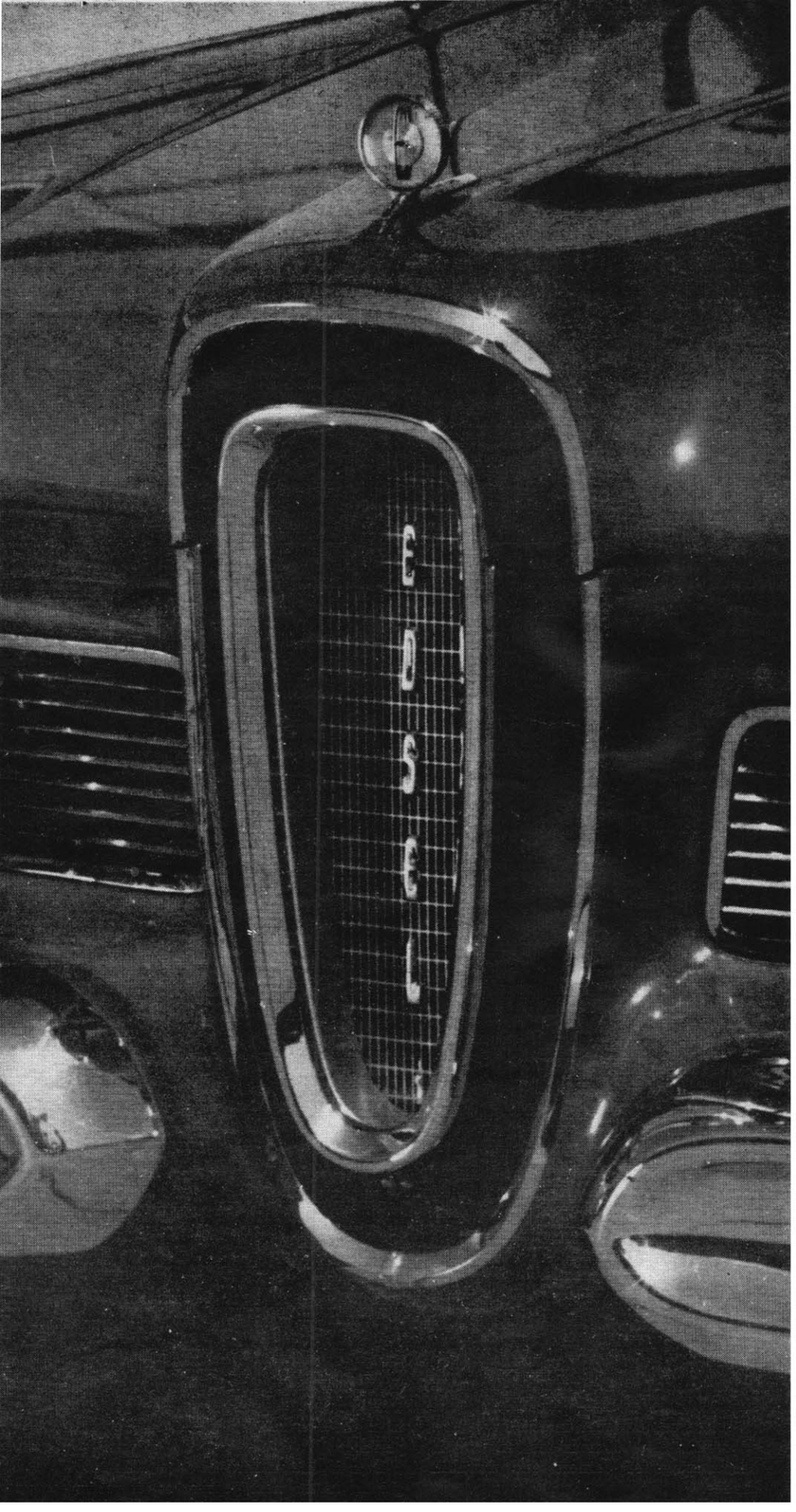


Last At The NEW EDSEL

CREATION of a brand-new make of automobile for the U.S. automobile market is a gigantic undertaking. It requires literally millions of hours of preparatory work, years of planning and research and huge amounts of money. Even with all this, such an undertaking is essentially a big gamble.

Since this is the case, why did Ford elect to introduce the Edsel?

Major reason was, obviously, to permit the company to increase its share of the market. Ford realized it was operating under a handicap with only one car, Mercury, in the medium price field. General Motors has had three makes in this bracket and Chrysler has two.

Studies showed Ford was at a severe disadvantage in capturing buyers "trading up" from low-priced cars in comparison with competition.

They revealed GM was retaining more than 85 per cent of Chevrolet owners going into more costly cars. Nearly 50 per cent of Plymouth owners trading up were staying in the Chrysler family. In contrast, only about 26 per cent of Ford owners trading up were buying Mercurys or Lincolns.

To increase its penetration in the medium-price class Edsel planners have designed four series of cars, plus a station wagon series, which will cover a broad area of this price range. In fact, they report, the new make will cover a range in which 60 per cent of new cars sold in recent years falls.

Lowest-priced Edsels, in the Ranger series, will be competitive with highest-priced Ford Fairlane models. The same will be true, to a lesser degree, of Pacer models. In fact, several Edsel models equipped with only a minimum of extra-cost accessories will actually sell for a lower price than more completely equipped Ford Fairlanes.

The same thing, in reverse, will be true at the other end of the price scale. Most costly Edsels will be less expensive than highest-priced Mercurys, but noticeably higher than models in Mercury's price-leading Monterey series.

No official prices had been released by Edsel at this writing, but it seems certain that factory suggested base prices of Ranger-Pacer models will begin in the vicinity of $2500 and go on up to about $3100 or so. Corsairs will start at about $3000 and go to around $3400. Citations will go from there up to the $4000 neighborhood.

It must be emphasized that these are factory suggested prices only and include federal excise tax and suggested dealer preparation charges. They do not include freight, state and local taxes or extra cost accessories.

It should also be pointed out that attempting to pin down *any prices* on cars today is almost impossible due to discounting, over-allowances, packing and other practices now common. The vast array of accessories is another factor which makes it difficult to give a specific price on a specific model with definite list of accessories.

Exactly what a certain Edsel model will cost you will vary with your locality, the condition of the auto market there, your dealer's eagerness to move cars in his area and many other factors. Only a trip to an Edsel dealer will tell you exactly what one of these cars will cost you.

What are Edsel's prospects for success? An accurate answer to this would be worth a lot more than $64,000 right now! Only time will tell for certain. Ford would hardly have invested some quarter of a billion dollars, however, without being rather certain of the gamble paying off—and obviously will go to great lengths to prevent a failure.

Companion articles give styling and engineering details, so they need not be repeated. Let it suffice to say that Edsels would seem to be at least as salable as most makes against which they compete. While there is little that is radical or startling about them, they have many good selling points.

(Arguments about Edsels' lack of anything greatly out of the ordinary have already started. Some say this will be a serious handicap in establishing the new make. Others reason that most buyers will be more likely to buy a new make if it does not appear overly strange to them. What's your opinion?)

One important key to the success of the new Ford Motor Company division is continuation of a good market for cars in the medium price range.

Sales of cars in this class, in general, have slumped slightly in recent months. GM cars, in particular, have been hurting and there are many in the industry who feel that this alone is a big factor in the overall softening of the medium market.

(There are even a few who feel Ford missed the boat by not making its new car a small, $2000-or-under economy model. This is an interesting idea and possibly has validity. General feeling in Detroit, however, is that there is not yet enough concrete proof that there is a market of sufficient volume for such a car to warrant gambling on one.)

One thing is certain—the Edsel will make the automobile business more competitive than ever. Since it is unlikely that it will create a great number of sales that would not have been made without its introduction, almost every Edsel sold will be to a customer who would normally have purchased another make.

This will work to the advantage of the car-buying public, or should. Every company, every dealer, every salesman in the business will be working just a bit harder to sell cars. All will be trying to make their products a bit more attractive to potential customers.

Addition of another make to the list of American-made automobiles is a good thing, a healthy thing. It follows a period in which just the reverse happened too often. We have seen many makes disappear or lose their real identity in the past five years or so.

The following pages offer a detailed look at this new make. They reveal details of Edsel engineering and styling, tell you what it's like to drive these cars. After reading them you should be in a better position to judge what results Edsels will have on the future—and vice versa.

TOP EDSEL IS CITATION SERIES. AMONG ITS DISTINGUISHING FEATURES IS TRIM PANEL INSERT IN REAR FENDER CHANNEL.

. . . The Styling Of The Edsel

EDSEL stylists were faced with quite a task. They had to produce a distinctive car, one not easily confused with existing makes. It could not be *too* different, however, or it might scare off potential customers not ready to accept radical change. In addition, there were certain components which had to be used for economic reasons. These factors must be kept in mind in analyzing the styling of this brand-new make of automobile.

Front and side appearance of all Ranger, Pacer, Corsair and Citation models is essentially the same. Nor are there major differences in rear end styling of the four series. Except for size, in fact, only important difference between Ranger-Pacer models and Corsair-Citation series are in the upper body and roof. A study of the Edsel's grille can be found on pages 48-51.

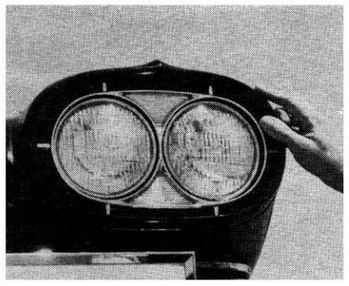
Corsairs and Citations use a modified version of the Mercury chassis and the two makes share a common basic body shell. The relationship between these Edsel models and Mercurys is evident only because of similar roof designs. Note the thin, flat lines of the roofs and channels sculptured into the metal. All Corsairs and Citations, except convertibles, of course, are

REAR END STYLING is widely approved, but is not too different from what some other '58 makes will offer. Most unusual is way in which tail lamp assembly runs into deck lid.

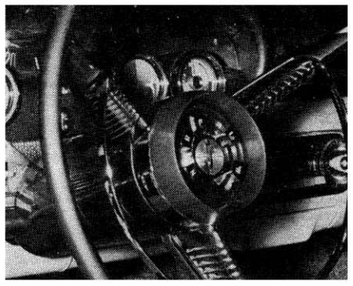
CORSAIR SERIES IS PRICED NEXT TO CITATION, SHARES BASIC MERCURY BODY SHELL.

EDSEL SPECIFICATIONS

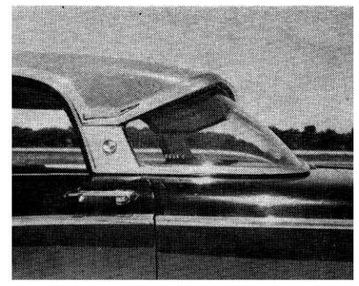
Wheelbase: 118 & 124 inches
Length: 209 & 218 inches
Height: 56 inches
Width: 79 inches
361-cubic-inch V-8
Bore & Stroke: 4.05 x 3.50
Compression Ratio: 10.5-to-1
Horsepower: 303
Torque: 400 @ 2800 rpm
410-cubic-inch V-8
Bore & Stroke: 4.20 x 3.70
Compression Ratio: 10.5-to-1
Horsepower: 345
Torque: 475 @ 2900
Transmissions
Manual
Overdrive
Automatic (torque converter)



DUAL HEADLIGHTS, of course, but better than pod arrangements employed elsewhere; note that the lamps are not hooded.

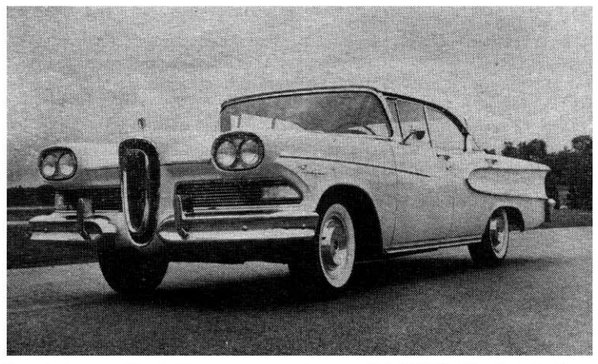


PUSHBUTTONS for automatic transmission are mounted in the hub of the recessed steering wheel. It's an improved arrangement.



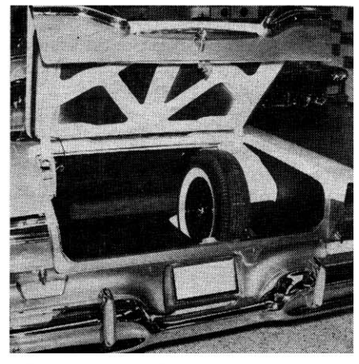
GLASS AREA is abundant in the Edsel, roof points are thinner. The roof overhangs the rear glass with a pronounced lip edge.

PACER SERIES is the top series in the lower half of the Edsel lineup. With the Ranger, it shares some basic Ford components. Bumper guards are mounted inboard. Grille is only radical touch.



RANGER is the designation for the lowest-priced Edsel series, one that in many instances could be priced under the more expensively equipped models of Ford, Chevrolet, Plymouth, etc.

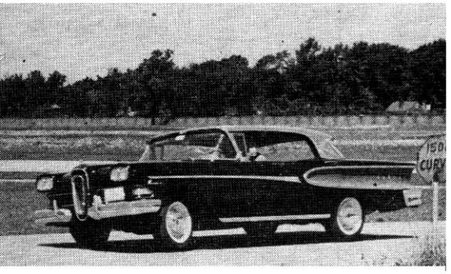
STATION WAGON series consists of all four door body types, except for one two door. Other major difference is in six- or nine-passenger seating. This one is highest priced of the five available. Rear fender treatment differs from passenger cars due to body configuration.



TRUNK interior of Edsel is quite conventional, fairly spacious. The spare is carried in a well in the normal upright position.

OUTSTANDING is the word used to describe Edsel's seating, which is especially comfortable. Seat belts are not standard.

IN A TURN, at speed, the Edsel shows some body roll, but the driver found it held to the course and felt no insecurity.



DRIVER'S REPORT ON

THE EDSEL

By Ken Fermoyle

SMOOTH is probably the best single word to use in describing how the new Edsels feel to a driver. It tells pretty well how the cars feel on the road, how they perform and how the controls and transmissions work.

Engineers who were in on the development of these newest Ford Motor Company products seemed mighty pleased to hear that this was my first impression of their babies. They had been working for several years to create automobiles with just that idea in mind.

The first Edsel I drove was a Corsair four-door hardtop. Corsairs are the second highest priced models in the line, coming just under Citations—and only slight differences in trim set the two apart.

In a briefing before going out to the test track where the actual driving took place I had been told, with some pride, about a new contour seat design developed for all Edsels.

As I slid behind the wheel of the Corsair I decided there was reason for the pride. Edsel seats are about as comfortable as anything I've ever sat in. They support both seat and back naturally, fitting in nicely with normal body contour.

After being checked out on the various controls and instruments, especially the push button transmission controls mounted in the steering wheel hub, we took off for a test drive.

The big 410-cubic-inch engine pulled the car away from a standstill so smoothly—there's that word!—that I did a double-take at the speedometer just a few seconds later.

The automatic transmission, a modified version of the familiar torque converter and three-speed unit used for some years on Ford products, went through its shift points almost imperceptibly.

It's been mentioned that the ride is smooth and that's about the only way to describe it. The suspension system contains no radical innovations, having a trailing arm, ball-joint setup with coil springs at front and long 55-inch by two-inch leaf springs at the rear. It has been refined to a point where it does a truly admirable job.

Low spring rates and careful attention to engineering detail make the ride soft and comfortable, even on beatup road surfaces. The 124-inch wheelbase insures against fore-and-aft pitching under practically all conditions.

As might be expected, the emphasis on comfortable ride has an effect on handling qualities. There is noticeable body lean during rapid cornering. This is not a car to be horsed around bends at high speeds with impunity—nor was it designed as such.

We checked out the Corsair on the handling course at the Dearborn test track. This is a two-lane blacktop road with a series of perfectly flat unbanked turns of varying radii. It shows up quickly any deficiencies in overall handling and steering.

Tightest turns on this course have a radius of 150 feet and going through these at about 40 mph produced quite a bit of body roll. Tires squealed an audible protest at this treatment, too. The Corsair stuck in its lane, however, and generally felt at least as good as most recent models in its price, size and weight bracket.

The power-assisted steering was very light, yet transmitted a respectable amount of road feel. No special brake checks were made, but there was definitely plenty of stopping power for all normal driving. Brake lining area is about average for a car of this weight, but fade would very likely be a problem under some abnormal conditions—a long downhill run which required continuous braking or a series of fast stops from fairly high speeds, say.

Acceleration tests proved the Corsair to be a very deceptive car. A practice run from 0-to-60 mph, with no special effort at an optimum speed takeoff, netted a time of under nine seconds—allowing for speedometer error of eight per cent. Further runs produced an average 0-60 time of 8.5 seconds.

Impressive thing was the seemingly effortless fashion in which the Corsair performed. It was hard to realize it was moving out as fast as that since there was little sensation of rapid acceleration. It did the job quietly, easily and an absolute minimum of fuss.

The big 410-cubic-inch V-8 just loafs along through most of the speed range, thanks in large part to the very high 2.91 rear axle. There is plenty of reserve power for passing even at the highest usable cruising speeds. Top speed was not checked since it is of only academic interest for the most part, but is well above the maximum most drivers ever will or can use.

After completing Corsair check rides, we switched to a Ranger. (The Ranger series is the lowest priced in the Edsel line.)

Interior appointments were not as luxurious as in the Corsair, but certainly weren't anything close to austere. Instrument panel layout and location of controls are similar.

Shorter and lighter than the Corsair, the Ranger is the more agile of the two. Its ride is different, not quite as soft, but can hardly be faulted on a comfort basis.

Because it uses essentially the same chassis as current Fords, it is difficult not to make a comparison. My impression was that the Ranger has a slightly softer ride, is just a notch below Ford in handling. Anyone who has driven many miles in a 1957 Ford will note the family resemblance between the way the two cars feel on the road, however.

Ranger performance was just slightly below the Corsair. Standard 0-60 runs averaged just over nine seconds and there was plenty of snap for fast, safe passing at highway cruising speeds.

Both Edsels checked had push button transmission controls mounted in the center of the steering column, of course. This seems to be a more logical location for them than those used by most other makes. They're convenient, easy for the driver to reach—but so is a normal column-mounted lever, and it is surely less complicated in operation. It's difficult to understand or justify the trend to push button transmission control, except as a sales and advertising gimmick.

To sum up, sessions with these two Edsels indicate they will be highly competitive with other cars in their class as far as on-the-road driving qualities are concerned. Other makes might handle better, but not give quite as comfortable a ride. Some might perform better, but not as smoothly. These things will balance out on an overall basis, however. •

EDSEL STYLING *(Continued)*

hardtops with no center post. All have the visor-like roof overhang over the rear window.

Rangers and Pacers share the same basic chassis and body shell used for Ford Fairlanes. Tops of these cars slope off more gradually at the rear and rear windows are set at a sharper angle than those mentioned above.

Edsel station wagons also betray their kinship to Ford wagons in the roof area. The same characteristic "step" is moulded into the top of both makes. As with other Edsels, however, this is just about the only visual evidence of any connection between the two makes.

Edsel wagons are the only wagons in the line which have fins or vertical blades at rear. A look at the rear view of other models reveals something of a gull-wing effect. From the depressed center section of the deck lid the sheet metal curves up, flattens and extends out over the sculptured section in each rear quarter panel.

Citations can be spotted quickly because they have trim panels mounted inside the large projectile-shaped channels in the rear fenders.

Going back to the front, we find an interesting feature. Note how a second chrome ring is mounted inside the ring surrounding the mesh-type grille. Edsel designers call that an "impact ring" and, presumably, it will serve as added bumper protection in case of collision. Just how much force it is capable of standing is questionable, but it could be of value in minor impacts. Another Edsel innovation is an accessory bumper guard with a hard rubber insert. This will prevent denting or scratching chrome guards in minor contacts with or while pushing other cars.

Parking lights and turn signals are mounted in the outer edges of the slotted horizontal grille sections. They wrap around into the side of the fender, so they can be seen from the side as well as front of the car.

Edsels, like other Ford-built cars, have front-hinged hoods. They have peaks built in to follow the vertical grille contour. This is quite a change from the broad, flat and low hood lines we have been seeing in the past few years and should result in a more rigid hood.

All Edsels have a cowl air intake to provide ventilation for the passenger compartment. Upper cowl area serves as an air plenum chamber.

Rear view of Edsels is relatively clean and uncluttered in appearance. The one-piece wraparound bumper appears sturdy and substantial and there is no phony grillework or other bric-a-brac tacked on. The gull-wing rear lights are in two sections. Half of the tail light at each side is actually mounted in the deck lid while the other half is in the fender.

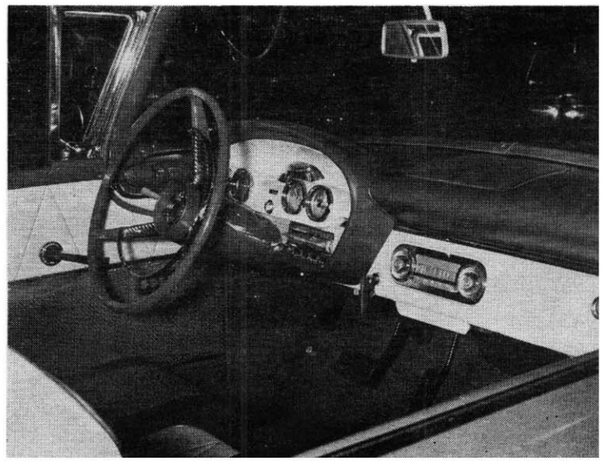
(It's interesting to note that even though an Edsel owner might be carrying something in the trunk with the deck lid raised, the immovable portion of the light mounted in the fender is still adequate to satisfy legal requirements in all states. Designers must think of everything!)

Outboard portion of the tail light is a combination tail light, stop light and turn signal. The inboard section merely provides added tail light illumination.

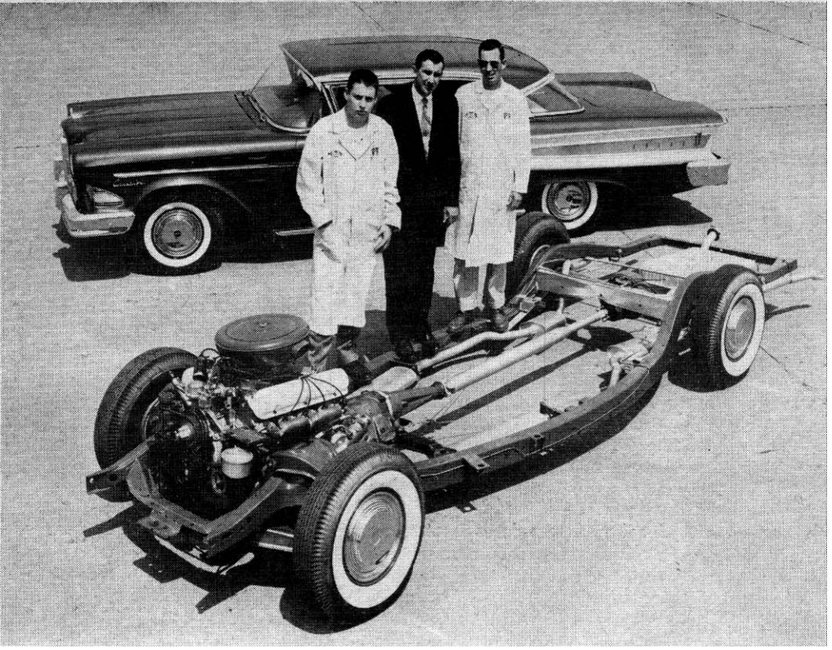
Edsel interiors are available with such a wide variety of materials, colors and design patterns that it would be impossible to attempt to describe them. Top-priced Citation models are especially lush—as might be expected; their interiors rival those of highest-cost luxury cars of a few years ago.

Instrument panels seem well designed, both from a functional and a styling standpoint. If anything, it is a bit too elaborate and could be confusing to a driver not accustomed to it. The fact that a large number of accessory items—tachometer, automatic chassis lubricator, oil level indicator and so forth—are available tends to make it even more complicated.

Contoured seats are an Edsel feature which should prove popular. All Pacer, Corsair and Citation two-door models have seats which are split, ⅔-⅓ fashion. This not only makes it easier to get into rear seats but makes it more comfortable for the middle passenger when three are riding in front. •



DASH PANEL of the new car includes a huge shade over the instrument cluster. Several units are unusual in a car of this type: tachometer, oil level indicator, odd speedo.



EDSEL FRAME is conventional with current Ford Motor Company practice of bowing the heavy boxed side rails out for increased foot room and using fewer cross members. Edsel uses Ford and Mercury frames for its four models, with very minor changes.

EDSEL ENGINEERING

Innovation without revolution appears to have been the aim of Edsel engineers in their task of readying a brand-new automobile for the market. The approach is logical and has been well carried out. The cars abound in interesting mechanical detail, but contain little that can be termed radical or completely untried.

EDSEL engineers, in developing their new products, did not have to start completely from scratch. Almost, but not quite. They had the vast technical resources of Ford Motor Company and their brothers-to-be divisions to draw from. Not to take advantage of the fact would have been unwise, from both a design and an economic standpoint.

Thus, it's not surprising that there are family resemblances in the engineering of Edsels and other Ford-built cars. As in any family, there are personality differences which set Edsels apart.

First thing to be understood is that there are two distinct breeds of Edsels, as mentioned elsewhere in this report. In fact, differences between Ranger-Pacer models and Corsairs and Citations are more pronounced in the area of engineering than, say, in styling.

(Station wagons have a shorter wheelbase than any of the other four series which almost qualifies them as a third breed, but they actually are closely akin to Rangers and Pacers.)

All Edsels use ladder-type frames with bowed-out side rails, similar in design to those introduced by Ford and Mercury last fall. They have five cross members joining husky box-section rails—except convertibles, which have X-shaped members replacing the front three cross members to get back some of the rigidity sacrificed for roofless design.

Another feature common to all models is the basic suspension system. It consists of a trailing-arm, ball-joint design with coil springs at front and leaf springs mounted outboard of the frame in conjunction with angled shocks at rear.

Although this design is basic, front and rear suspensions are tailored to various models. That is, shocks and springs are calibrated to give desired ride and handling qualities to Edsels of different weight, wheelbase and the like.

(There are some who will be surprised that Edsel does not offer some form of air suspension, but it is an open secret in Detroit that this is in the works. It likely will appear later.)

Offset hypoid-type gears and straddle-mounted pinions are used at the rear axle in much the same fashion as 1957 Fords and Mercurys.

Station wagons have a 116-inch wheelbase and overall chassis design appears to be almost identical with current Ford Custom models. Rangers and Pacers have the same wheelbase, 118 inches, as 1957 Ford Fairlanes and use essentially the same chassis.

Corsairs and Citations are mounted on a 124-inch wheelbase—two inches longer than 1957 Mercurys. Again, basic chassis design is similar to Mercury, but frame rails have been extended and rear cross members lengthened.

Resemblance to current Fords and Mercurys, however, ceases when you get to the engines. Both the 361- and 410-cubic-inch V-8's are completely new.

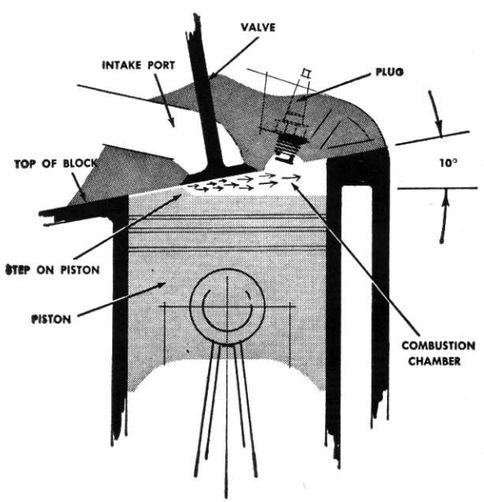
The larger engine is the more interesting of the two. To begin with, it has no conventional combustion chambers cast into cylinder heads. Instead, the surface of the head is machined flat and the block is cut at an angle so the combustion chamber is formed *within* the block itself. The chamber is shaped like a cylindrical wedge and the top of the piston is formed to produce the desired configuration and turbulence within it.

Actually, a step is cast in the top of the piston. This step drives into the narrowing wedge of the chamber, forcing the fuel mixture across the spark plug electrode at high speed. Maximum combustion is claimed, due to speed and turbulence of the mixture at the moment of ignition.

Since the flat surface of the head and the cylinder walls are machined, this design results in the equivalent of a fully machined combustion chamber without the expense of machining out an irregular area cast into the head. It should insure more uniform combustion chamber sizes from cylinder to cylinder within a given engine than in the past. It also puts the spark plug in a more accessible spot than has been the case with earlier Ford-built overhead V-8's.

(This design eliminates the possibility of head milling to raise compression ratios, of course. On these engines it will take special pistons or the old "cheater" dodge of milling the block to increase compression!)

Careful attention has been given to temperature control in all phases of these engines. Water jacketed intake manifolds, three-stage cooling systems and thermostatically controlled air intakes are examples of the work done by Edsel engineers in this respect.



EDSEL ENGINE has no combustion chamber cast into the head. The head surface is milled flat and the block is milled at an angle to the bore center line which results in a chamber in the bore.

EDSEL LINEUP

Ranger Series
- Four-door hardtop
- Four-door sedan
- Two-door hardtop
- Two-door sedan

Pacer Series
- Four-door hardtop
- Four-door sedan
- Two-door hardtop
- Two-door convertible

Corsair Series
- Four-door hardtop
- Two-door hardtop

Citation Series
- Four-door hardtop
- Two-door hardtop
- Two-door convertible

Station Wagon Series
- Two-door six passenger

Water from the engine cooling system circulates through passages in the intake manifold. This eliminates the conventional heat riser and the possibility of its moving parts sticking. It's claimed that the water jacketed manifold will insure better vaporization of the fuel air mixture, and easier cold starting.

Three-stage cooling, in combination with water jacketed intake manifold, is another factor in improving cold starts. The 410-cubic-inch Edsel engines have three thermostats calibrated to control the cooling stages.

It works like this:

When the cold engine is started, coolant circulates only within the heads and intake manifold. This insures it will warm up fast to efficient operating temperature. As this point is reached, a thermostat opens and allows coolant to flow through the block as well as the head and manifold.

As the temperature of the coolant in this area reaches the proper point, a thermostat in the intake manifold opens and permits it to flow through the radiator core and the entire circulation area comes into normal use.

The thermostatically controlled carburetor air intake is similar to the system used by Lincoln and Mercury. It supplies air to the engine either hot, from under the hood, or cooler, from outside the engine compartment, according to its need.

The 361-cubic-inch V-8 is more conventional in design but has quite a few differences from current Ford-built engines. It does, however, have a conventional wedge-shaped combustion chamber cast into the heads.

Both engines use four-barrel carburetors, though a different type is used for each, and both have hydraulic tappets. Single exhausts are standard, duals optional, for both.

Compression ratio on the 361 engine is the same, 10.5-to-1, as for the 410 V-8. Both engines are well over-square. The larger engine has a bore of 4.20 inches and a stroke of 3.70 inches while bore and stroke of the smaller engine are 4.05 and 3.50 inches respectively.

Edsel V-8's have a better horsepower-per-cubic-inch ratio than engines used in most of the 1957 Ford lines.

No optional power-boosting equipment has been reported available for either engine at this writing. This is no doubt due in part to the industry's attempt to play down speed and power.

The two engines *are not* interchangeable between series. The big engine is available only in Corsair and Citation models while the 361-inch engine is used in the shorter wheelbase cars.

A feature Edsel engineers are very happy with is the self-adjusting brake design which will be used on all of the division's cars. A rather simple pawl and ratchet device automatically maintains proper clearance between brake shoe lining and drum surface.

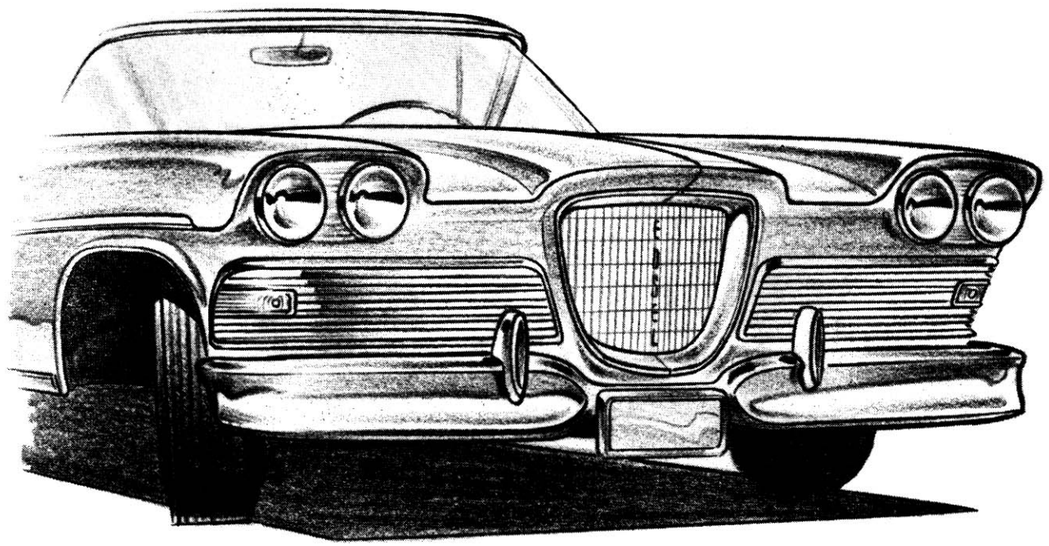
The self-adjusting mechanism has been set up to operate only when the car is backed up and brakes applied. This eliminates the possibility of misadjustment under conditions during which the drum might be abnormally expanded while in forward motion—say, in severe downhill braking. If the adjuster operated in such cases the brakes would be set too tight and would bind when drums cooled and returned to normal size.

This automatic adjustment feature has several virtues. It eliminates the necessity for manual adjustments—too often made on a by-guess-and-by-gosh basis—for the life of the linings. It also guarantees practically a constant pedal pressure and reserve, making possible a lower pedal height. This puts the pedal more on a plane with the accelerator and reduces brake reaction time.

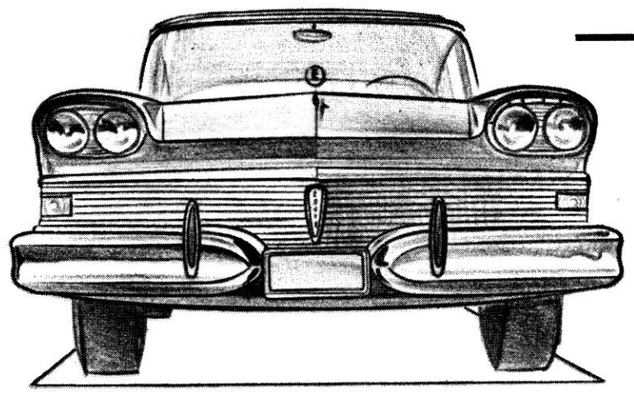
Only disadvantage is that the driver will get no indication of lining wear due to a gradually sinking brake pedal. This is only a minor problem, however, and can be taken care of by pulling a wheel periodically to check lining condition.

Push button transmission controls mounted in the steering wheel hub actuate the automatic transmission electrically rather than mechanically. The control panel does not rotate with the steering wheel, but remains in a stationary position at all times.

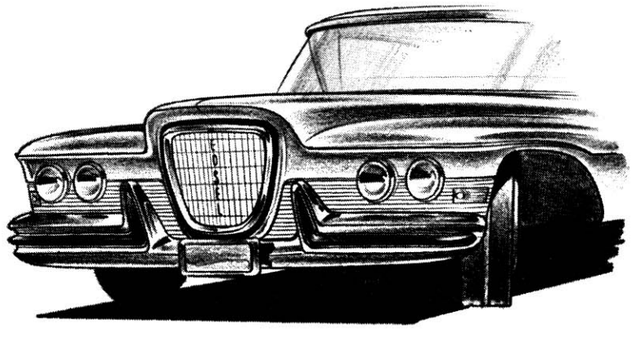
A new recirculating ball-and-nut steering gear is used on all Edsels. It transfers the rotating force of the steering shaft into the linear motion needed to move the front wheels thru free rolling balls. Because a ball will roll with little friction, this type of steering gear is very smooth and efficient. The design is Ford's own, so it is not unlikely that a similar system will be used on other Ford-built makes for 1958. •



EVOLUTIONARY TREATMENT of the 1958 Edsel front end could be something on the order of this illustration by Bob Gurr. Retaining the dual headlights and current bumper treatment, Gurr has softened the impact of the non-horizontal grille styling into what is basically a vertical, but more pleasing than the harsh version used by Edsel stylists.



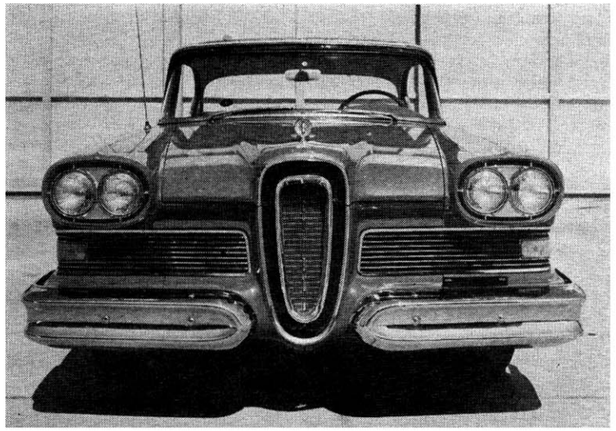
STOCK EDSEL (above), with vertical grille removed shows what car might have looked like if stylists had followed conventional, and current, design trends. Below, is another evolutionary possibility. Still retaining dual headlights, they are moved down in the fender panel, and the fender tops have been flattened out below the hood line. The bumper has also been changed.



EDSEL'S

WHAT IS A GRILLE?

BY EUGENE JADERQUIST



EXTREME CONTRAST between horizontal shapes of dual headlights, bumpers, and side grilles, with the narrow vertical of the center grille looks good to some people, bad to others. Drawings show what might have been.

THE grille is at once the most useless and most distinctive feature of an automobile. Useless because it is at the very best nothing more than a coarse screen to protect the radiator honeycomb from damage; distinctive because through the years we have been conditioned to accept the grille as the single truly identifying feature of the automobile.

Evidence today points to the eventual disappearance of the grille as both a functional and decorative item. In some foreign cars, and in fact in a few American cars, the screening job is assigned to a fine mesh placed far enough back in the car's snout to be invisible to all except those hyper-curious people who poke their heads into every available hole in a car. On cars with concealed air-intake openings, the air meshes are no more decorative than your household window screens. In both these cases the grille has lost all engineering reason for existence.

Car designers are completing the job by assigning the job of identification to other elements than the grille. In Cadillac's case, both the wide V hood medallion and the tail fins assist in establishing the Cadillac identity with even the most

(Continued on next page)

NEW GRILLE

Illustrations by Bob Gurr

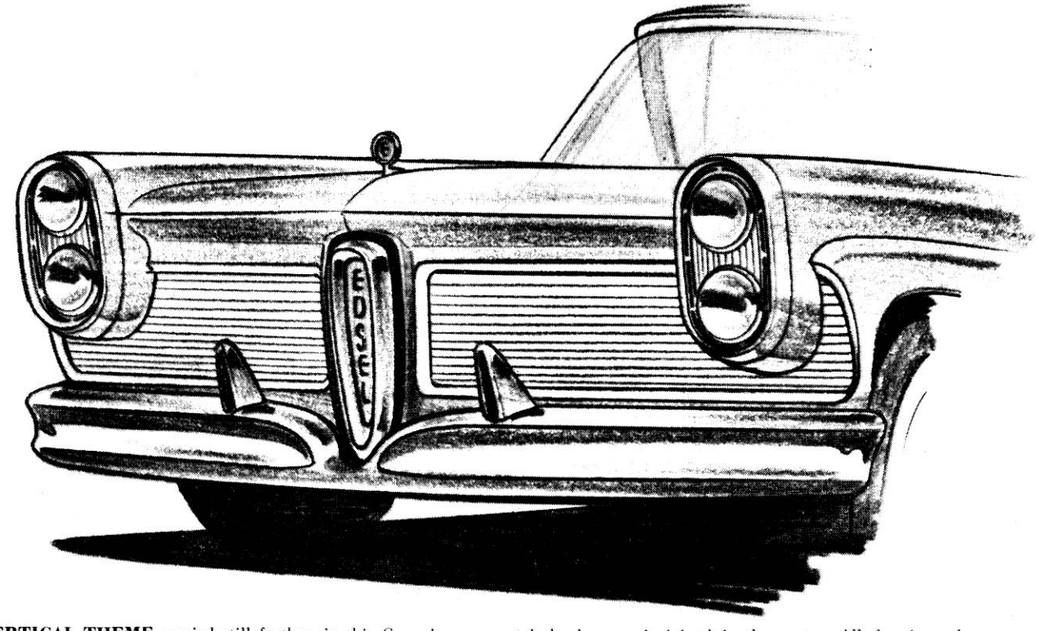
THE USE of a vertical grille on the new Edsel is a precedent-shattering event for domestic automobile manufacturers and could very well be an indication of things to come.

First impressions, however, count heavily in selling a piece of merchandise and the first look at an Edsel front end will undoubtedly leave some people as cold, as it will some hot to buy.

Whether or not Edsel stylists have done a good job is debatable. Details of the front end, taken individually, are excellent, but when added together as an entity, require considerable getting used to.

There is nothing basically wrong with a vertical grille. Vertical grilles can look beautiful and well integrated and we have only to look at the wonderful results achieved by the Italian stylists on Alfa Romeo and Lancia automobiles to prove it.

Most stylists excuse the use of a horizontal grille (used almost 100 per cent



VERTICAL THEME carried still further, in this Gurr drawing, shows the dual headlights arranged in vertical design instead of a horizontal layout. The grille is a little smaller and the bumper is joined in the center. All drawings shown on these pages are the artist's conception of what possibly could have been done, or what might be coming in the future.

WHAT IS A GRILLE? *(Continued)*

unobservant citizen. Chrysler's huge fins, Buick's spear, Ford's spear, the GM notch doors and other items fit in this classification as strong, and in most cases continuing, reminders of the car's identity. Foreign-car designers use body shape in the same way. The grille-less Volkswagen could be mistaken for a Porsche by a near-sighted man on a dark night but otherwise its body shape can be confused with no other car in the world. Mercedes (in almost all models), Ferrari, Maserati are likewise distinguishable by their silhouettes and seldom resort to a standard grille for identification. Only in America, and to a lesser extent in Britain, does the grille have even a partial function as an identifying element.

In the beginning, of course, there was no grille.

Grandfather's first car generally had a radiator to store and cool the water for the cooling system, but no one considered it especially important to protect the radiator from stray pebbles and careless insects. Most people did recognize the importance of filtering the air that flowed into the carburetor's air intake, but this was done by screening the air at the carburetor, a practice that eventually resulted in the construction of our massive and highly chromed air cleaners. As far as the radiator was concerned, the slow car speeds and limited driving of the era gave it most of the protection it needed. What few obstructions lodged in the honeycomb could easily be cleaned out by hand.

But there were those who lived in bug-infested areas. These people bought wire screens, some of them nickel-plated, to attach to the outside of the radiator. These screens, available as accessory equipment on any car, were the forerunners of the modern grille.

Another item that began as an accessory and then was shortly adopted by all the luxury cars is more obviously grille-like in appearance. It also was extremely functional and, in fact, provided a service missing in part on the modern car. Only the old-timers will remember this item—the shutter—but it was long a feature of the automobile.

Nowhere were the shutters more effective in appearance as on the pre-World War II Rolls-Royce Ghost and Phantoms. They became so much a part of the car that they actually aided in identification, though little additional help other than the hood lines is essential to the identification of a Rolls.

No one can date, precisely, the beginning of the grille as a chiefly ornamental-identification element. Perhaps it was the Duesenberg in America in 1928, perhaps not. At any rate, the use of the grille did not become widespread until 1932, the year of the beginning of universal streamlining.

At this point the grille was two things—an identification item and a very necessary part of the streamlining process. After all, a radiator is square or rectangular in shape, generally very close to square. In the pre-1932 era of styling, it was perfectly all right to front a square, angular body with an uncompromisingly square front. Once the general body shape had begun to take on the streamlined look, after the square corners of the body had melted into curves, the use of the square radiator as a bare frontpiece would have been ugly if not ludicrous. It would have been frighteningly expensive to shape the radiator itself to conform to the new streamlining. The very practical solution was to enclose the radiator within body metal shaped to conform to the body's contours, then to cover the necessary air intake space with a decorative, and properly shaped, grille.

By 1934 even the dullest brains in Detroit had discovered another advantage to the use of the grille. It could be varied from year to year, at little cost, to alter the entire front-end appearance of the car. Now the grille became not only a convenience and an ornament but a sales weapon as well: it was the ideal way to shame the owner of a 1934 model into buying a 1935 model that was almost exactly the same in all other respects save grille shape. It was during this period that the grille assumed its primary role in identification. Without taking up undue space with childhood reminiscences, I report that I could identify any American car by its grille in the 1930s. So thoroughly did grille shapes vary from 1934 to 1941, that I could perform this same feat when the car was in profile. More, these grille shapes, in both front and side elevation views, were so distinctive they have remained in my mind until now. (Perhaps this article will serve as the cathartic I need to remove this excess lumber. There's little benefit now in being able to tell the difference between the '34 and '35 Chevrolet.)

The immediate post World War II period that did so much to change the American car performed violence on the grille. For some five years it was unnecessary to change anything on the car to sell it. Body shells remained constant, grilles changed but slightly, engines only just turned the ohv corner. Suddenly the economic, appearance-change value of the grille disappeared. It moved into its present role as a primarily ornamental-identification item.

The effect of this change was to give the grille to the lunatic fringe of stylists. What they did with their new freedom is now, thankfully, history. We got the bent-toothed Buick, among other things. There were cars that grinned and cars that frowned; cars that looked like a girl with braces on her teeth and cars that resembled Halloween pumpkins. It was not long before the stylists had forgotten the protective function of the grille and the customer found his radiator once again clogged with the pleasant little items that can be picked up along any road. Fortunately the overall styling of the newer cars, the cars we have now, could not stand these excesses of imagination. This is why we now find the grille effacing itself or disappearing.

At least that's what we thought until the introduction of the Edsel. In a determined effort to give the Edsel a truly new appearance, the designers have completely defied the current automotive trend by creating a vertical grille. It will be interesting to see the outcome of this bold move, and only time will tell if they have started a new cycle of frontal treatment, or fallen flat on their faces by daring to be different.

Like any item that has little or no functional value, grilles follow an erratic course. It has been pointed out that grille shapes, beginning in 1932, have gone from broad to narrow to broad. It is also interesting to note that grilles themselves have gone from nonexistent to highly important to almost nonexistent. Once the detachment of grille from identification becomes complete, grilles may finally disappear entirely. Yet, again emphasizing that grilles follow fashion rather than function, there is the possibility that the lunatic fringe of styling may once again take us on a merry ride with their bizarre and seldom comprehensible ideas.

In all this, nothing has yet been said about the proper decorative function of the grille. It has one, unless the front end of the car is expressly designed to eliminate the need for the particular type of ornamentation the grille provides. The Volkswagen is such a car. On almost all other cars we see or drive, the grille is necessary as an element in styling.

In American cars today the primary decorative function of the grille is to relieve the ugly blankness of the front end. Our bustle fronts, if you will pardon the application of a rear-end phrase to the front, are dull, unimaginative, plain. The grille should hold the eye in the center to de-emphasize the tremendous breadth, should move the eye upward to cancel out the undershot-jaw look given by the massive bumpers. (These bumpers also contribute to the appearance of excessive width.) The newest, downsloping, front ends are a styling element in themselves and require an entirely different grille treatment. In these the downslope needs to be emphasized. European cars do this by eliminating the grille entirely or by recessing it, both methods dragging the eye downwards. (Very spectacular, in this respect, is the use of a single, thin chrome strip following the downslope of the hood in the center.)

The body shell enclosing the grille (grille shell or radiator shell) thus defines grille shape. In those cases where the grille-shell shape is the identification feature of the car (as with any Packard and the current Mercedes transportation cars) the grille is designed only to emphasize the shape of this shell. In the opposite condition, as with the varying makes of cars built on a single General Motors body shell, the grille must distinguish, by its own pattern, one car from another and therefore must provide a design of its own within, but harmonious with, the shell.

This knowledge can be applied also to the customizing of earlier American cars. One of the popular grill changes is the use of the 1932 Ford V-8 radiator shell and grill on the Model A Ford chassis. Usually the V-8 radiator and engine are used, too, but the change can also be made if you are using a stock Model A radiator and engine. During this same era in the American auto industry some manufacturers went so far as to offer a factory job based on the grille change. In 1932 you could have your 1930 or 1931 Packard altered to take the V-shaped 1932 grille. Packard felt this essential because one of the company's strongest advertising points had been that the Packard did not change in appearance with the years. The job was inexpensive, by Packard standards, and effectively converted the earlier cars to look like the '32 models.

Of course, this was during the period when the grille, or radiator, shell was made as a separate unit. In today's cars the shell change cannot be made.

For most of today's custom car fans, the grille is the one element where the individual can exercise his own imagination. Starting with the bare, open spot where the original grille was removed, something entirely distinctive, yet consistent with the body design of the customized product, can be designed.

"Grille" actually means "a grating . . . forming an openwork barrier or screen." (Grill, incidentally, is a permissible spelling but not a good one.) Like most of the grilles in non-automotive applications today, the grating in front of your car is mostly ornamental. The engineer, the stylist, in most cases the sales department, and the buyer consider it ornamental. It does screen your radiator from such items as chickens, large stones, sticks and other heavy and bulky pieces, but it is no longer an efficient bug screen. Nor, in the light of Detroit's new long-term body-design policies, is it absolutely essential as an identification item. It is a good, perhaps the best, feature of a custom: it serves partly to distinguish the front end of a Chevy from a Pontiac, a Ford from a Mercury, a Plymouth from a Dodge.

Practically speaking, the grille is dead; esthetically it may well live forever. We buy gay upholstery and three-tone paint jobs. Why not pay the extra money for fancy grilles? We may feel one way now but next year is another story. •

by manufacturers since the late war) as causing the car to look lower. Due to the predominant horizontal shape at the front, it adds to the illusion of width, they say.

Edsel stylists were undoubtedly able to produce this new concept because it was to be a car conceived from a clean drawing board, with no ties to any previous model. With no past heritage to live up to, or live down, the stylists could start fresh in most any direction they chose, subject to OK by the supreme command at Ford, of course.

George Walker, vice president of Ford and head of the styling studio, expresses it this way: *"The thing that was most sought after in styling the Edsel was individuality. We were interested in creating an effect unlike that created by any other car and we feel that the Edsel front end contributes greatly to that effect. While none of us claim that the vertical theme found in the front end of the Edsel is entirely new (most cars had something resembling it before 1949) we do feel that we have given this theme an entirely new treatment.*

"Once the vertical theme had been decided on, a great many sketches were developed in an effort to achieve a fresh feeling. The result is evident—an entire front end centered around a vertical radiator with a unique honeycomb treatment."

Head stylist of the Edsel Division, Roy A. Brown, stresses the need for individuality and identity in his reasons for the Edsel front end treatment: *"Styling of the Edsel front end was actually begun with a horizontal theme in mind. But it was decided very early in the program that this didn't provide the individual identity we were looking for. We then turned to a study of other themes—large rectangles, triangles and other shapes—before selecting the present theme. This decision was based on two factors: It provided strong individual identity and there was precedent for it. The vertical treatment is a new concept of a somewhat familiar theme, which is a good merchandising factor. It's new and exciting, but not so strange that people will shy away from it.*

"It's interesting to note that we never varied from the basic vertical theme, once our decision had been made.

"Distance identity studies played a large part in directing us toward some new front end treatment. These studies convinced us that, looking at cars from a block away, it was practically impossible to tell one from another."

Stylists of many companies have no doubt wanted to try something different in front end styling, but could not impress the need on the sales department for this much distinctiveness.

So far, and in spite of advertising claims, it has apparently been the policy for designers to play follow-the-leader, rather than be the leader. This is especially true when it calls for a radical departure from the norm.

The results of this styling revolution, as far as the other manufacturers are concerned, are impossible to predict. If the public does not take to this departure from convention, then other manufacturers will definitely not follow suit and the horizontal grille is with us forever.

At any rate, all eyes will be on Edsel sales and it is a distinct probability that competitors will be charting sales as accurately as will the Edsel division itself. If sales are good and little sales resistance is shown the vertical grille, then look for other manufacturers to follow suit. •