

economical?

How does it handle?

Is it Ford's biggest gamble?

How does it ride?

performer?

HOW



It's new -- but how different?

IN 1956 THE FORD MOTOR COMPANY introduced the Continental Mark II into a price class that had no domestic competitors. Established as a separate division, Continental built 3000 units and suspended production about mid-1957 for the second time. Most of the Mark II's were sold by the time Cadillac began producing their competing Eldorado Brougham.

Some say that the Continental styling was too "old fashioned"—yet a number of its aristocratic styling features were lifted and applied to the Thunderbird so that, even today, some people mistake one for the other at a distance. There is one difference: the Thunderbird enjoys an extremely healthy sales position.

Now Ford's third new postwar car has been announced—their most ambitious venture to date. Fanfare has preceded this new car and some are now saying that they're in over their heads; that the Edsel hasn't a chance against the target area occupied by the Dodge, De Soto, Pontiac, Oldsmobile and some Buicks. Other closer observers are of the opinion that FoMoCo is even competing against their own Ford and Mercury cars.

The economics of the matter are that the announced \$250 million has to be paid off, according to Edsel officials, in three years if the project is to be in the black. This means that in a price range making up about 60 per cent of the total new car market, Edsel must sell in the vicinity of 200-230,000 units per year to reach the break-even point. It seems quite problematical whether a new car can enter such a stiffly competing area of the overall market and take that large a chunk out of it.

A conquest car—one aimed at garnering other manufacturers' customers—is the way Edsel will be pushed. The monumental task of setting up a new sales organization appears staggering to the imagination of those on the outside. If Edsel can accomplish

seeing out of the windshield corners in heavy rain or snow will be experienced. Distortion in the windshield glass was a shade above average—this problem is yet to be licked.

The instrument panel in a fully equipped Edsel is both beautiful and quite efficient. The speedometer, a stylized horizontally rolling dome-like object with large white figures on a dark background, is located where it is immediately readable. Two optional dials good for the gimmick fanciers are the tachometer and fresh air control. The latter is a single knob with which you can dial the amount of exterior fresh air or heat desired. When equipped with air-conditioning the single dial controls the amount of refrigeration desired in one single motion—a true innovation.

As so often is the case on modern cars, there is a goodly assortment of warning lights: to supplement the standard fuel level gauge there is an optional fuel level warning light, the oil pressure light, one for generator, one for the hand brake, one to warn of an open door (a practical idea), an oil level warning light, a green cold engine tell-tale, and finally, a red light to warn of an overheated engine.

The steering wheel, with its two-thirds horn ring, has a good feel and is positioned well. The big Edsel innovation is the compact circular group of transmission control buttons in the wheel's hub. You need not take your eyes off the road for an instant, you need not grope to find the right button when jockeying for a parking place . . . your hand soon learns the correct positions for PARK, REVERSE, NEUTRAL, DRIVE, and LOW. Called "Teletouch," the hub-mounted selector remedies a situation that other button systems have failed to recognize—that most folks are not left handed, and that there are some times (as when inadvertently stalled for a moment) when one's hands must fly from buttons

GOOD IS THE Edsel?

by Joe H. Wherry Detroit Editor

the task set for it, the car had better be good! Just how good can best be answered by analyzing those features and points that you haven't seen (or won't see) in the showroom.

This new car is longer than the longest '57 Ford and Mercury models. Height is another matter, for although the wheels are the new 14-inchers, the Edsel tops its '57 relatives by a fraction of an inch. Headroom front and rear in the sedans is also fractionally less than in comparable '57 Fords and Mercurys. Hip-room, however, is greater than in the '57 Ford, approximately the same as in the Mercury. Your garage may seem a bit narrower; the Edsel is about two to five inches wider than both '57 Ford and Big-M.

Interiors reflect FoMoCo's concern for safety with the installation of dished steering wheels, padded dashes, and safety belts—optional in most cases. Though not six feet tall by nearly two inches, the writer found the Ranger and Pacer test cars put at our disposal to be most comfortable in every respect. The front seats move easily in both manually and power operated options. In the former case the seat tracks slant upwards to raise the seat in its forward position; power options for seats include both two- and three-way options.

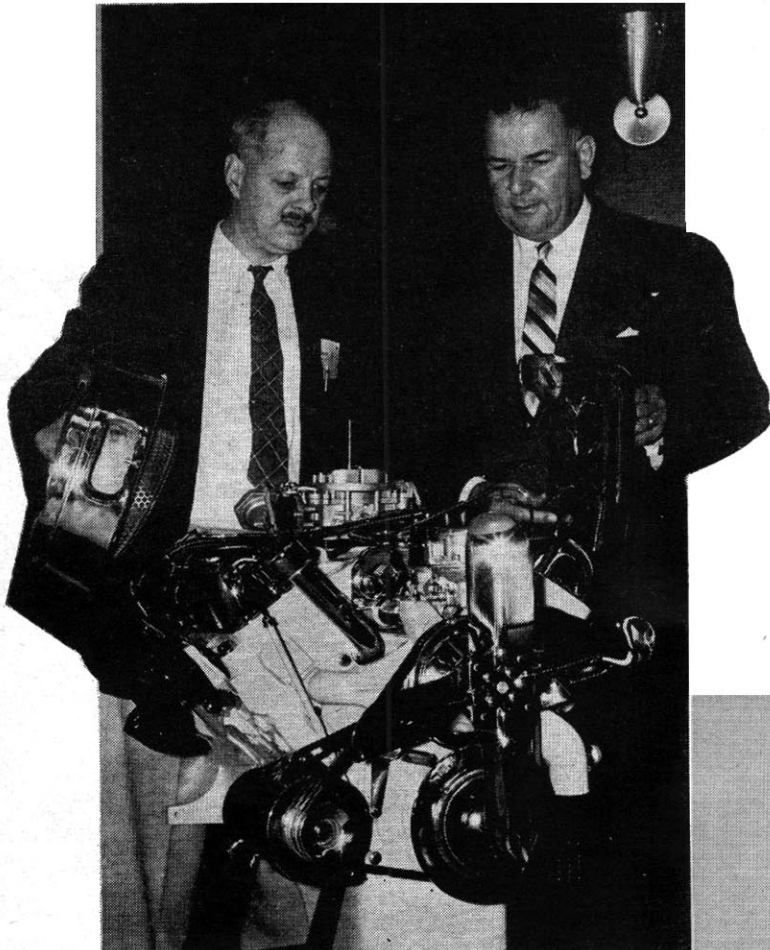
The driving position is excellent, with an over-hood view on par with the best in '57. Only when cresting the steep test hills did the center-high nose protrude; the redeeming factor when in such a circumstance is that the gouged or depressed outer part of each side of the hood enhances forward vision. The vacuum-operated wipers (on each test car) move in opposition and stop conventionally in the center; it appears that the usual difficulty

on the left to the wheel, to the ignition switch key, back to buttons and wheel in order to get under way. For those who still prefer the "ancient" lever-operated automatic transmission, he too can be satisfied, for the Ranger, Pacer, and all wagons can be had with the familiar lever. The economy minded can have the three-speed synchromesh stick shift with or without optional overdrive, but only in the wagons and smaller Ranger and Pacer series. In the bigger and longer Corsair and Citation models the automatic torque converter with planetary gearset giving three overall ratios is standard.

The engines are new, and though there are points of resemblance to last year's big FoMoCo units, there is no similarity in the specifications in either case, at least dimension-wise. Each engine has integral block and crankcase one-piece design cast of Ford's own iron alloy. There are five main bearings in each with end thrust being taken by number 3 main. Both mills use a molded-type crank made of Pearlitic alloy iron—little final machining is required and these cranks are said to be extremely durable. Each block carries its oil filter at the left front and the lubrication system is of the full pressure type with the exception of the piston pins and timing gear or chain which are by oil mist and pressure spray, respectively. Servicing the filter will be easier on the bigger "E-475" engine for one need not circumvent or fumble around the fuel pump mounted above the front of the block. The smaller "E-400" plant has its fuel pump slightly in front and above the oil filter. Both engines use a new distributor with both vacuum and centrifugal spark advance, single four-barrel downdraft carburetors, more easily reached spark plugs, and have

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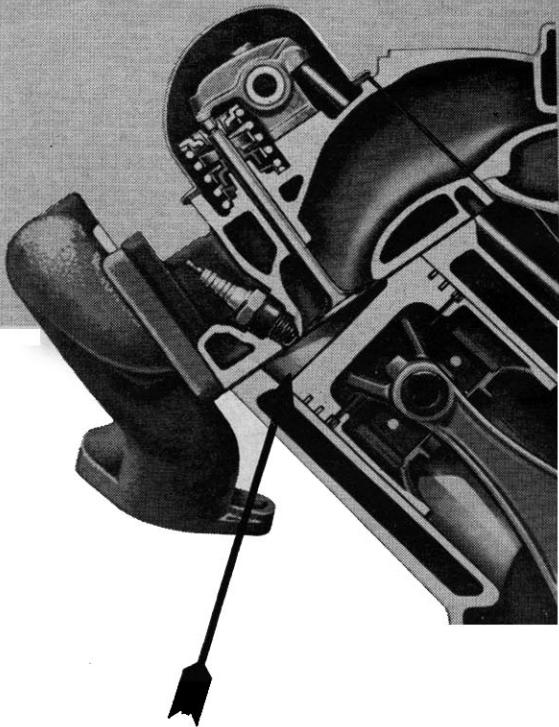
How good is the Edsel's engine?



W. E. BURNETT (r.), Executive Engineer, Engineering Operations, Edsel Div. discusses 410 cu. in. engine with author Wherry.

ENGINE SPECIFICATIONS

	Ranger-Pacer-Wagons	Corsair-Citation
Type	90° V8	90° V8
Displacement	361 cu. in.	410 cu. in.
Horsepower	303	345
Torque	400 ft.-lbs.	475 ft.-lbs.
Bore and Stroke	4.05 x 3.50	4.20 x 3.70
Compression Ratio	10.5:1	10.5:1
Combustion Chambers	Angle wedge	Cylindrical wedge
Crankshaft	Precision molded of Pearlitic alloy iron, with 5 main bearings, and end thrust taken by No. 3	Same
Camshaft	Precision molded of alloy iron, with chain drive and 5 bearings	Same
Fuel Pump	Mechanical	Mechanical
Carburetor	Downdraft 4-venturi	Downdraft 4-venturi
Air Cleaner	Dry replaceable element	Dry replacement element
Fuel Capacity	20 gallons	20 gallons
Electrical System	12-volt	12-volt
Distributor Drive	Vertical from camshaft front	Vertical from camshaft front
Spark advance	Vacuum and centrifugal	Vacuum and centrifugal
Spark plugs	18 mm	18 mm



BIGGER E-475 engine has fully-polished combustion chamber (arrow) in block, top of which is machined at 100-degrees instead of 90 degrees. Smoother surfaces are thereby provided by machining only the flat surface of the head.

continued

disposable-dry-pack type air cleaners of generous size. Each engine has hydraulic tappets only, intake valves exceeding two inches diameter, exhaust valves of from 1.55 to 1.78 inches diameter. Three stage cooling systems are used (similar to the '57 Mercury), and neither engine specifies the fan which free-wheels at higher speeds.

An unusual but sensible engine innovation is evidenced on the 410-cubic-inch engine, which has the new cylindrical wedge combustion chamber arrived at by the heads sitting on the respective cylinder banks at less than a right-angle—a feature we expect to set a trend.

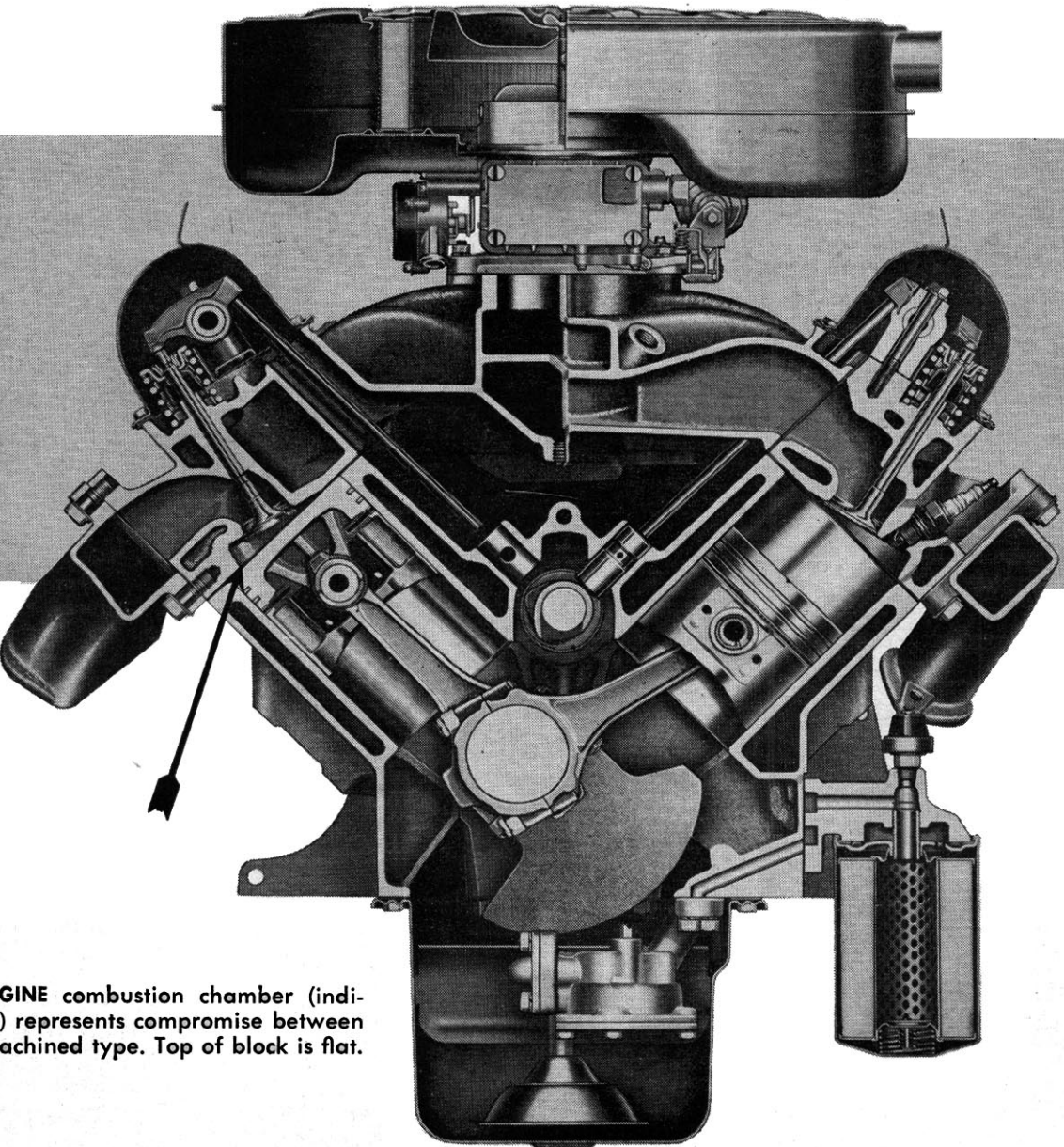
When we tried out the performance of the Edsel, we found that we could drop from DRIVE to LOW at speeds under 50 mph indicated. You get a LOW gear start when flooring the throttle and this was sufficient to take the 303-horsepower, test Ranger hardtop sedan to a calibrated 60 mph in 10.2 seconds. In the more useful traffic speed range this "small" Edsel (the slightly higher priced but identically sized Pacer would perform the

same) scats from a dead start to 30 mph in 3.7 and to 45 in just 6.6 seconds. On the straightaway the Ranger, locked in DRIVE range, got from 50 to 80 mph in a healthy 11.3 seconds. Upshift from low to second gear occurs, under full throttle, at about 45 mph and to third gear at about 62 mph.

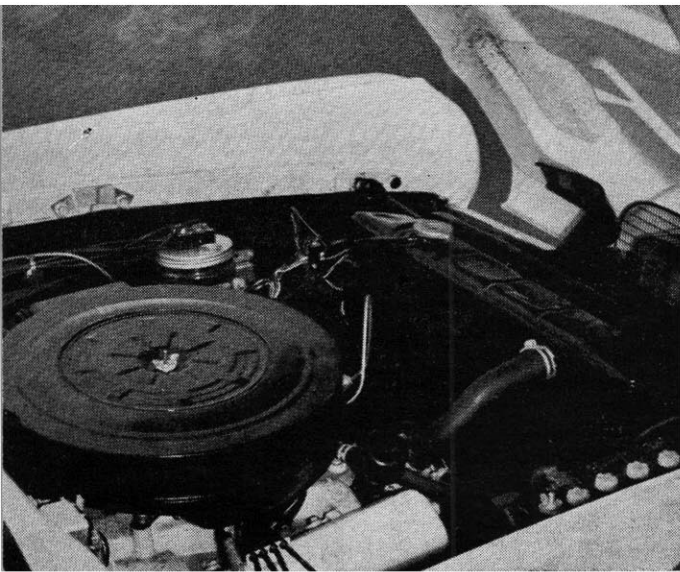
The big-engined Corsair test car, which like the Ranger checked was a pre-production job, has a hefty 410 cubic inches which churns out a rated 345 bhp and 475 lbs. ft. torque. Longer in wheelbase than the Ranger/Pacer models by six inches and longer overall by 5.7 inches, this stylish brute digs 30 and 45 mph in a hasty 3.4 and 6.3 seconds, respectively. To 60 mph the extra torque, which feels as if the maximum boost is fairly constant in the acceleration ranges, took only 9.7 seconds. A performer in the true tradition, even if it won't show up on any factory racing teams, the Corsair hit 80 mph from a cruising 50 in 10.9 seconds.

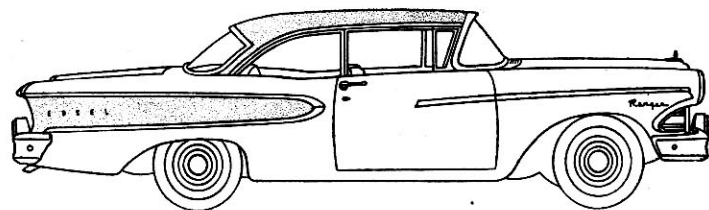
Because pre-production test models are usually full of lead

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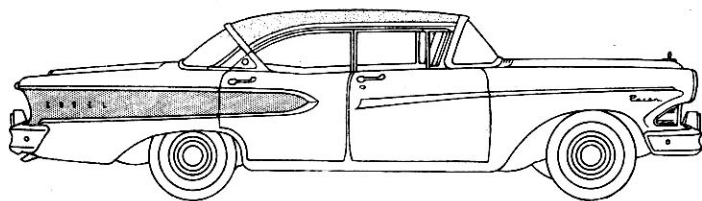


E-400 EDESEL ENGINE combustion chamber (indicated by arrow) represents compromise between casting, fully-machined type. Top of block is flat.

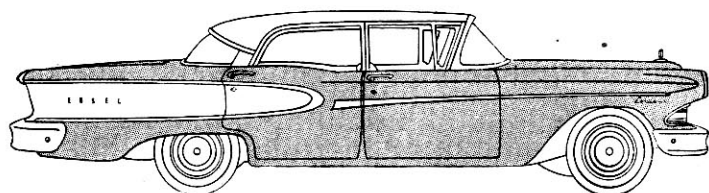




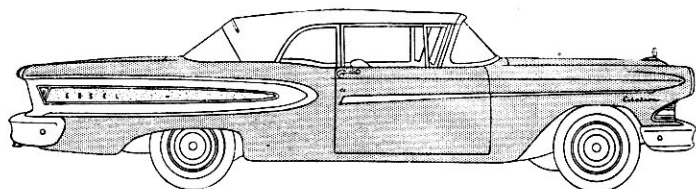
Ranger. 118-in. wheelbase, 2D hardtop.



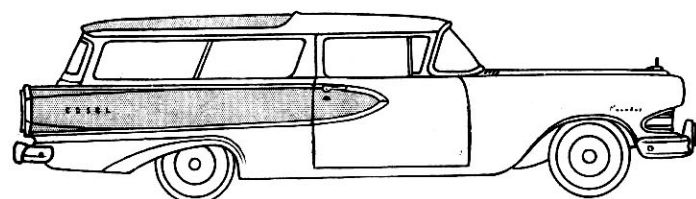
Pacer. 118-in. wheelbase, 4D hardtop.



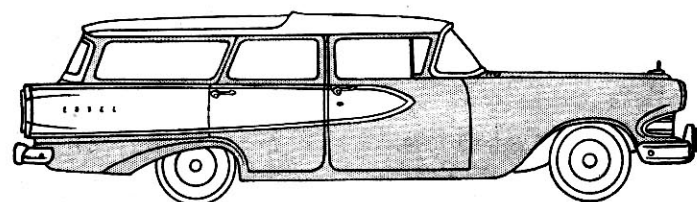
Corsair. 124-in. wheelbase, 4D hardtop.



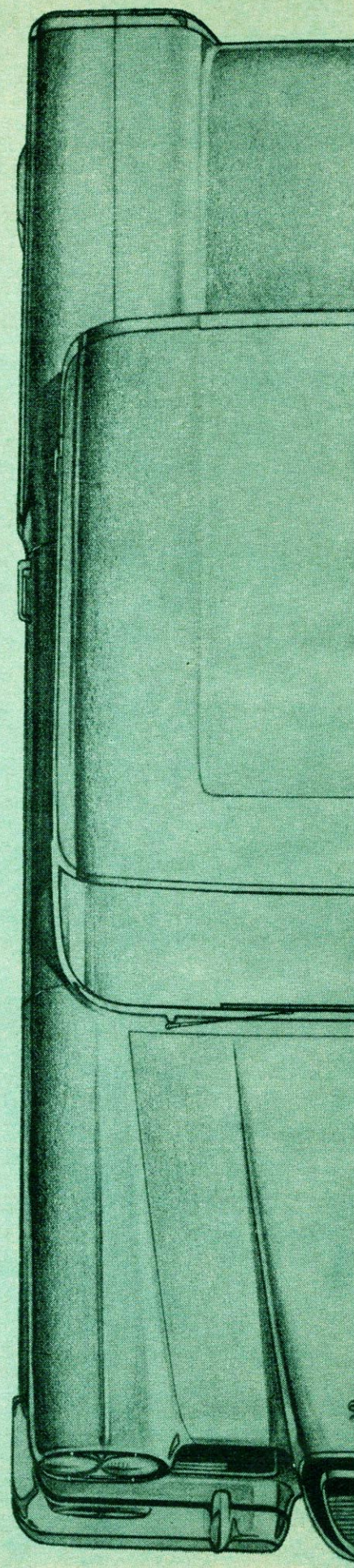
Citation. 124-in. wheelbase convertible.



Roundup. 116-in. wheelbase, 2D, 6-pass. wagon.

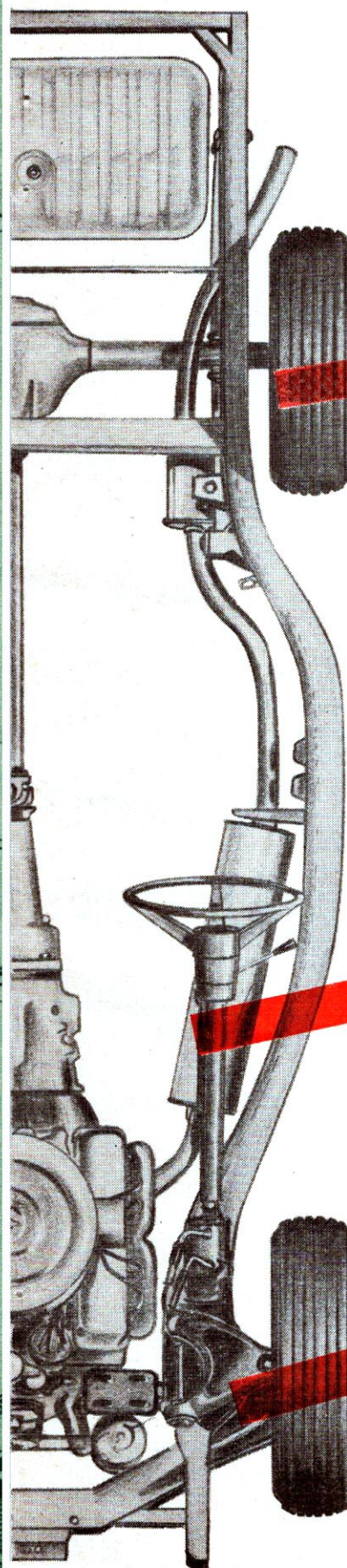


Villager. 116-in. wheelbase, 4D, 6-pass. wagon.

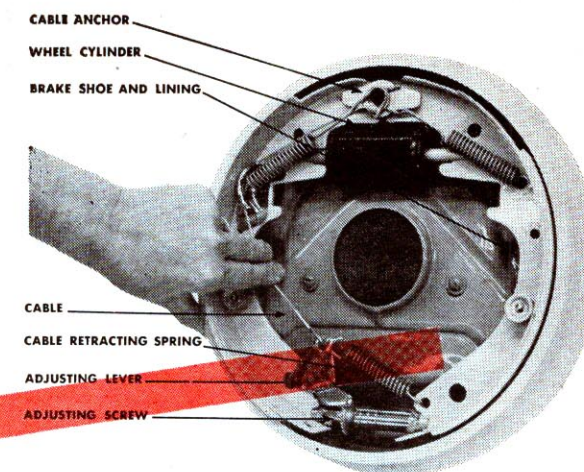


How good is the Edsel's suspension?

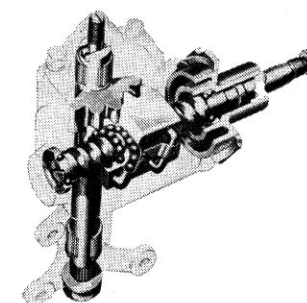
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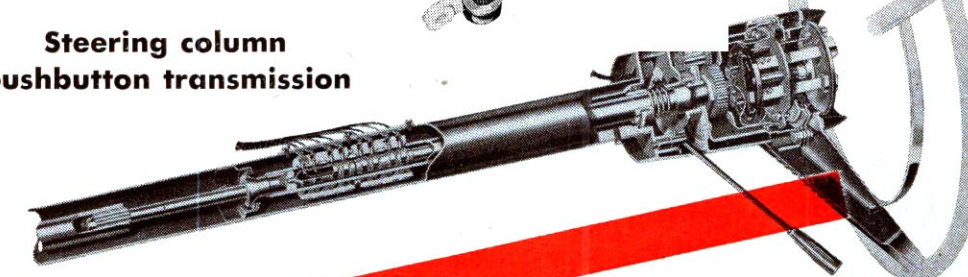
Brake with automatic
adjusting



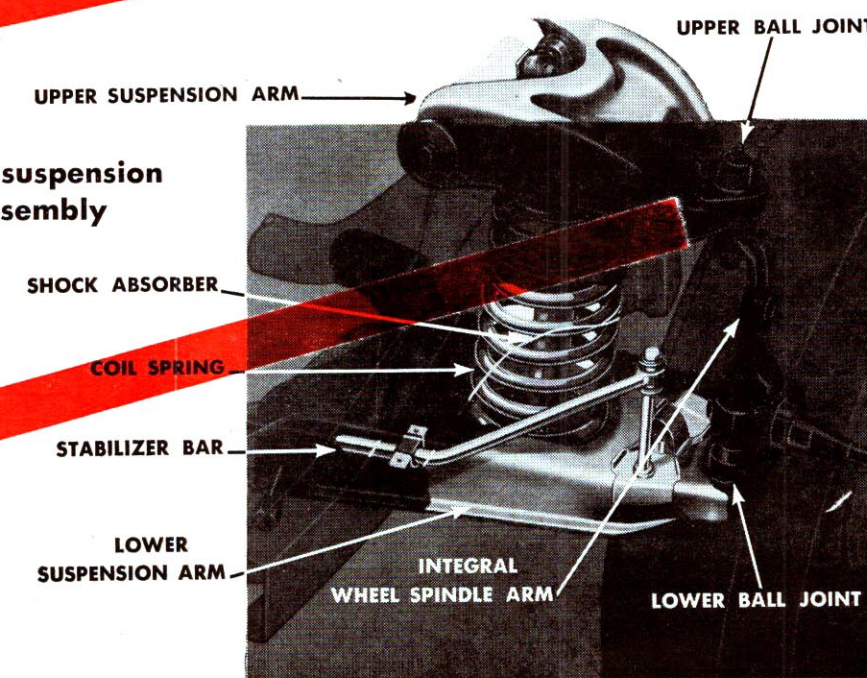
Recirculating ball and
nut steering gear



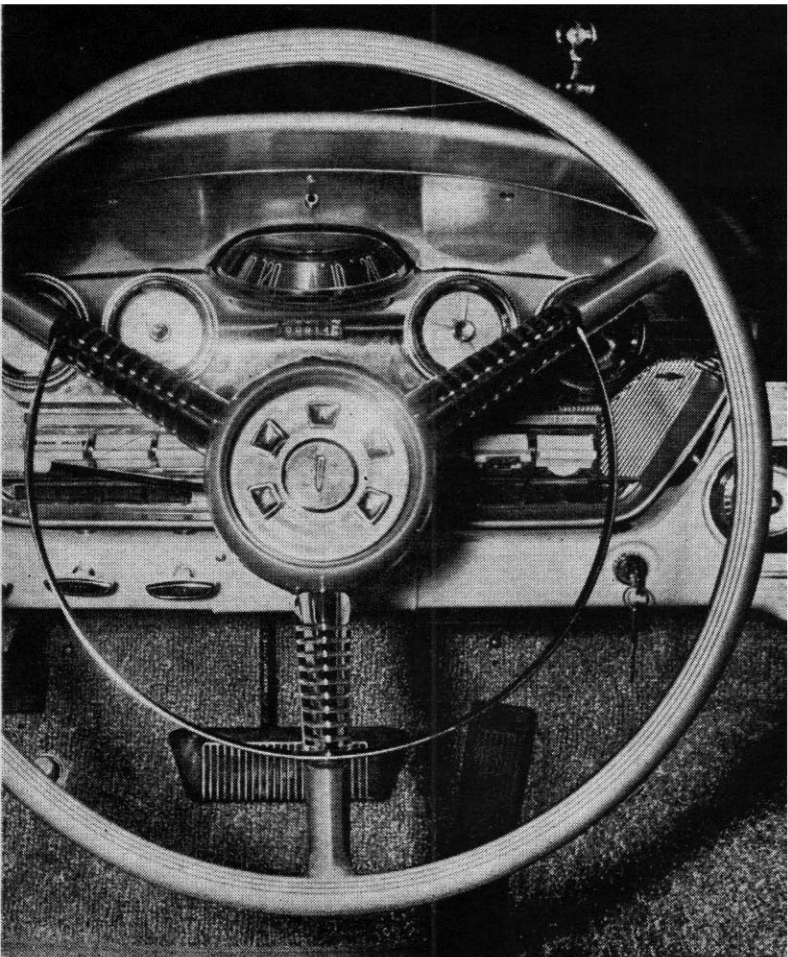
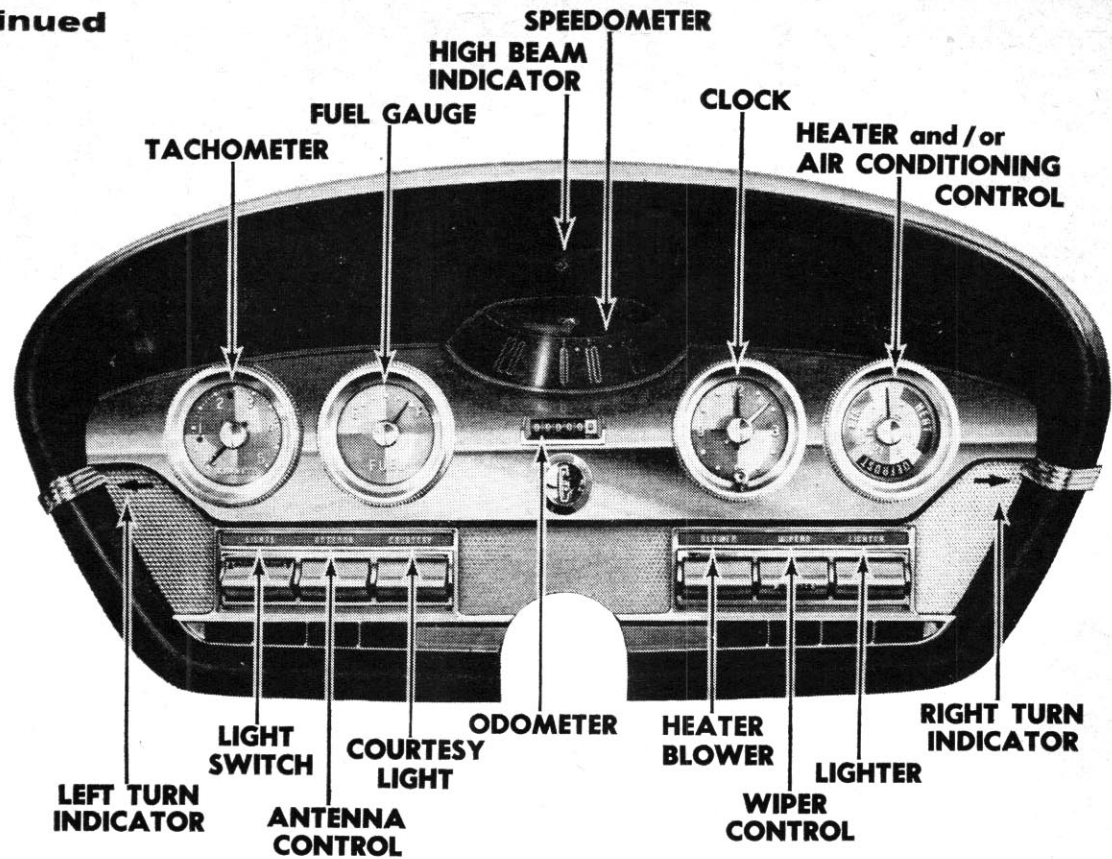
Steering column
pushbutton transmission



Front suspension
assembly



continued



in unseen places, it might be assumed that a well-tuned production stock Edsel, of either size, would better these times by a fraction or two of a second. At any rate the performance was as satisfying as the handling. As to the latter, both series felt very much like the Ford Fairlanes of '57 with perhaps a bit smoother ride (especially in the back seat). They also have about the same amount of heeling over on a hard and quick corner. Each had power steering (an overall ratio of 23 to 1). Power steering wheels take $4\frac{1}{4}$ turns lock to lock, whereas non-assisted steering has $5\frac{1}{4}$ turns. Power steering is standard on the Corsair and Citation, optional on the smaller two series and all wagons. Both types use recirculating ball and nut gear.

On a 27 per cent test hill we stopped the cars, set the foot-operated parking brake, killed the engines, and then started up the hard way. The parking brake releases by means of a toggle beneath the dash on the left. A word of warning—you could accidentally pull the very close and identical toggle that releases the front-hinged hood, although little harm would be done when stopped since there are safety catches on each side. It would seem that less initial confusion would result if the hood release changed places with the optional one-shot chassis Multiluber; the latter is on the right adjacent to the ignition-starter switch keyway.

In loose gravel we tried rocking as one would need to do in snow. A built-in inhibitor switch prevents the automatic box from engaging reverse at more than five mph—but you can still play the "R" and "L" buttons very neatly with two fingers of your most educated hand, be it left or right. Swiftly traversing the Belgian blocks and washboard roads of the test area showed the Edsel to be a roadworthy car. Air suspension and a limited slip rear axle are scheduled for introduction a bit later on. For the present the front coil springs with telescoping shocks inside are mounted quite conventionally between upper and lower control arms. The latter are angled 20 degrees toward the rear. An integral spindle (in one piece with top and bottom ball joint attaching brackets) is used, which is said to impart greater solidity and frontal rigidity.

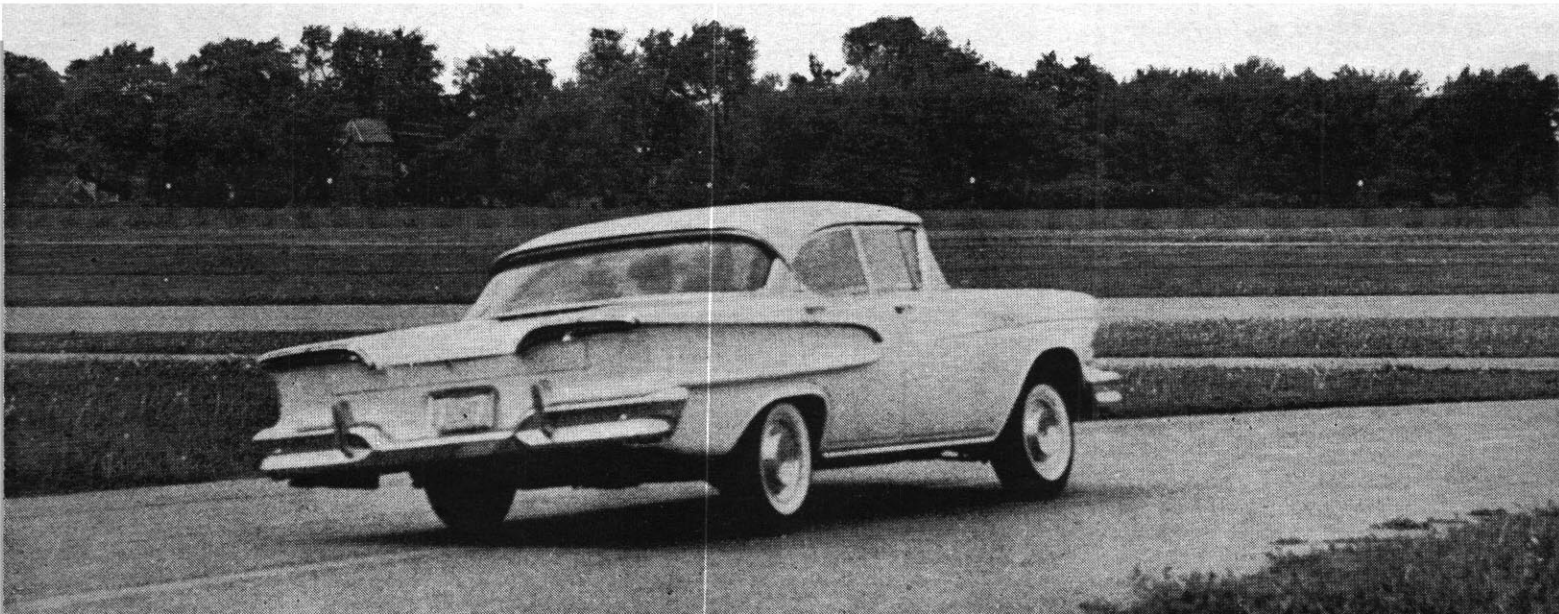
Rear suspension, too, is familiar—semi-elliptical leaf springs

How good is the Edsel's performance?

are used with the front ends held by compression type shackles with rubber sound-deadening blocks at the front ends. On the 116- and 118-inch wheelbase chassis the front ends of the longitudinal rear springs are mounted outboard of the frame side rails at the front. Inboard front spring mounting is used on the big 124-inch chassis. The telescopic rear shock absorbers are steeply angled inward, at the top, where they attach to the frame crossmember above and forward of the rear axle. This crossmember is tubular on the two short chassis. The 124-inch chassis uses a formed rectangular cross-sectioned member across the frame in the rear. Convertible frames have an additional I-beam, box type "X" member amidship. In each model size the chassis are of full width and narrow forward of the pickup over the rear axle. Further differences are few of great import, but the locations, relatively, of the standard single exhaust systems (duals are optional) are down the left side of the chassis on the 116- and 118-inch frames and on the right side in the big job.

Definitely a cut apart from the majority of cars, it is extremely doubtful whether there will be a style remotely like the Edsel, at least in most components, within the next 12 months. However, lest we be accused of unduly "raving" about it, let us say this: Edsel has the several unique approaches mentioned above—but there were untold opportunities for more. To some all the subtly increased fanfare over the past two years may seem to have been unwarranted—to others who can appreciate a fresh approach to styling and desire distinction unobtainable in Ford, Chevrolet, or Plymouth, the Edsel may well be the answer. The Edsel performs fine, rides well, and handles good. Our road test, later, will tell more.

BODY SERIES				
Ranger	2D sedan, 2D hardtop, 4D sedan, 4D hardtop			
Pacer	2D hardtop, 4D sedan, 4D hardtop, convertible			
Corsair	2D hardtop, 4D hardtop			
Citation	2D hardtop, 4D hardtop, convertible			
Wagons	2D 6-passenger, 4D 6-passenger (2 models) 4D 9-passenger (2 models)			
DIMENSIONS				
Series	Wheelbase	Length	Height	Width
Ranger	118	213.1	56.4	78.8
Pacer	118	213.1	56.4	78.8
Corsair	124	218.8	56.8	79.8
Citation	124	218.8	56.8	79.8
Wagons	116	205.4	58.8	77.1
REAR AXLE				
Type	Ranger-Pacer	Corsair-Citation	Wagons	
	Semi-floating, hypoid final drive	Same	Same	
Ratios:				
Standard Transmission	3.56	None	3.70	
(Optional)	3.70	None	3.56	
Overdrive	3.70	None	3.70	
(Optional)	3.56	None	3.56	
Automatic Transmission	2.91	2.91	3.22	
(Optional)	3.22	None	2.91	
Brake type	Bendix duo-servo with automatic brake adjuster			
Brake Lining Area (Sq. In.)	191.5	212.8	191.5	



PERFORMANCE		
SPEED IN MPH	RANGER 4D HARDTOP (361 cu. in. engine, automatic transmission)	CORSAIR 4D HARDTOP (410 cu. in. engine, automatic transmission)
0-30	3.7 secs.	3.4 secs.
0-45	6.6	6.3
0-60	10.2	9.7
50-80 (DRIVE)	11.3	10.9