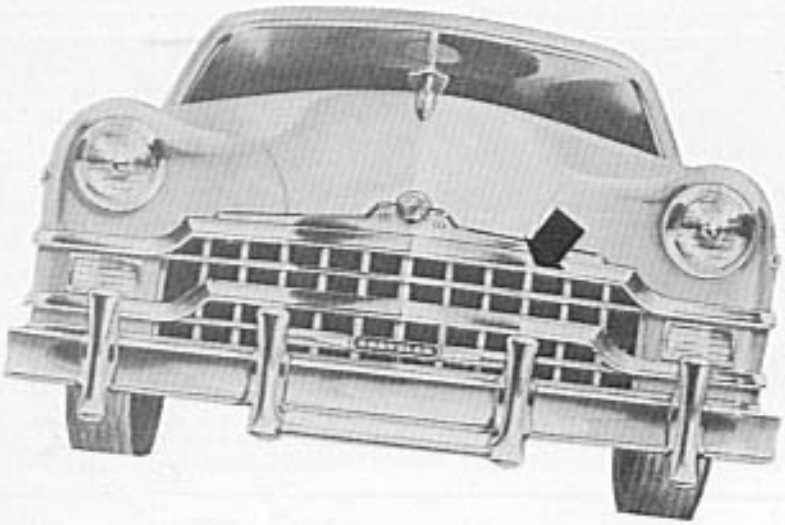
Many early attempts at flowing graceful design incorporated the body and frame unitized construction.

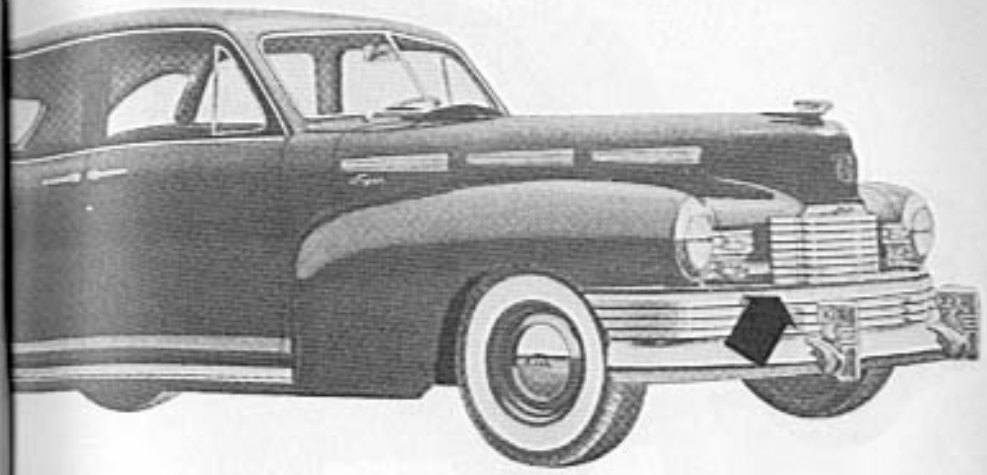
Paste-Up Reconceptions

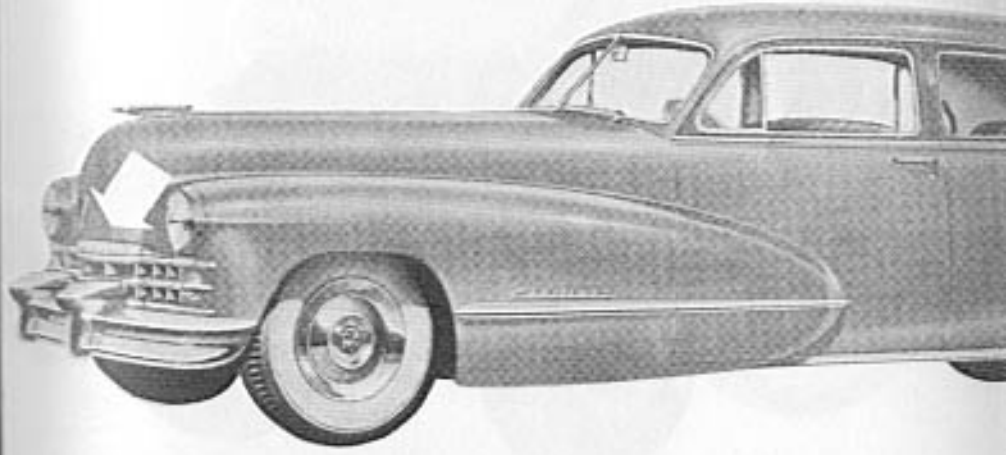
THE FOLLOWING SEVERAL PICTURE PAGES DO NOT DEPICT ACTUAL CARS BUT SHOW ARTISTS' RENDERINGS, AND AN OCCASIONAL PHOTO, WHICH HAVE BEEN ALTERED WITH SCISSORS AND PASTE TO ILLUSTRATE REPRESENTATIVE CHANGES. SOME OF THESE ALTERATIONS—POINTED OUT BY ARROWS—ARE DESCRIBED IN THE SPECIFIC CHANGE SECTION; OTHERS ARE SELF-INSTRUCTING.

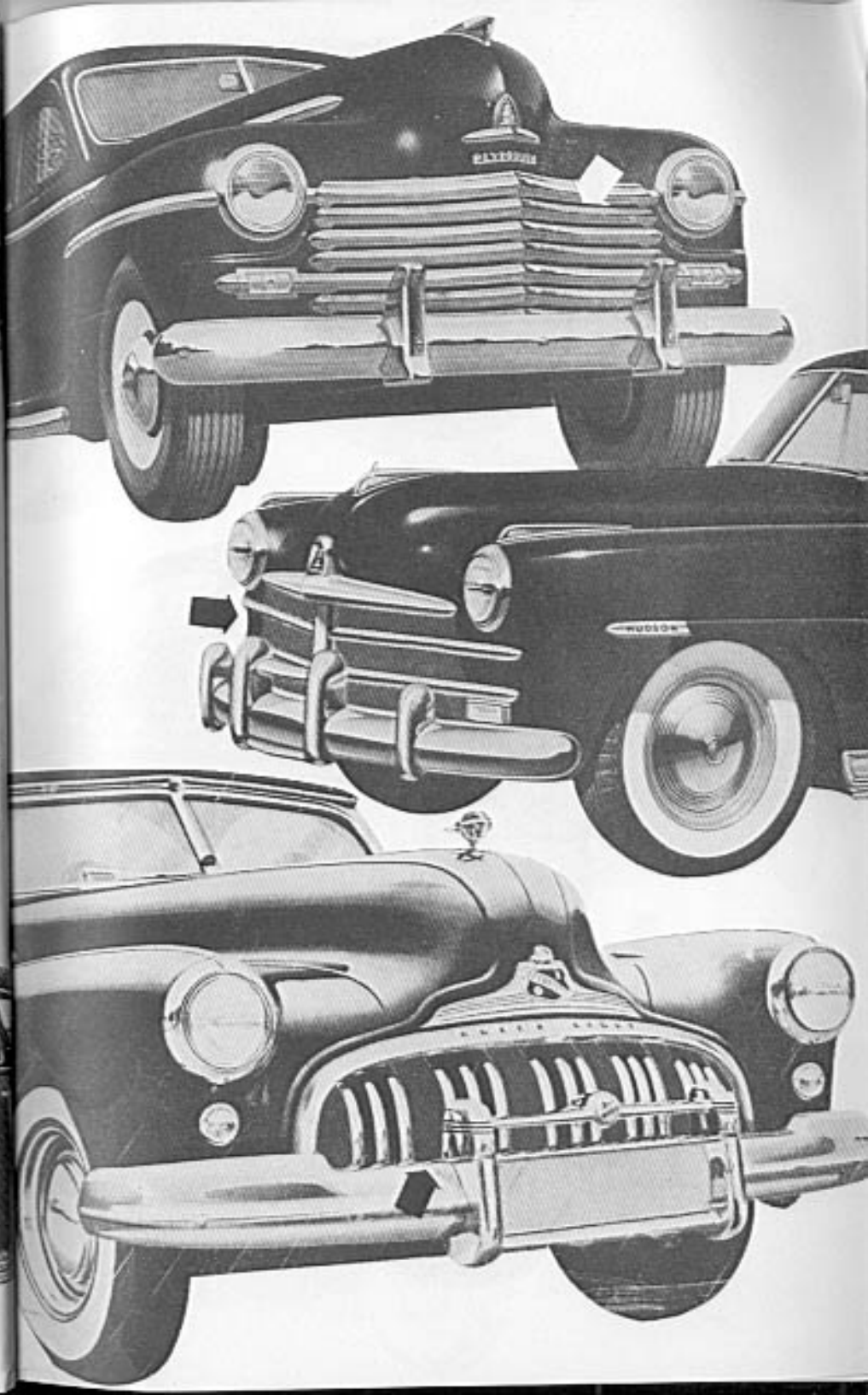
SOME OF THE CHANGES, LIKE THE DE SOTO AND HASH RECONCEPTIONS ARE CHANGES FOR CHANGE'S SAKE, OTHERS LIKE THE NEARLY INTEGRATED BUMPER-GRILLE OF THE FRAZER, AND THE EXTENDED PANEL EFFECT ON THE JEEP STATION WAGON, ARE STRIVES FOR GREATER HARMONY OF LINES. ALL ARE RELATIVELY SIMPLE REVISIONS--NONE BRING A DRASTIC RE-APPORTIONMENT AS SHOWN IN THE LINCOLN ON THIS PAGE.

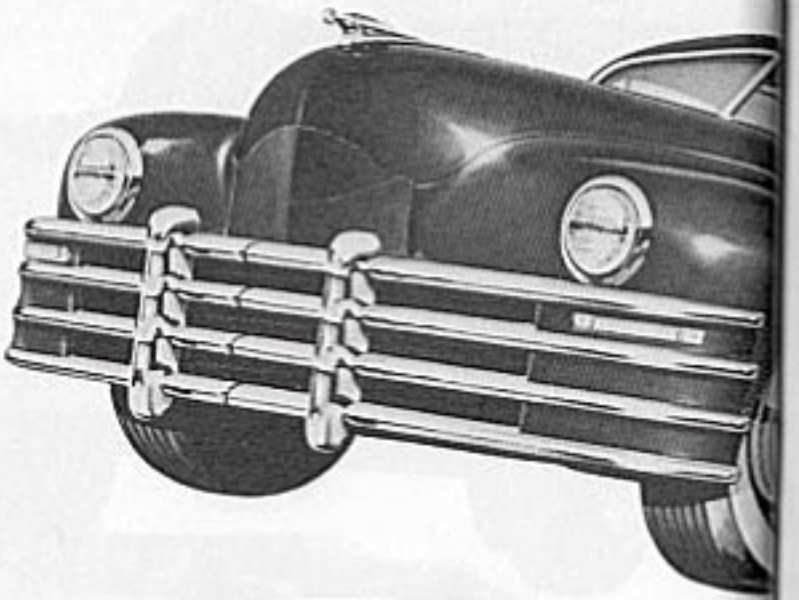
CONCEIVED IN FUN THIS CHOPPED JOB IS SUPPOSED TO SHOW WHAT THE OPERATOR OF A CONTINENTAL WISHES HIS CAR WERE LIKE WHEN HE SIGHTS A NORMAL PARKING SPACE.

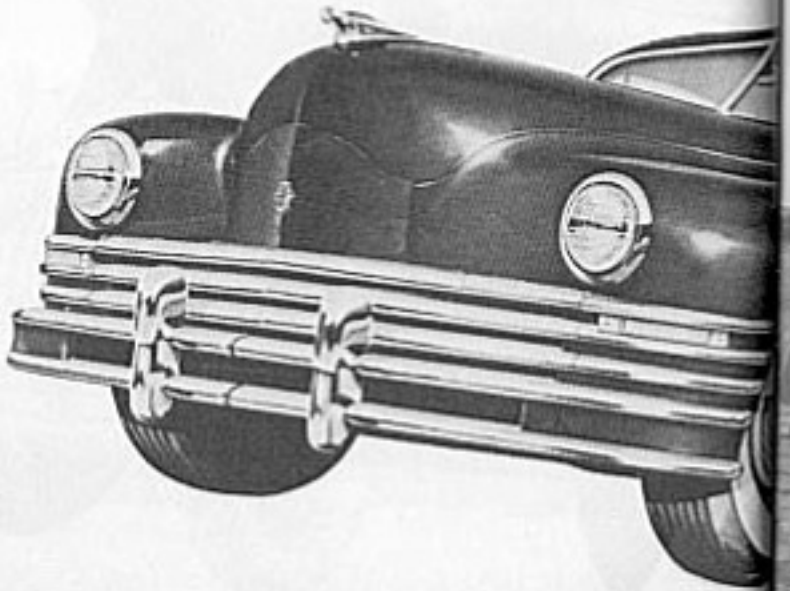












The Story of a Custom Car

HOW ONE JOB WAS DONE

In the following account Mr. Preston P. Hopkins details the thoughtful approach to extensive modifications which culminated in the crisp continental Ford shown here. The car is shown in phantom view on the next page...

"Stationed at Fort Knox in 1944, as an instructor at the Armored School there, I lived about 10 miles off the post. I met a fellow with a 'chopped' '39 Ford. He was a body man; I am a designer. We talked cars. Being partial to foreign types, I drew up several showing what I thought could be done in that line--with stock pieces. He offered to help me build it. So we 'had at it'...

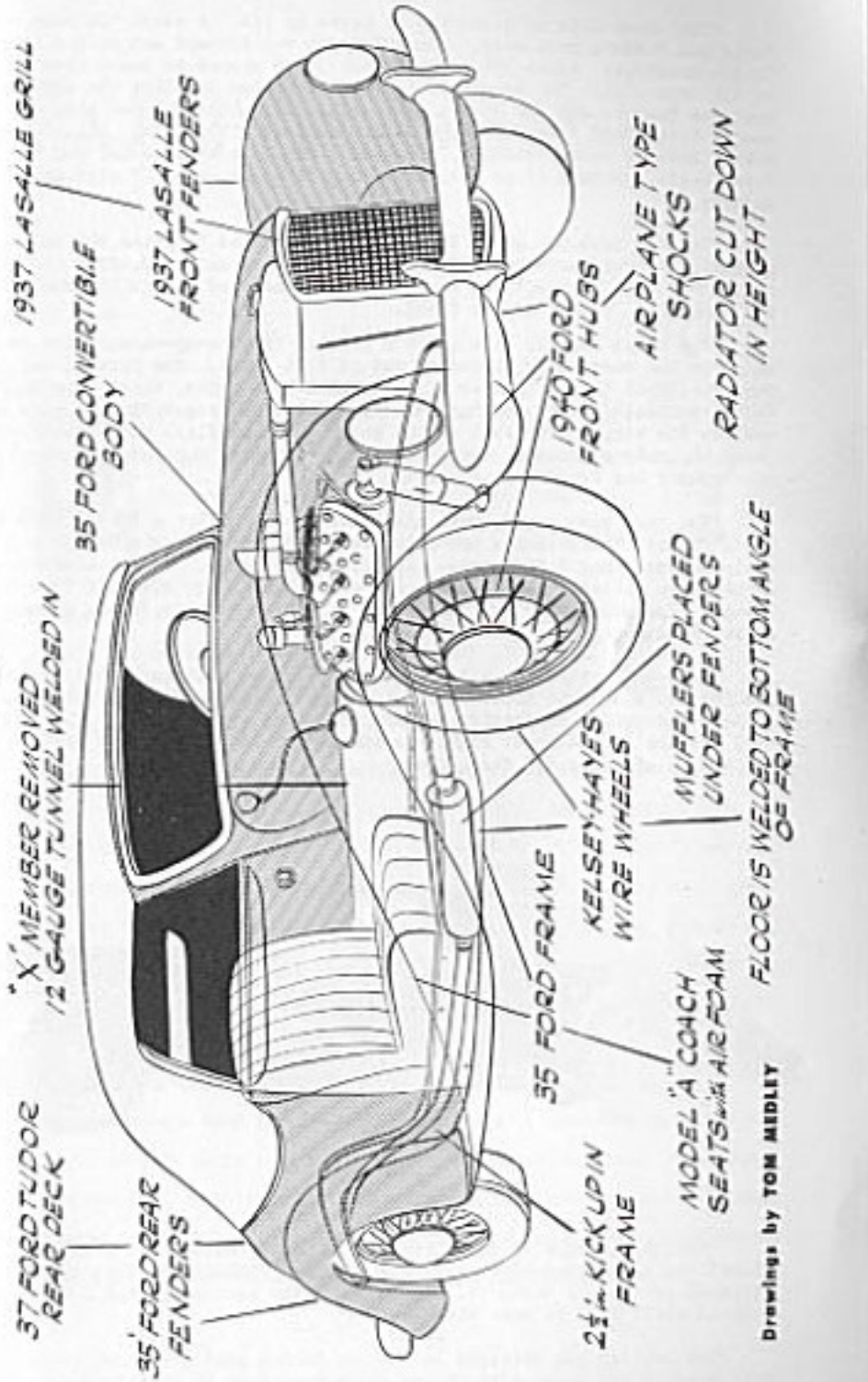
"I started off drawing what I thought could be done--then checked all the wrecking yards around Louisville to see what could be found. Then scale drawings of available fenders, body panels, etc. were made and laid over my original sketch, checking for required trim lines, and compromises necessary on my original sketch.

"We got all the pieces together in a pile, rented space, and started construction. The original pieces were:

'37 La Salle grills, 2 hood shells, hood and front fenders
'37 Ford tudor rear deck
'35 Ford convertible coupe body
'35 Ford frames (2)
'39 Ford coupe (wrecked) for mechanical parts
'40 Ford front hubs
Kelsey-Hayes wire wheels (found in Texas while on a trip)

"I wanted a low car, with a decent sitting position--yet with plenty of head-room--so started off by completely revising the frame. The main channels were dropped 2½", and the front section of the extra frame was welded in 13" ahead of the front cross-member. This allowed room for tie rods, etc. ahead of the motor, and brought the motor back for better balance. 14" were taken out of the side rails, resulting in a wheelbase of 110". The floor, welded on the bottom of the side rails, further reduced the floor height--from stock to about 10", still maintaining 8" of ground clearance. (Continued on page following phantom view)

Phantom View of the "Estrata"



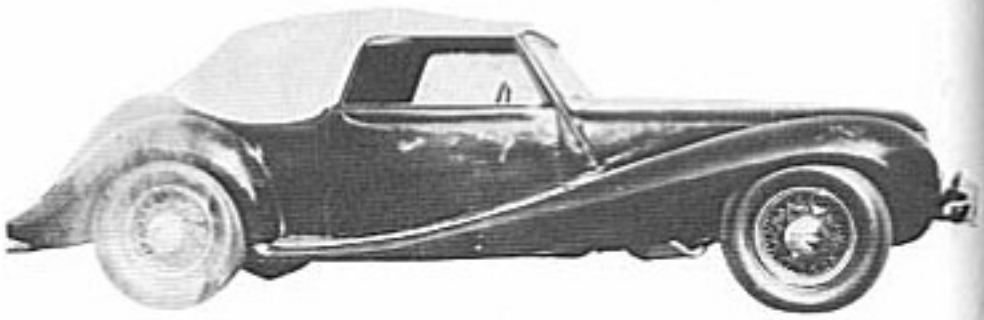
"Then came lots of jockeying of parts to fit. A stock '35 Ford rear floor and fenders were used. The '37 trunk was trimmed and welded to the fender housings. About 10" of body panel were shaped to reach from the trunk to the door sill. The hinge-points were relocated to allow the door to swing over the fenders and the opening was reinforced; '41 Plymouth hinges were used. Doors were trimmed at the bottom and new sills made. Lincoln push-button latches were installed. The dash, complete with radio, was '39 Ford. Front seats, believe it or not, are model 'A' coach, with 3" airfoam over the springs.

"Two top sections of La Salle shells were used to frame the shortened grille, one being inverted. New side panels were made and, after removing the center and side hinges, these were welded to the hood and grille shell to form a single unit, hinged at the front.

"The front fenders were quite a problem in line-up--about five feet added to the rear being formed up out of flat sheet. The forward sections were re-shaped to the contour of the sealed beam units, which were installed from underneath. The steering gear is Hudson; GMC truck tie rod ends are used on the very short front radius rods. Twin mufflers were installed in about the only place they could be hidden and still maintain ground-clearance--under the front fender skirts.

"The rear radius rods were also shortened to allow a low floor and rear seat. Motor, transmission and axles were '39 Ford--using a Harman & Collins semi-race cam, and 3.54-1 ratio with 6:50 x 16 tires. Monroe strut-type shocks were fitted. The clutch and brake linkage were reworked from '35 Ford, using a Plymouth master cylinder. The fan drive was new, being of necessity extremely compact.

"Rear-end ratios being laid out for pleasant cruising above 70, the job was not too snappy in acceleration below 35. Although no sway bars were fitted, the center of gravity was low enough to prevent roll. The longitudinal balance seemed about right--as the car would go where you pointed it and had an affinity for fast turns.



"Though I'm sure we must have put in nearly an hour of work on her--everything considered--for every one of those 2000 pounds that comprised the finished job it was worth it. She was a lithe performer, and a happy memory. I would still like to have the 'Jewel'."

The builder has referred to the car in the past tense not because it has been wrecked but because it it has since been sold to another party.

THE AUTOMOBILE

By JOHN O. MUNN

I AM SPEED MADE SUBJECT TO HUMAN will. I give mankind dominion over distance. I open the avenues of all the world to humanity. I enlarge the radius of human life. I expand the horizon of human opportunity. I give to man a locomotion as rapid and as subtle as his desire. I give to his body the speed and mobility of his ambition. I promote peace and good fellowship in the human race, for I have bridged the spaces that kept men isolated and ignorant of each other. I hurry the master minds of the world to conference places where the destinies of nations are determined. I snatch the dying from the scythe of Death and outrun him a thousand times a day. I am the silent partner in all the business houses of the world. I save hours out of man's work-day and give them to him to play with. I make man free of all the far places of venture, recreation and delight. I am the most capable and constant servant in the homes of men. I bear the sick swiftly and gently out to nature whose touch puts the roses into cheeks fatigue has faded. I take men from their stifling cities of steel and stone out to the murmuring streams and wind-swept meadows. I cement the ties of home and kinship with the blessing of frequent reunion and concerted recreation. I give supremacy of locomotion to man whom nature made slower than the beasts. I am individual transportation free of all laborious limitations. . . *I am the Automobile.*

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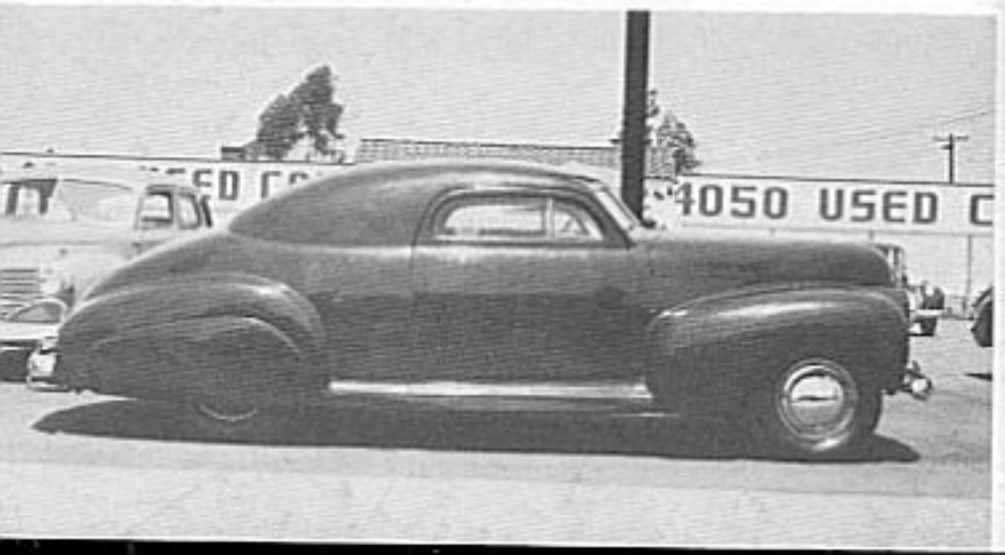
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"There is no intellect that does not desire to create continually, and the pleasure in the perception of a new or unaccustomed form of unity is comparable to that of original achievement."

HERBERT LANGFELD, THE AESTHETIC ATTITUDE

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