

TOTAL PERFORMANCE & NEW SHEET METAL



FOR 1964 the Ford Division of the Ford Motor Company will continue to offer four basic lines of automobiles. Relatively unchanged in size or price, the four cars are, of course, the Falcon, Fairlane,

Ford and the Thunderbird.

However, there are many changes for 1964, highlighted by completely new sheet metal from bumper to bumper on all models except the Fairlane. Even the Fairlane, now entering its third year of production, has new bumpers, a new grille and new quarter panels at the rear corners (thus eliminating the vestigial fins).

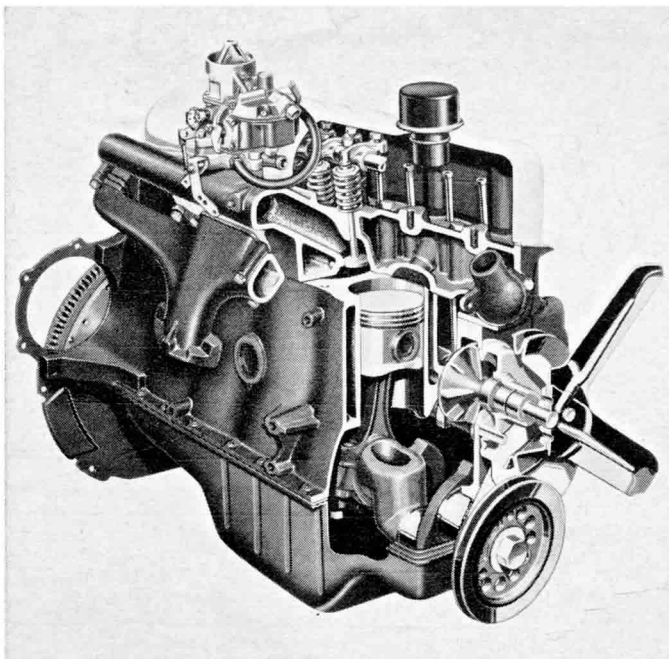
Aside from the obvious styling changes, there are many mechanical improvements, some carried over from the 1963½ models, others all-new for 1964. Prominent among the new me-

chanical features is a 3-speed automatic transmission which, both in performance and price, fits between the 2-speed Fordomatic and the 3-speed Cruise-O-Matic.

Total Performance

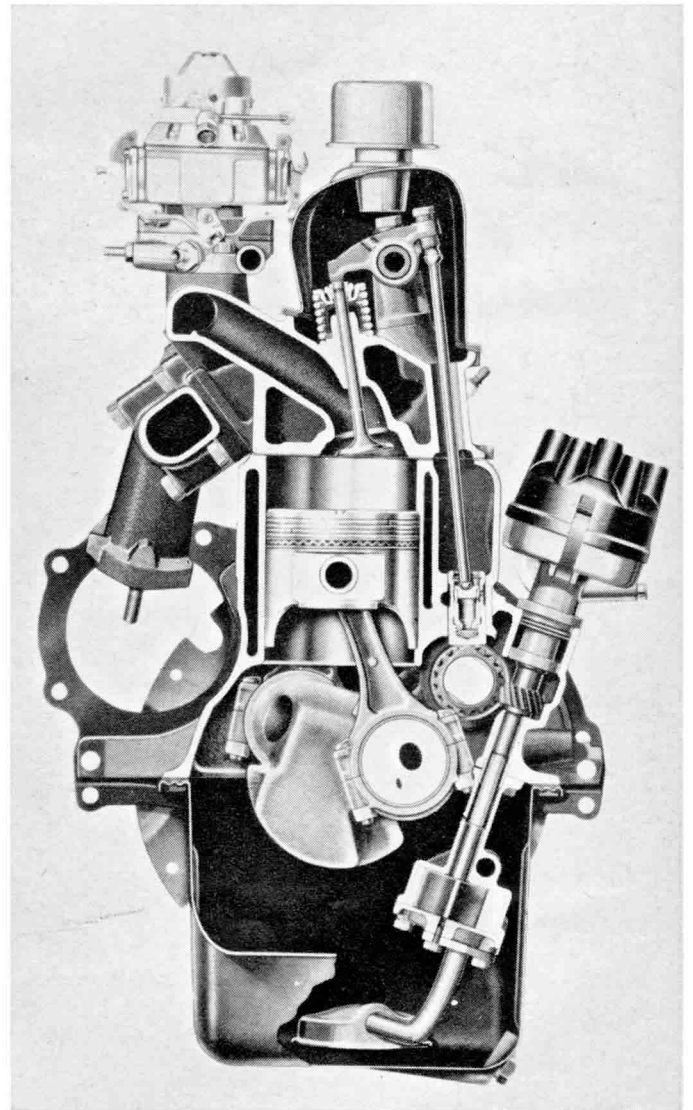
Ford's theme for 1964 will again be "Total Performance." The company defines total performance as "the ability of a vehicle to fully accomplish its intended function." Total performance, to Ford, means POWER: the availability of ample torque for propelling the vehicle under any driving condition. But more important, total performance means other things, too.

ENGINEERING THE '64 FORDS



SIX-CYLINDER, 144-cu. in. engine is mainstay of the Falcon line.

LARGER VERSION, with 200 cu. in., powers Fairlanes with automatics.



Ford mentions roadability, drivability, braking power, visibility, comfort and dependability. All these important facets of overall performance are included in Ford's philosophy. We at *Car Life* would sum it all up as "well-balanced design," with the goal of providing chassis components equal to the performance image so well established by Ford products during 1963.

The Cars In Detail

FALCON—For 1964, the compact model of the Ford line has been completely restyled for the first time since its introduction in the fall of 1959. The wheelbase remains 109.5 in. and all other principal dimensions are about the same except that the rear tread has been widened 1.5 in. to 56.0 in.

It is almost correct to say that there are really two Falcons, because when the V-8 option is specified, the buyer gets different springs, heavier underbody parts, heavier drive-line compo-

nents, bigger brakes (10 in. dia.) and a stronger rear axle.

The 144-cu. in. 6-cyl. engine continues as standard; however, the optional 170-cu. in. six is standard equipment in the heavier Futura convertible and station wagon models. Their 85 and 101 bhp ratings are unchanged but they have slight changes to improve lubrication to the rocker arms, a redesigned crankcase ventilation system and 190° thermostats. The 200-cu. in., 6-cyl. engine, which is optional on the Fairlane series, is not available in a Falcon, although it is merely a bored and stroked 170.

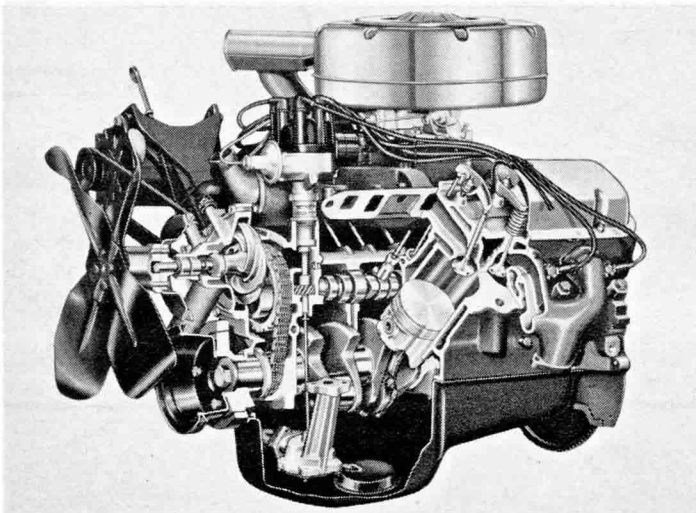
As introduced for 1963½, the V-8 option is the 260-cu. in. Fairlane engine with 164 bhp. This engine can be ordered with any Falcon body and is standard equipment in the two de luxe Sprint models. The Sprint engines differ slightly in that they are equipped with special "tuned" air-cleaners, a low-restriction exhaust system and an engine dress-up kit which includes nu-

merous gleaming chrome-plated covers.

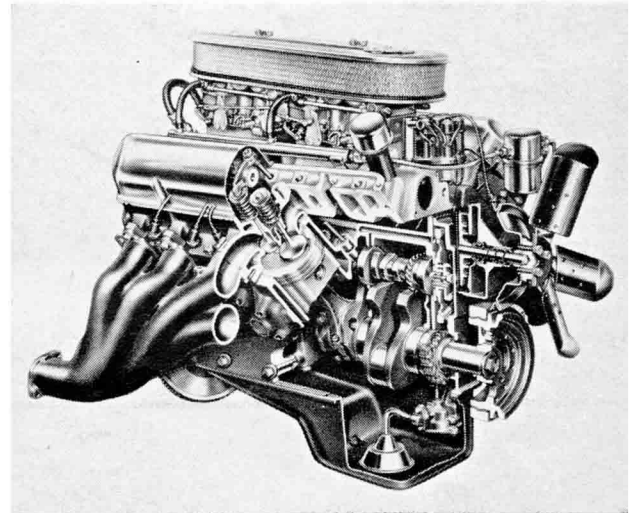
A high-performance (HP) version of the 260 V-8 is available only on the Fairlane—and with 289 cu. in. it develops 271 bhp! However, sometime during the model year Ford dealers will have available certain Cobra high-performance parts for those Falcon V-8 owners who want even better acceleration and top speed.

Changes in the Falcon/Fairlane V-8 engine include larger intake and exhaust valves, feasible because the smaller bore 221-cu. in. version has been dropped. There are minor changes in the spark advance curve and in the anti-smog control system. There is also a unique dual air intake for selective heating of carburetor air to avoid icing problems and for a quicker warm up.

As mentioned earlier, all Falcons equipped with the 260 V-8 engine have modified body, chassis and drive-line components. The body changes include heavier gauge side rails and

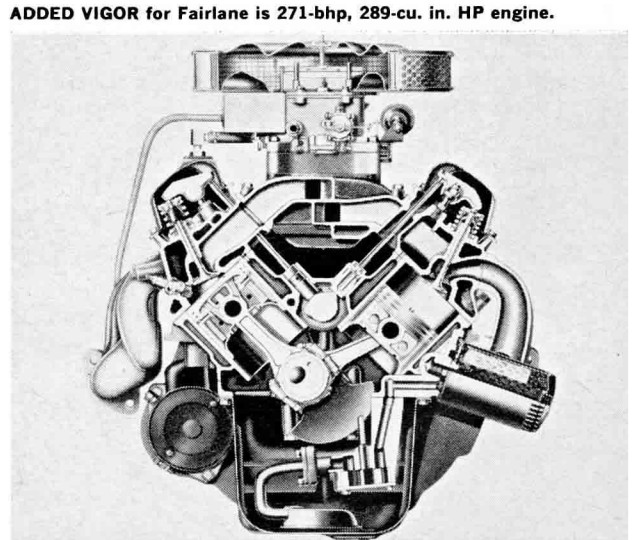
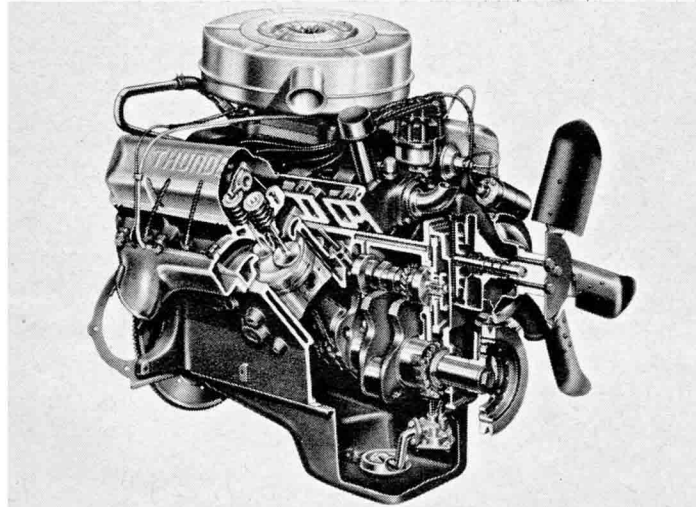


FAIRLANE 260-cu. in. V-8 is optional for all Falcons and Fairlanes.



BIGGEST BEAR is the 427 High Performance option for Galaxie.

GALAXIE OPTION is the 390-cu. in. V-8 of 300 bhp, standard for Thunderbird.



ADDED VIGOR for Fairlane is 271-bhp, 289-cu. in. HP engine.

ENGINEERING THE '64 FORDS

addition of torque boxes at the front under the toeboard. The V-8 clutch is 1.5 in. larger (10 in.) and has semi-centrifugal weights which are not used on 6-cyl. models. This was done so that clutch pedal release pressure can be the same with either engine. The V-8 propeller shaft is 2.75 in. dia. as compared with 2.50 in. for the sixes. The rear axle is from the Fairlane and has a straddle-mounted pinion gear. Rear springs on all models have been changed from 5 leaves, 2 in. wide, to 3 leaves 2.5 in. wide. The V-8 springs have a higher rate than those of the Six.

A similar situation exists with transmissions. The Falcon V-8 gets the excellent all-synchromesh 3-speed manual transmission from the larger cars, the 1st and 2nd gear ratios being 2.79 and 1.70:1, respectively. Six-cyl. cars continue to be available with a non-synchromesh 3-speed or an all-synchromesh 4-speed box (3.16:1 low). The V-8 gets the heavier Warner-Gear 4-speed all-synchromesh unit made espe-

cially for Ford with a low gear ratio of 2.74:1 (larger Ford 4-speed cars get a 2.36:1 low gear ratio in the same 4-speed case).

The 2-speed Fordomatic transmission continues as the only automatic option for the Falcon, regardless of engine choice. This unit had a number of refinements incorporated last year and is carried over with no change. However, the station bus and club wagon or the 90-in. Econoline truck chassis can be ordered with the new, small 3-speed Fordomatic transmission described later in the Fairlane section. Incidentally, these Econoline models come only with the 170-cu. in., 101-bhp engine—no options except for a 3-speed or a 4-speed manual transmission—or the above 3-speed Fordomatic.

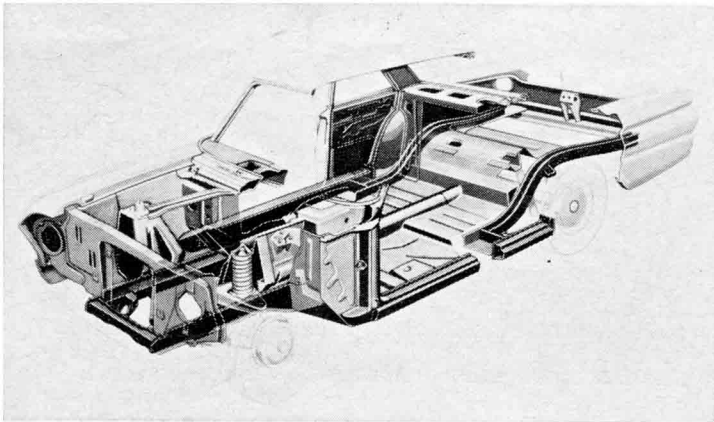
Although the Falcon has all-new sheet metal (except for the roof panels, which are carried over from last year), unit construction is still the method used. Underbody corrosion protection has been further improved and the double-yoke door latches of the Fairlane now appear on the Falcon.

When the V-8 option on the Falcon

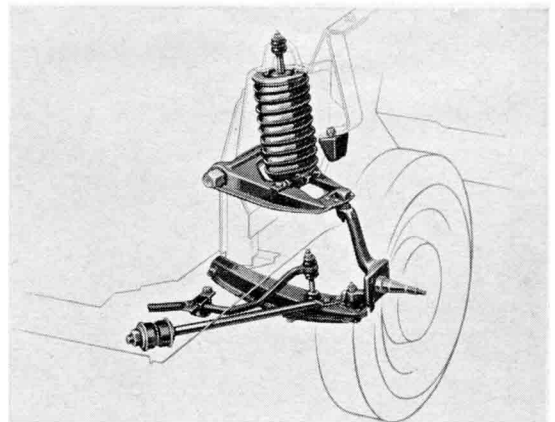
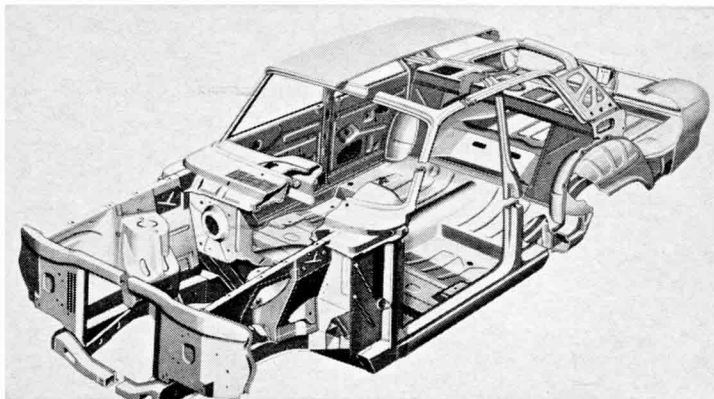
was announced in mid-'63, the front suspension got certain Fairlane pieces, including heavier ball joints and low-friction threaded pivots for the upper wishbone. These parts are now used in all Falcons along with a new strut design and a special fluid in the shock absorbers, which gives the same ride regardless of outside temperature. When the V-8 option is specified, the buyer gets 10-in. brake drums (1 in. larger), or he can order disc brakes at extra cost. In either case the front track is increased from 55.0 to 55.6 in. by this change.

A most interesting package change is the use of a smaller steering wheel (16 in. dia.) and moving it 1 in. forward. This necessitated slight changes in the pedal locations but allows a more arms-out type of driving. Power steering is now available, presumably because of the smaller steering wheel and the heavier V-8 engine option. Other package changes include more headroom in front and slightly more legroom both front and rear.

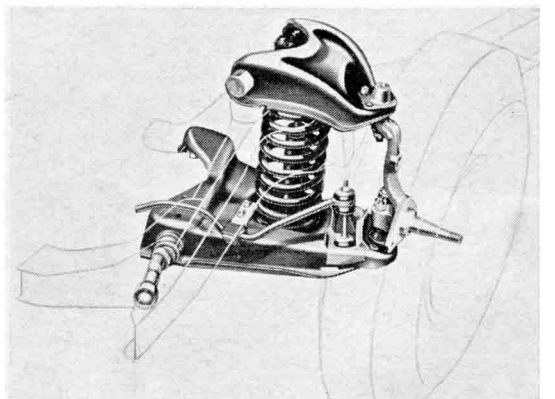
FAIRLANE—The 1964s come in two trim series: the Fairlane (standard model) and the Fairlane 500 (de luxe trim). There are four distinct bodies: a 2-door sedan, a 4-door sedan, a 4-door station wagon and a 2-door



DARKER AREAS show (above) areas where the Falcon unit-body is strengthened to take extra stress of V-8 engine. Fairlane body-chassis (below) is a textbook example of unit construction, will be much-copied in '64.



FRONT SUSPENSION of Falcon (above) has been improved with new struts and bushings; Ford front end (below) has cranked "compliance link" lower arm front anchor.



hardtop. This latter body is also available with special trim and is called the Fairlane 500 Sports Coupe.

New sheet metal on the Fairlane line consists of new bumpers, grille, rear doors, rear quarter panels and roofs. In other words, about half of the exterior panels have been changed.

There are no really sensational changes in the 1964 Fairlane although the 221-cu. in. V-8 option has been dropped and there is a new 3-speed automatic transmission. Aside from the obvious appearance changes, the cars are structurally and mechanically identical to what was offered in 1963.

The standard engine for the Fairlane is the 170-cu. in. Six, which develops 101 bhp and is optional in the Falcon. The standard transmission is a 3-speed unit with no synchromesh on low gear. However, if you order a Six with the optional 2-speed Fordomatic, you get a bored and stroked version of the 170 which has 200 cu. in. and 116 bhp. Unlike the Falcon line, you cannot order a Fairlane Six with a 4-speed all-synchro transmission.

The first Fairlane V-8 option for '64 is the same 260/164 engine available in the Falcon. But, unlike the Falcon, Fairlane buyers can order a 289/195

V-8 or even a new HP (high-performance) 289 which develops no less than 271 bhp at 6000 rpm. The standard transmission for V-8 powered cars is Ford's new-last-year all-synchromesh 3-speed. The Ford/Warner Gear T-10 4-speed is standard equipment if the 289/271 HP engine is ordered. If overdrive is desired, the only Fairlane which can be so ordered is the 260/164 V-8 powered unit.

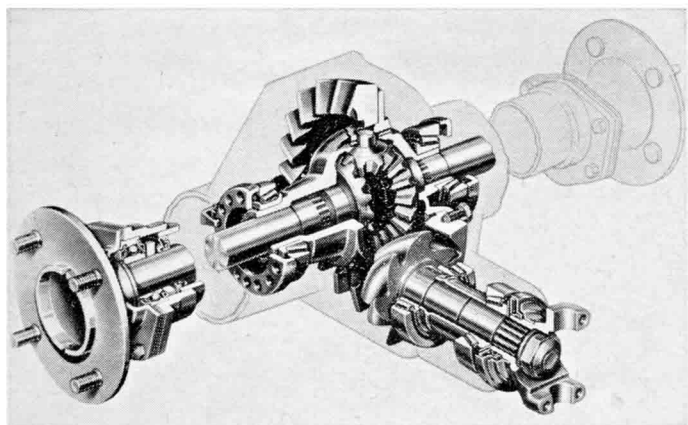
V-8s with automatic transmissions can be ordered in two choices. The 260/164 V-8 engine is the only choice if the customer wants the 2-speed Fordomatic. The brand-new 3-speed Fordomatic, actually smaller and lighter than the 2-speed, is now available on the Fairlane V-8 for the first time and it can be ordered with either the 260 or 289 V-8 but not the 289/271 HP.

This new 3-speed automatic is a dual-range transmission, much like the well-known Cruise-O-Matic used in the larger Fords. For economy, the driver can elect to use 2nd gear for normal starts, or alternatively, all three forward gears for optimum acceleration and performance. With more gears, plus the usual torque converter, the closer spacing of ratios insures smoother upshifts. For compari-

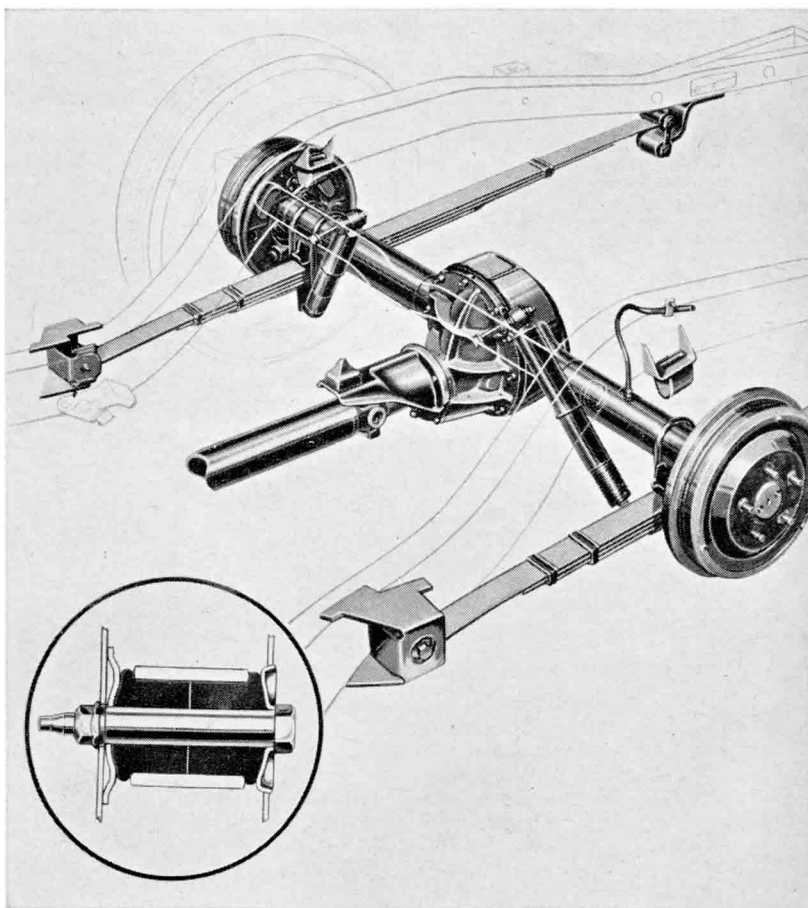
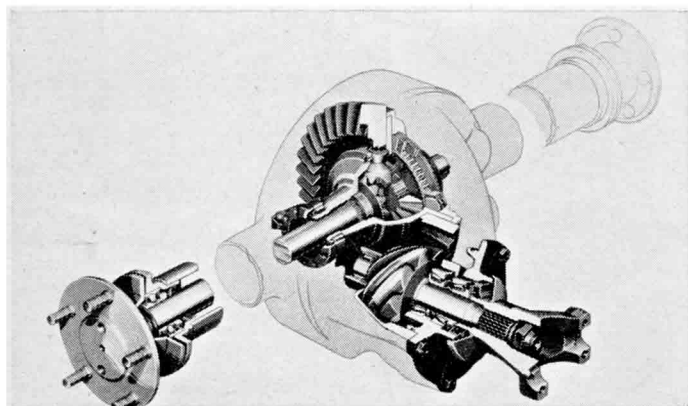
son purposes, the following table shows all the multiplication ratios of the 3-speed vs. the 2-speed and Cruise-O-Matic.

	2-SPEED	3-SPEED	CRUISE-O-MATIC
3rd	—	1.00	1.00
2nd	1.00	1.46	1.47
2nd X converter	—	2.99	3.09
1st	1.82	2.46	2.40
1st X converter	4.37	5.04	5.04
Converter ratio	2.40	2.05	2.10

It is important to note here that on the 2-speed, the transition from a ratio of 4.37 at stall to a ratio of 1:82 is smooth because of the converter. But when the shift from 1.82 to 1.00 is made, usually at 45-50 mph, the converter is functioning as a fluid coupling and there is bound to be a "bump" when the shift is made. To soften it, a designer can utilize a very slow shift—which hurts performance. When the 3-speed is operated as a 2-speed, the ratio changes gradually from 2.99 to 1.46. The bump from 1.46 to 1.00 is easier. When it operates in all 3-speeds the ratio changes from 5.04 at stall to 2.46 via the converter. There is a small bump when the gear ratio changes from 2.46 to 1.46, but the car speed at the time is 30-35 mph and the torque converter is still functioning, though not at its full capacity, combined-ratio of 2.99



DIFFERENTIAL FOR Falcon has drive pinion supported in two tapered roller bearings; Equa-Lock for Ford (below) directs power to both wheels. Rear suspension has leaf springs (right).



ENGINEERING THE '64 FORDS

(shown) which pertains only to 2nd gear starts.

In brief, a 3-speed transmission with torque converter gives what amounts to 5 speeds forward; in round numbers ratios of 5, 2.5, 2, 1.5 and 1.0:1. This new transmission puts Ford even with Chrysler and both of them ahead of GM, competitively, in the "in-between" size car market for 1964.

Fairlane engine changes parallel those described for the Falcon. The 289/195 engine option is of course the first V-8 engine in the big Fords. The new HP 289 engine gets its High Performance designation by virtue of 271 bhp at 6000 rpm with a torque peak of 314 lb.-ft. at 3400 rpm.

The increased power comes as a result of a number of changes, though interestingly enough the valve sizes are the same as the 289/195 engine at 1.67 in. (intake) and 1.45 in. (exhaust). There are, of course, the usual "three C" changes: cams, carburetion and compression ratio. The latter is raised from 9.0 to 11.0:1, requiring premium

fuel. Carburetion consists of a special 4-barrel unit—size not yet specified by Ford.

The intake manifold is the double-deck type and has very large passages. In addition, the exhaust system is tuned for free-flow with individual downswept passages from each port.

The valve lifters have the hydraulic plungers removed, and a small adapter cup fits on top so that the pushrods need not be changed to accommodate the all-mechanical system. Valve timing has been stepped up from the standard 20-66-56-20 sequence to 44-82-92-34 (crankshaft degrees) giving 306° of duration and an overlap of 78°. Valve lift is increased from 0.3680 to 0.4774 in. and the nominal spring pressure is boosted from 169 lb. to 247 lb. at valve open position.

Another change in this engine is a special crankshaft. While it looks and measures the same as the standard 289 crank, the HP version gets special inspection for imperfections and special machining.

As mentioned before, this engine comes only with the T-10 4-speed transmission. Also, when this engine

is specified, the still larger Ford rear axle gears are used, which have a ring gear diameter of 8.75 in. as compared with 8.00 in. used on the standard Fairlane V-8 and 7.25 in. on the Fairlane 6. The standard axle ratio for the HP option is 3.89:1. Standard tires are 7.00-13, but 7.00-14 on 5.0-in. rims are available.

Heavy-duty suspension and brakes are also standard equipment when the HP engine is specified. With a curb weight of around 3250 lb., this car will undoubtedly perform! Tests run by the company on the NHRA drag strip in Detroit show consistent elapsed times of 13.8 sec., and a speed of 101.8 mph, and this is in completely stock form.

FORD—Most of us think of the big 119-in. wheelbase Fords as Galaxies. However the big Fords come in 3 trim variations and the correct model designations are the Custom 300, the Galaxie 500 and the Galaxie 500/XL.

All new sheet metal, with one or two exceptions, characterizes the new Ford line. As before, there are six basic bodies: the usual 2- and 4-door sedans and hardtops, plus a convertible and a station wagon. The convertible pioneers something unique: The rear window is made of tempered glass

0.80 in. thick. It folds down with the top and no special treatment is required from the owner during the power-folding operation.

Last year Ford discontinued the original ohv V-8 family, made in 239, 256, 272, 292 and 312 cu. in. sizes. The replacement was the Fairlane lightweight V-8 with the top displacement of 289 cu. in. This engine competes with Chevrolet (283), Plymouth and Dodge (318), Rambler (287), Studebaker (289) and Buick Special (300). The Ford engine is the lightest of the group and with 3-speed automatic it weighs 52 lb. less than the Chevrolet 283 with 2-speed automatic.

Next above the 289/195 V-8 is the 352-cu. in., 220-bhp, the first "big block" option. With suitable changes it also comes in 390/300 form, in a 390/330 version and finally with as much as 427 cu. in. and 410 or 425 bhp depending on carburetion. There are no important changes in these bigger engines except for a redesigned automatic choke and more thrust area for main bearing No. 3 (by adding 0.25 in. to the outside flange diameter). The 390 engines are quieter because of minor changes in the valve gear and the V-belt layout. Pistons on the 427

have been changed to impact extrusions instead of permanent mold castings.

The all-synchromesh 3-speed has a redesigned linkage which reduces lever travel by 10% and reduces shifting effort by 30%. Ford engineers told *Car Life* that this transmission has been eminently successful. It costs more to build with the synchro low, but with so many cars now equipped with automatics, the service experience with manual transmissions was becoming expensive. Last year, warranty costs on manual transmissions were so low that the extra cost of the synchro-mesh more than paid for itself and also created some good will for Ford.

A 4-speed all-synchromesh transmission is offered but it is available only with the 390-cu. in. engine option and is standard equipment with the HP-427 engine. This unit is specially made for Ford by Warner Gear and it is designed to give good service life even with extended hard usage in each gear ratio. For 1964, there is a change in the 2nd speed gear: it is now made of aircraft-quality steel and with a slight revision in tooth form to provide a heavier and stronger gear. The following chart shows gear ratios for all manual transmissions.

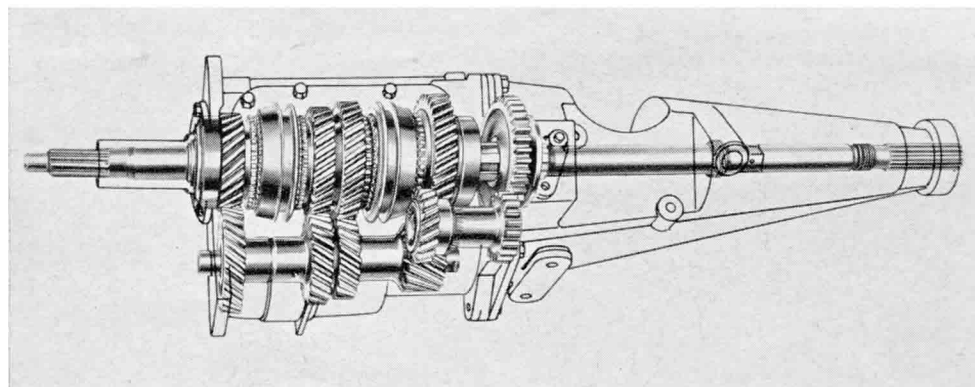
O/D	6-223	8-289	8-352	8-390	8-427
1	2.81	3.26	2.79	2.42	2.24
2	1.69	1.84	1.70	1.60	1.61
3	1.00	1.00	1.00	1.00	1.41
4	0.72	—	—	—	1.00
Synchro					
-1st	no	no	yes	yes	yes

The 2-speed Fordomatic is no longer available on the big Fords. Replacing it is the new 3-speed Fordomatic described in the Fairlane section. The dual-range feature of this new automatic does not apply to the heavier big cars because 223 to 289-cu. in. engines do not ensure enough torque to start a heavy, 3800-lb. car in 2nd gear. In the Ford application, this transmission always starts in 1st gear.

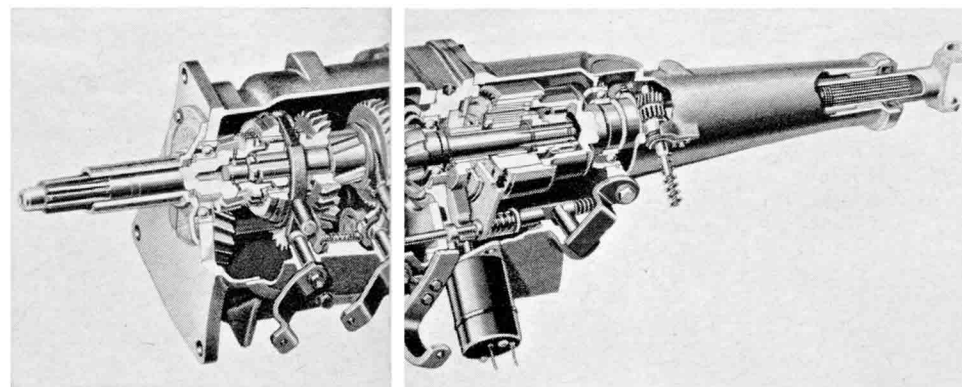
Ford does offer the dual-range Cruise-O-Matic for all V-8 engines: i.e., the 289, 352 or 390, but not the 427. This heavy-duty automatic allows 2nd gear starts in the D2 position, for better control on slippery roads.

The 1964 Fords continue with 14-in. wheels, but 15-in. wheels are mandatory with the HP 427 engine.

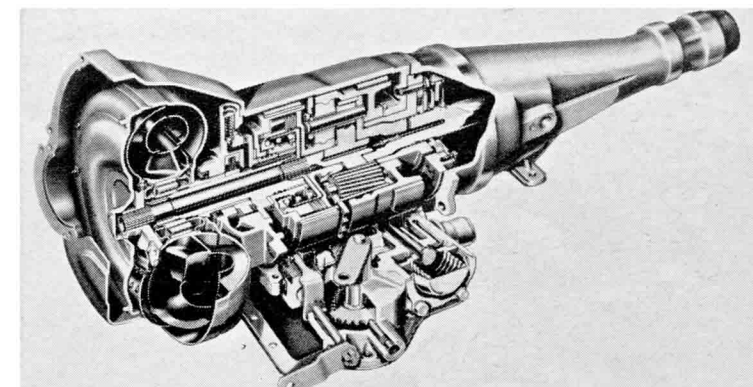
The 1964 Fords are heavier than their competitors. Ford engineers state: "A substantial improvement in ride and handling characteristics is immediately noticeable in the 1964 Ford with increased weight in the body and suspension system. Big car feel and surer, ▶



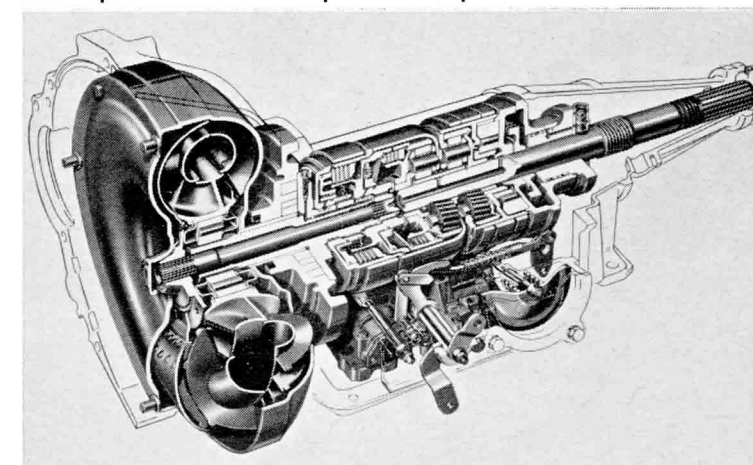
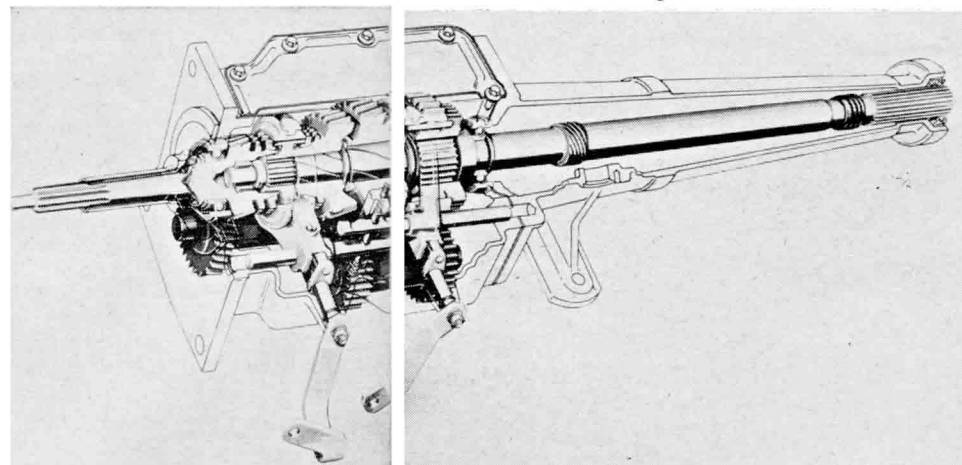
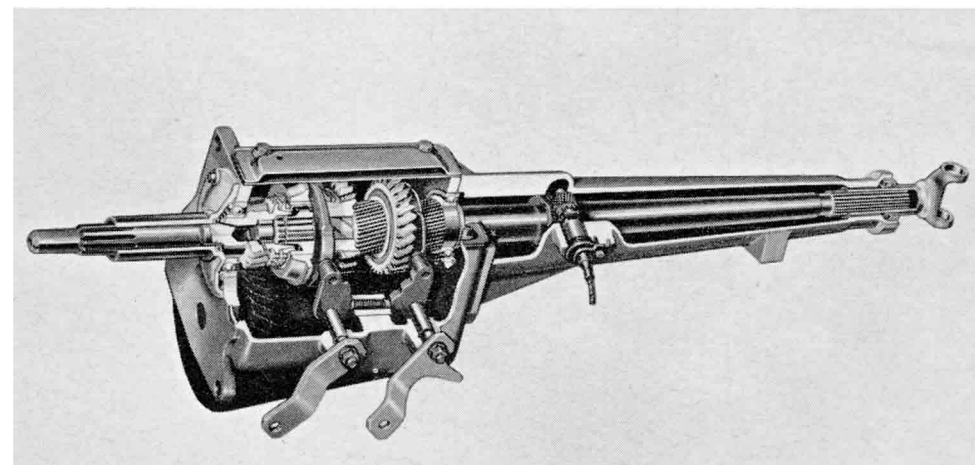
4-SPEED TRANSMISSION optional for Galaxie has 2.36 1st, that for Fairlane a 2.74 1st. 3-SPEED UNIT for Falcons doesn't have synchromesh on 1st, but has helical cut gears.



OVERDRIVE transmission is available for Galaxie. ALL SYNCHRO gearbox is used in Fairlane, Galaxie.



2-SPEED Fordomatic is used only in Falcon, Fairlane. NEW 3-speed Fordomatic will replace most 2-speeds.



ENGINEERING THE '64 FORDS

(shown) which pertains only to 2nd gear starts.

In brief, a 3-speed transmission with torque converter gives what amounts to 5 speeds forward; in round numbers ratios of 5, 2.5, 2, 1.5 and 1.0:1. This new transmission puts Ford even with Chrysler and both of them ahead of GM, competitively, in the "in-between" size car market for 1964.

Fairlane engine changes parallel those described for the Falcon. The 289/195 engine option is of course the first V-8 engine in the big Fords. The new HP 289 engine gets its High Performance designation by virtue of 271 bhp at 6000 rpm with a torque peak of 314 lb.-ft. at 3400 rpm.

The increased power comes as a result of a number of changes, though interestingly enough the valve sizes are the same as the 289/195 engine at 1.67 in. (intake) and 1.45 in. (exhaust). There are, of course, the usual "three C" changes: cams, carburetion and compression ratio. The latter is raised from 9.0 to 11.0:1, requiring premium

fuel. Carburetion consists of a special 4-barrel unit—size not yet specified by Ford.

The intake manifold is the double-deck type and has very large passages. In addition, the exhaust system is tuned for free-flow with individual downswept passages from each port.

The valve lifters have the hydraulic plungers removed, and a small adapter cup fits on top so that the pushrods need not be changed to accommodate the all-mechanical system. Valve timing has been stepped up from the standard 20-66-56-20 sequence to 44-82-92-34 (crankshaft degrees) giving 306° of duration and an overlap of 78°. Valve lift is increased from 0.3680 to 0.4774 in. and the nominal spring pressure is boosted from 169 lb. to 247 lb. at valve open position.

Another change in this engine is a special crankshaft. While it looks and measures the same as the standard 289 crank, the HP version gets special inspection for imperfections and special machining.

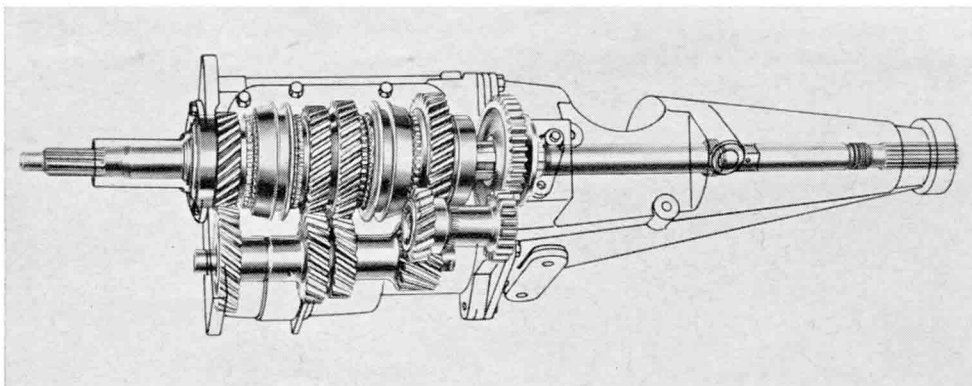
As mentioned before, this engine comes only with the T-10 4-speed transmission. Also, when this engine

is specified, the still larger Ford rear axle gears are used, which have a ring gear diameter of 8.75 in. as compared with 8.00 in. used on the standard Fairlane V-8 and 7.25 in. on the Fairlane 6. The standard axle ratio for the HP option is 3.89:1. Standard tires are 7.00-13, but 7.00-14 on 5.0-in. rims are available.

Heavy-duty suspension and brakes are also standard equipment when the HP engine is specified. With a curb weight of around 3250 lb., this car will undoubtedly perform! Tests run by the company on the NHRA drag strip in Detroit show consistent elapsed times of 13.8 sec., and a speed of 101.8 mph, and this is in completely stock form.

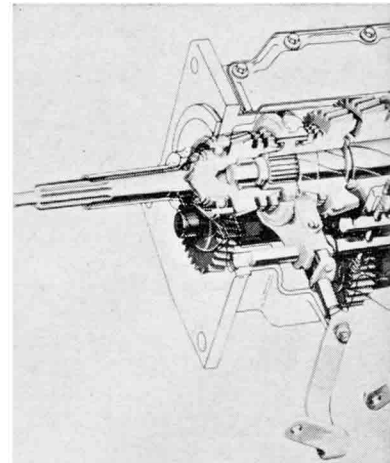
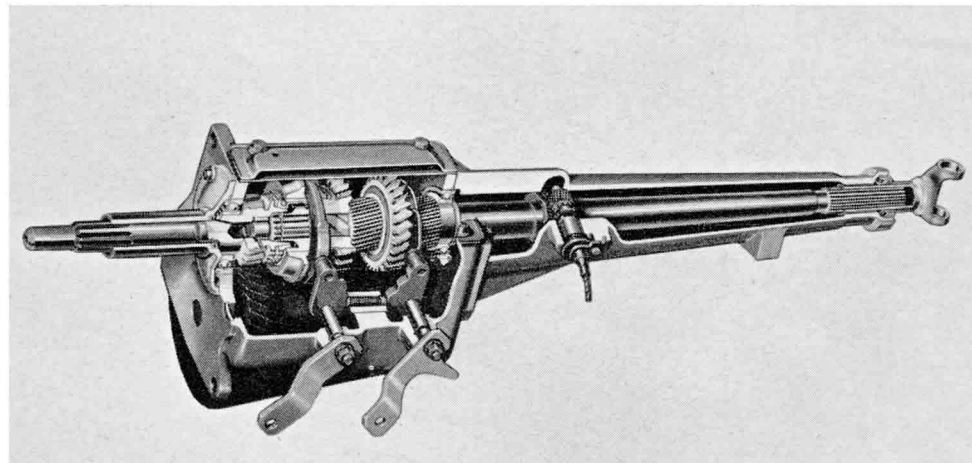
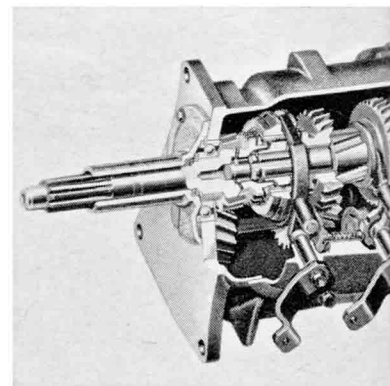
FORD—Most of us think of the big 119-in. wheelbase Fords as Galaxies. However the big Fords come in 3 trim variations and the correct model designations are the Custom 300, the Galaxie 500 and the Galaxie 500/XL.

All new sheet metal, with one or two exceptions, characterizes the new Ford line. As before, there are six basic bodies: the usual 2- and 4-door sedans and hardtops, plus a convertible and a station wagon. The convertible pioneers something unique: The rear window is made of tempered glass



4-SPEED TRANSMISSION optional for Galaxie has 2.36 1st, that for Fairlane a 2.74 1st.

3-SPEED UNIT for Falcons doesn't have synchromesh on 1st, but has helical cut gears.



0.80 in. thick. It folds down with the top and no special treatment is required from the owner during the power-folding operation.

Last year Ford discontinued the original ohv V-8 family, made in 239, 256, 272, 292 and 312 cu. in. sizes. The replacement was the Fairlane lightweight V-8 with the top displacement of 289 cu. in. This engine competes with Chevrolet (283), Plymouth and Dodge (318), Rambler (287), Studebaker (289) and Buick Special (300). The Ford engine is the lightest of the group and with 3-speed automatic it weighs 52 lb. less than the Chevrolet 283 with 2-speed automatic.

Next above the 289/195 V-8 is the 352-cu. in., 220-bhp, the first "big block" option. With suitable changes it also comes in 390/300 form, in a 390/330 version and finally with as much as 427 cu. in. and 410 or 425 bhp depending on carburetion. There are no important changes in these bigger engines except for a redesigned automatic choke and more thrust area for main bearing No. 3 (by adding 0.25 in. to the outside flange diameter). The 390 engines are quieter because of minor changes in the valve gear and the V-belt layout. Pistons on the 427

have been changed to impact extrusions instead of permanent mold castings.

The all-synchromesh 3-speed has a redesigned linkage which reduces lever travel by 10% and reduces shifting effort by 30%. Ford engineers told *Car Life* that this transmission has been eminently successful. It costs more to build with the synchro low, but with so many cars now equipped with automatics, the service experience with manual transmissions was becoming expensive. Last year, warranty costs on manual transmissions were so low that the extra cost of the synchromesh more than paid for itself and also created some good will for Ford.

A 4-speed all-synchromesh transmission is offered but it is available only with the 390-cu. in. engine option and is standard equipment with the HP-427 engine. This unit is specially made for Ford by Warner Gear and it is designed to give good service life even with extended hard usage in each gear ratio. For 1964, there is a change in the 2nd speed gear: it is now made of aircraft-quality steel and with a slight revision in tooth form to provide a heavier and stronger gear. The following chart shows gear ratios for all manual transmissions.

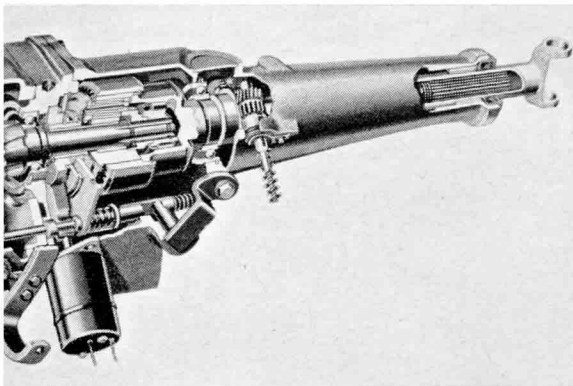
	O/D	6-223	8-289	8-352	8-390	8-427
1	2.81	3.26	2.79	2.42	2.24	2.36
2	1.69	1.84	1.70	1.60	1.61	1.78
3	1.00	1.00	1.00	1.00	1.00	1.41
4	0.72	—	—	—	—	1.00
Synchro						
-1st	no	no	yes	yes	yes	yes

The 2-speed Fordomatic is no longer available on the big Fords. Replacing it is the new 3-speed Fordomatic described in the Fairlane section. The dual-range feature of this new automatic does not apply to the heavier big cars because 223 to 289-cu. in. engines do not ensure enough torque to start a heavy, 3800-lb. car in 2nd gear. In the Ford application, this transmission always starts in 1st gear.

Ford does offer the dual-range Cruise-O-Matic for all V-8 engines: i.e., the 289, 352 or 390, but not the 427. This heavy-duty automatic allows 2nd gear starts in the D2 position, for better control on slippery roads.

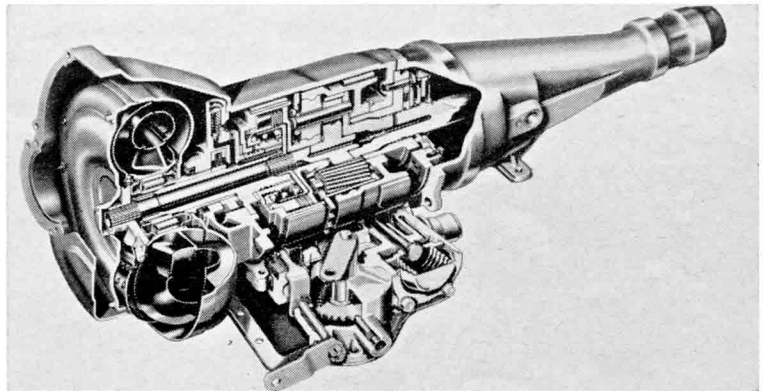
The 1964 Fords continue with 14-in. wheels, but 15-in. wheels are mandatory with the HP 427 engine.

The 1964 Fords are heavier than their competitors. Ford engineers state: "A substantial improvement in ride and handling characteristics is immediately noticeable in the 1964 Ford with increased weight in the body and suspension system. Big car feel and surer,



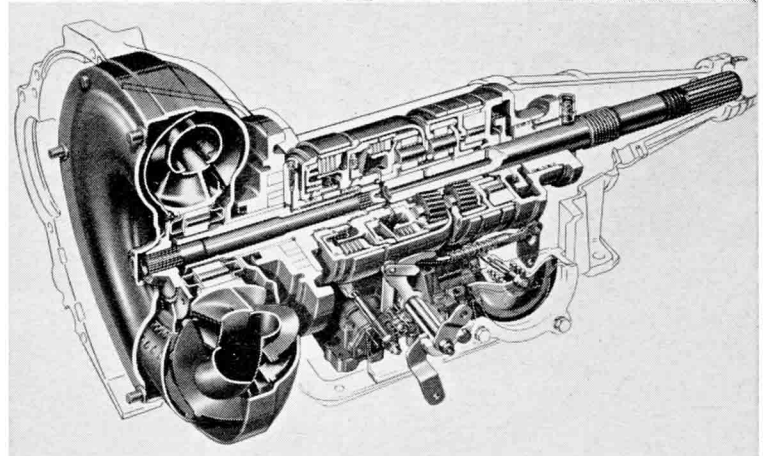
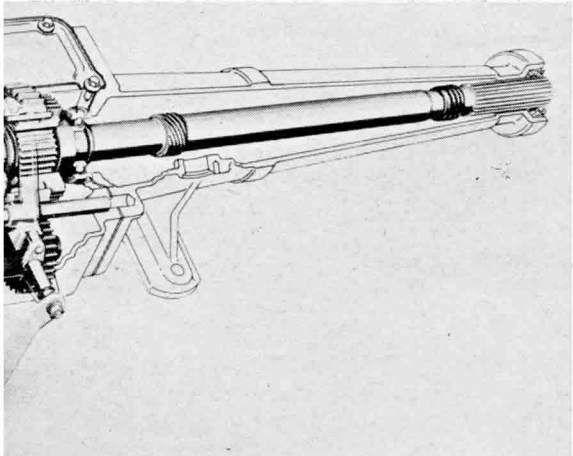
OVERDRIVE transmission is available for Galaxie.

ALL SYNCHRO gearbox is used in Fairlane, Galaxie.



2-SPEED Fordomatic is used only in Falcon, Fairlane.

NEW 3-speed Fordomatic will replace most 2-speeds.



ENGINEERING THE '64 FORDS

safer control are the result of a 2-300 lb. weight advantage over traditional standard car weights. Most of this weight advantage is in important areas such as frame, body, front suspension and rear suspension. Rocker panel sections are deeper and floor pan design provides additional strength. These engineering refinements for 1964 reduce the road noise level and enhance Ford's luxury car ride and handling feel."

Suspension changes are of a minor nature, chiefly a little more rubber

here and there. The standard ride-rates, front/rear are unchanged at 97/103 lb. per in. However, the

added weight gives the effect of a softer ride. Optional heavy-duty front springs are available and rear springs with rates of 126, 133 and 154 lb./in. are listed. Heavy-duty suspension and brakes are mandatory with the 427 engine.

THUNDERBIRD—Following precedent, the 'Bird gets all-new sheet metal once every three years. In this case 1964 is the year and the new Thunderbird is much more graceful looking with a longer hood and a shorter roof line. As before, there is a convertible

and a hardtop, both of which seat four persons only. Options include a roadster type tonneau cover for the convertible and vinyl covering with landau irons for the hardtop.

The overall package size is unchanged but new front seats allow the rear passengers more knee room as well as more foot space underneath. Luggage space is increased appreciably by moving the gas tank farther forward.

While air-conditioning is optional, a new high capacity ventilation system is provided in which air enters at the cowl and exits via a vent located at the base of the rear window. This rear vent is driver controlled by a vacuum switch and, even with the side vents and all windows closed, is said to be

very effective in exhausting air from the interior of the car at highway speeds.

The most important mechanical change in the 1964 Thunderbird is 15-in. wheels which mount low-profile tires with a section width of 8.15 in. These tires were specially engineered for the car and give a very smooth ride, aided by center-piloted wheels which run truer than non-piloted.

The primary reason for dropping 14-in. wheels in favor of 15-in. was to reduce brake fade. A "bare" Thunderbird weighs over 4600 lb. and easily 5000 lb. with a few accessories and a driver. The cast-iron brake drums have an inside diameter of 11.09 in. with linings 3-in. wide. With 15-in. wheels the maximum drum tempera-

ture, under test, is reduced by over 100° F. The brakes are unchanged, but a new power brake system for the Thunderbird has been adopted to reduce pedal effort.

Chrome-plated wire wheels are continued as an option and it is interesting to note that these mount 8.00-14 tires, not 8.15-15.

Although the suspension looks exactly the same as before, there are a number of changes. The soft suspension of the previous model has been softened still more; the front ride rate is reduced from 130 to 100 lb./in. according to Ford engineers. To accomplish this it was necessary to increase the wheel travel. The front system now incorporates anti-dive geometry and the 60-in. rear springs

have anti-squat. Both suspension systems produce slightly more understeer—in front for high speed stability, at the rear for safer cornering.

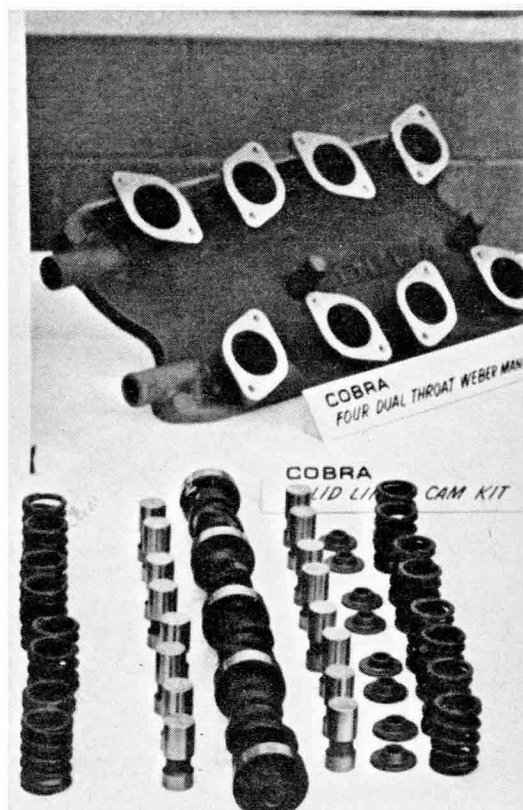
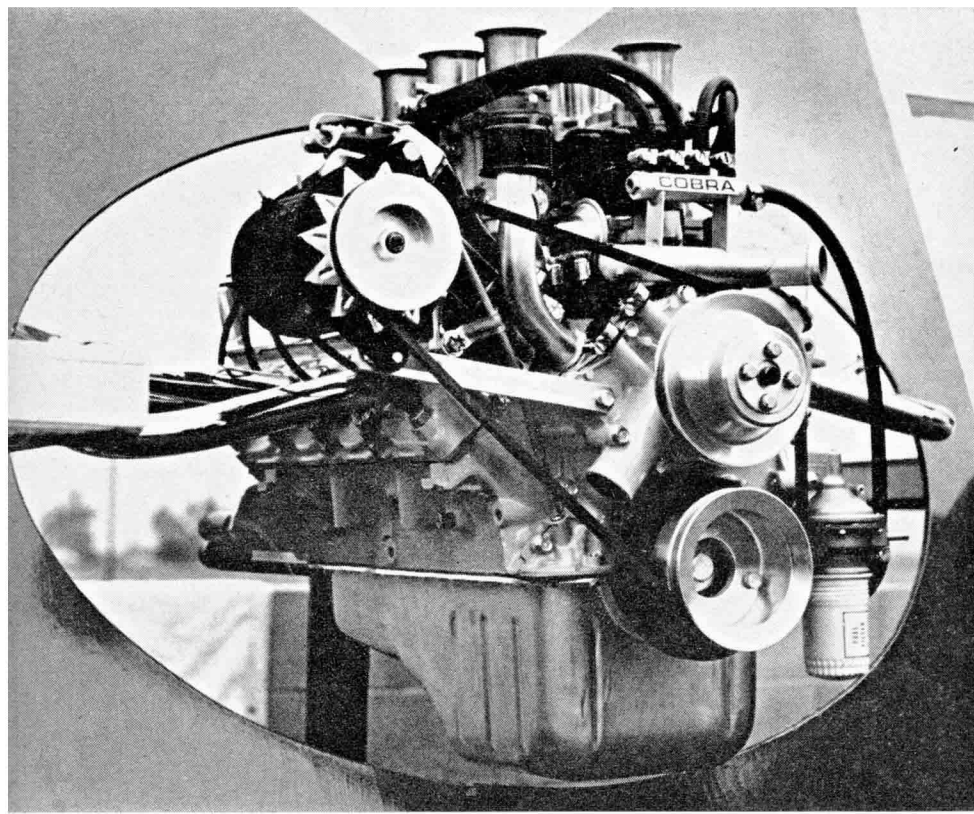
The only engine you can get in a Thunderbird is the 390-cu. in./300-bhp unit. Changes described for the large Ford engines apply, including a larger thrust bearing and revised V-belt arrangement. The 1964 Thunderbird has the radiator moved farther forward and a quieter fan. A transistorized ignition system is available for this engine.

The 3-speed Cruise-O-Matic transmission and 3.0:1 axle continue as standard equipment and there are no options. The 1964 'Birds will have a dual exhaust system, an item not available last year.

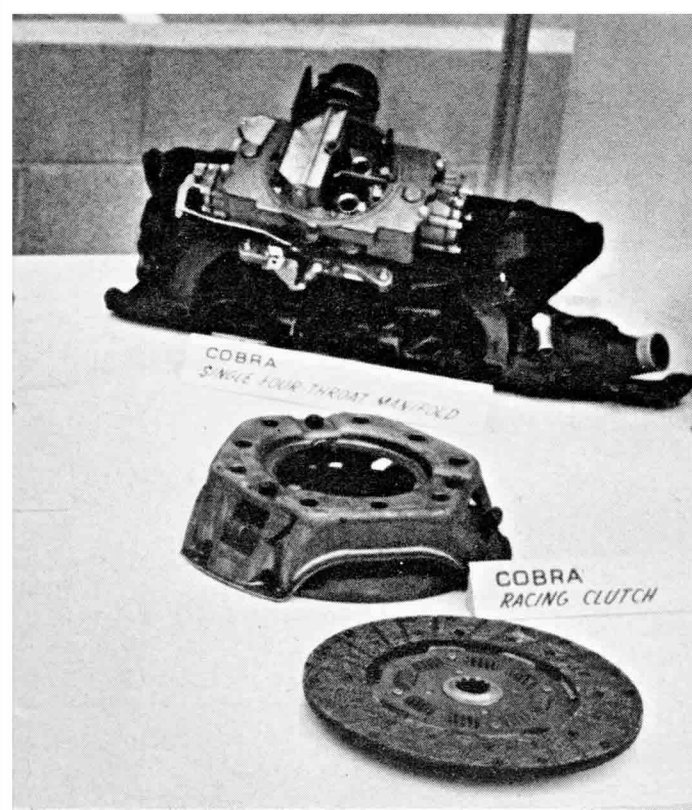
COBRA KITS for Fairlane & Falcon

OWNERS OF Fairlanes and Falcons with the 260/289-cu. in. V-8 engine will soon be able to inject Cobra venom into their powerplant's veins. This autumn, key Ford dealers across the country will sell high-performance equipment developed for the Shelby AC-Cobra, the new Fairlane-powered

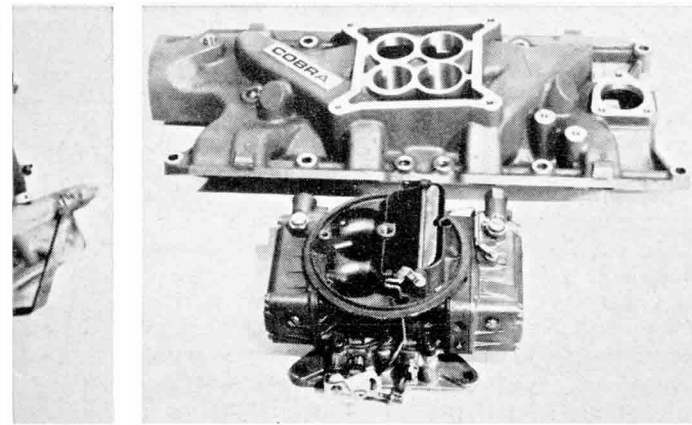
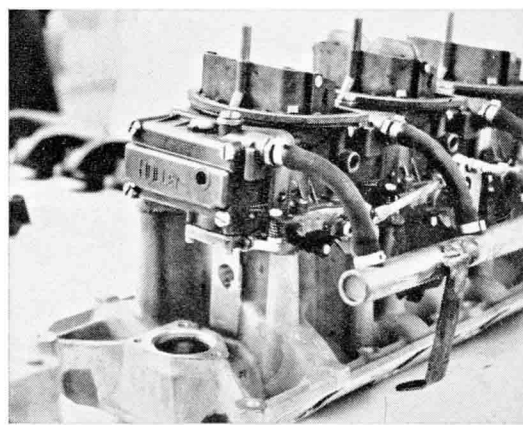
sports car that has all but usurped the big production winner's circle from Corvette. A welcome merchandising move, it is one more FoMoCo association with experts in the motorsport field (Shelby American, Inc., of Venice, Calif., in this case) to enhance its "total performance."



FULL RACE kit, or single 3x2 manifold, is on its way.



BIG 4-barrel manifold should become popular.



ENGINEERING THE '64 FORDS

safer control are the result of a 2-300 lb. weight advantage over traditional standard car weights. Most of this weight advantage is in important areas such as frame, body, front suspension and rear suspension. Rocker panel sections are deeper and floor pan design provides additional strength. These engineering refinements for 1964 reduce the road noise level and enhance Ford's luxury car ride and handling feel."

Suspension changes are of a minor nature, chiefly a little more rubber

here and there. The standard ride-rates, front/rear are unchanged at 97/103 lb. per in. However, the

added weight gives the effect of a softer ride. Optional heavy-duty front springs are available and rear springs with rates of 126, 133 and 154 lb./in. are listed. Heavy-duty suspension and brakes are mandatory with the 427 engine.

THUNDERBIRD—Following precedent, the 'Bird gets all-new sheet metal once every three years. In this case 1964 is the year and the new Thunderbird is much more graceful looking with a longer hood and a shorter roof line. As before, there is a convertible

and a hardtop, both of which seat four persons only. Options include a roadster type tonneau cover for the convertible and vinyl covering with landau irons for the hardtop.

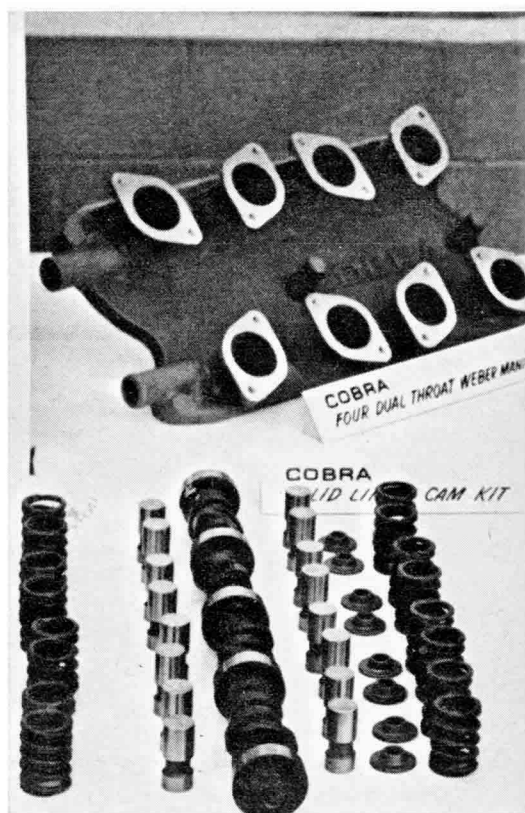
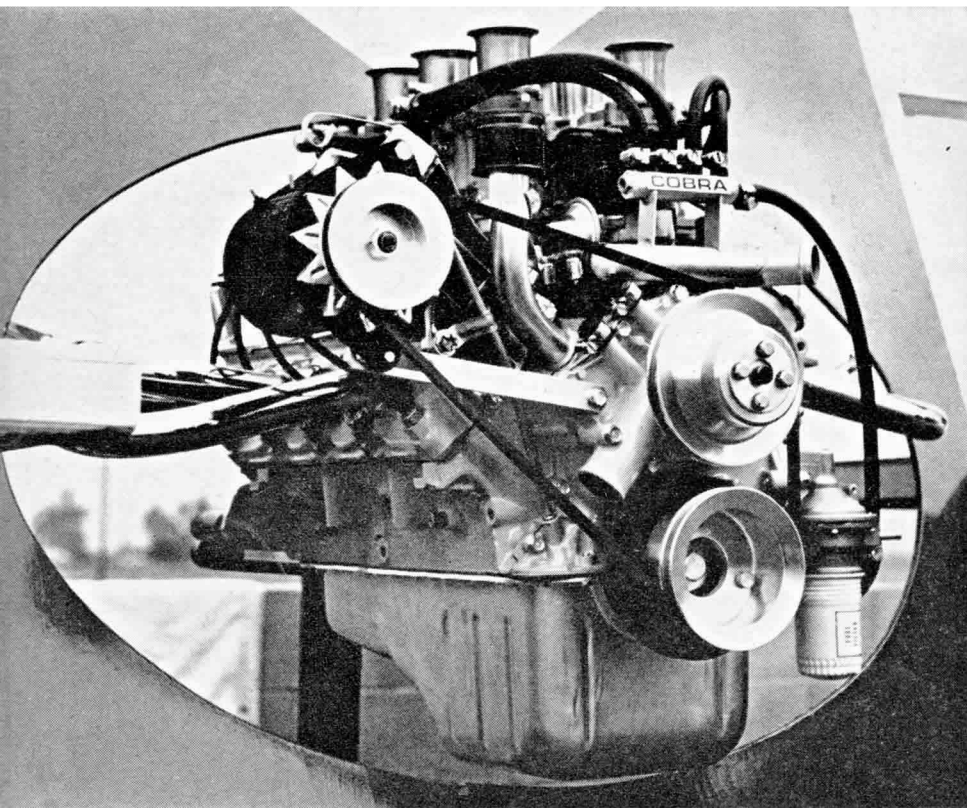
The overall package size is unchanged but new front seats allow the rear passengers more knee room as well as more foot space underneath. Luggage space is increased appreciably by moving the gas tank farther forward.

While air-conditioning is optional, a new high capacity ventilation system is provided in which air enters at the cowl and exits via a vent located at the base of the rear window. This rear vent is driver controlled by a vacuum switch and, even with the side vents and all windows closed, is said to be

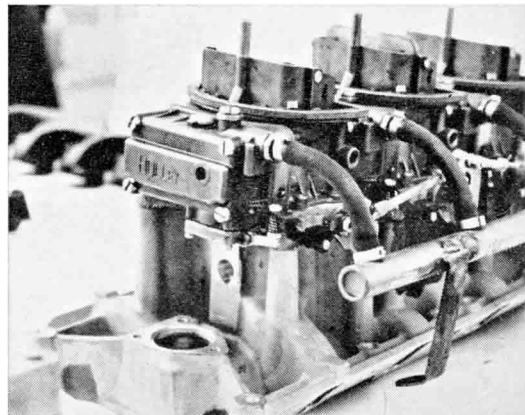
COBRA KITS for Fairlane & Falcon

OWNERS OF Fairlanes and Falcons with the 260/289-cu. in. V-8 engine will soon be able to inject Cobra venom into their powerplant's veins. This autumn, key Ford dealers across the country will sell high-performance equipment developed for the Shelby AC-Cobra, the new Fairlane-powered

sports car that has all but usurped the big production winner's circle from Corvette. A welcome merchandising move, it is one more FoMoCo association with experts in the motorsport field (Shelby American, Inc., of Venice, Calif., in this case) to enhance its "total performance."



FULL RACE kit, or single 3x2 manifold, is on its way.



very effective in exhausting air from the interior of the car at highway speeds.

The most important mechanical change in the 1964 Thunderbird is 15-in. wheels which mount low-profile tires with a section width of 8.15 in. These tires were specially engineered for the car and give a very smooth ride, aided by center-piloted wheels which run truer than non-piloted.

The primary reason for dropping 14-in. wheels in favor of 15-in. was to reduce brake fade. A "bare" Thunderbird weighs over 4600 lb. and easily 5000 lb. with a few accessories and a driver. The cast-iron brake drums have an inside diameter of 11.09 in. with linings 3-in. wide. With 15-in. wheels the maximum drum tempera-

ture, under test, is reduced by over 100° F. The brakes are unchanged, but a new power brake system for the Thunderbird has been adopted to reduce pedal effort.

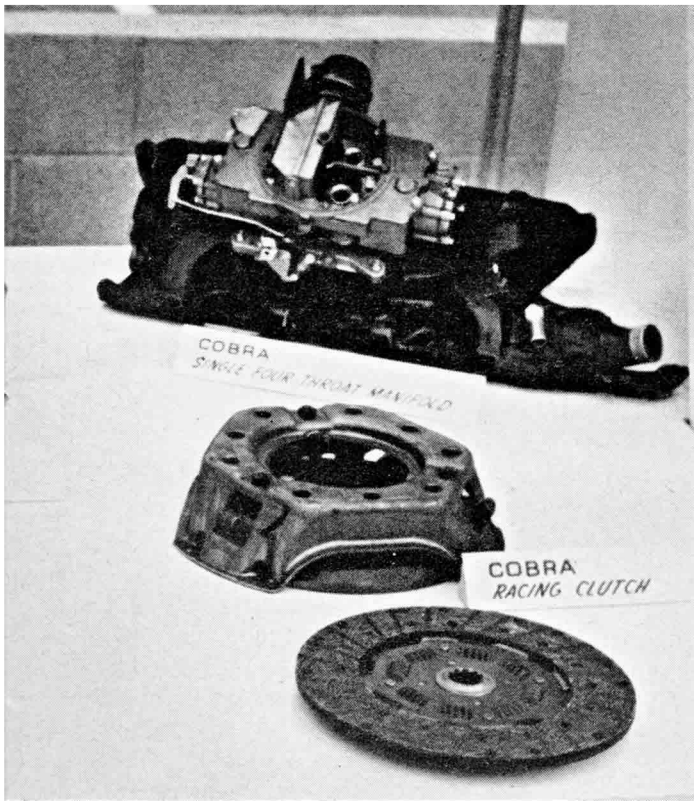
Chrome-plated wire wheels are continued as an option and it is interesting to note that these mount 8.00-14 tires, not 8.15-15.

Although the suspension looks exactly the same as before, there are a number of changes. The soft suspension of the previous model has been softened still more; the front ride rate is reduced from 130 to 100 lb./in. according to Ford engineers. To accomplish this it was necessary to increase the wheel travel. The front system now incorporates anti-dive geometry and the 60-in. rear springs

have anti-squat. Both suspension systems produce slightly more understeer—in front for high speed stability, at the rear for safer cornering.

The only engine you can get in a Thunderbird is the 390-cu. in./300-bhp unit. Changes described for the large Ford engines apply, including a larger thrust bearing and revised V-belt arrangement. The 1964 Thunderbird has the radiator moved farther forward and a quieter fan. A transistorized ignition system is available for this engine.

The 3-speed Cruise-O-Matic transmission and 3.0:1 axle continue as standard equipment and there are no options. The 1964 'Birds will have a dual exhaust system, an item not available last year. ■



BIG 4-barrel manifold should become popular.

