

12
100

REASONS

WHY YOU

SHOULD

OWN A

FORD



INTRODUCTION

The new Ford V-8 for 1934 is representative of the most advanced engineering practices. It embodies features to be found in no other car. Every feature is tried and proven. There is nothing experimental about this new automobile.

Ford successfully introduced the V-type engine into the low-price field. In no other car selling at less than \$2300 is a V-type 8-cylinder engine available. In adapting it to the low-priced automobile Ford has made it an economical power-plant, with many exclusive features. The fuel and oil economy which has characterized Ford cars in the past has been attained in the Ford V-8 engine. Other low operating cost features are embodied in it.

Ford has not stopped with the engine however, nor with any individual part of the entire car. Throughout the chassis and body every detail has been studied. Useless weight has been eliminated. The best of materials have been utilized. Design and manufacturing have been co-ordinated to produce the well-balanced, smooth-running, economical automobile this car is.

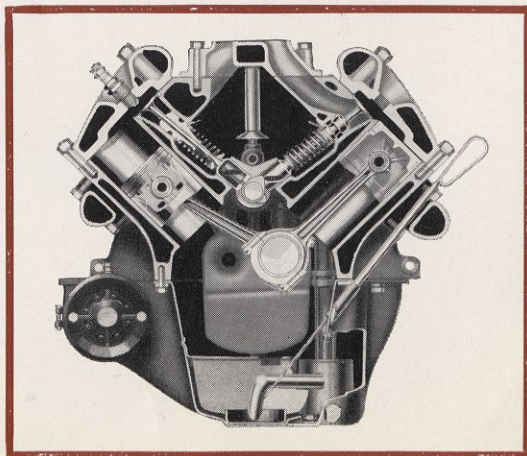
The new Ford V-8 is not a "one feature" car. No enumeration of its features can tell the entire story of the years of development, the painstaking tests, the precision and the care which this car exemplifies. Nor can any list of features tell the story of the millions of satisfied owners who have used Ford cars for more than 30 years.

However, there are so many reasons why the new Ford V-8 is representative of engineering progress that 100 of them are included herein. These may serve to indicate why the Ford V-8 is such an outstanding "buy," regardless of its low purchase price; why this new car has built-in characteristics which give it economy, low depreciation, long life, unsurpassed performance and above all—safety.

100 REASONS WHY YOU SHOULD OWN A NEW FORD V-8

ENGINE

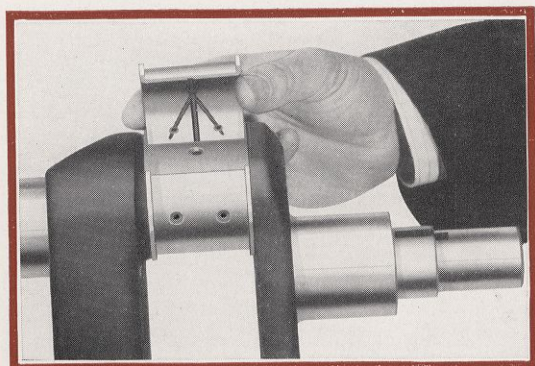
- 1 Cylinder blocks and crankcase cast integral. (Exclusive Ford feature.) Provides exceptional rigidity for the entire engine, giving smoothness of operation and long life to bearings and all moving parts.
- 2 90° V-angle between cylinder blocks and 90° crankthrows give even cylinder firing sequence and place the engine in inherently perfect balance. Both contribute to freedom from vibration at all engine speeds.
- 3 Exceptionally short, fully counterbalanced crankshaft. Aids toward smooth operation of engine and reduces bearing wear.



4 Cylinders offset from crankshaft. Reduces bearing pressures, adding to life of crankshaft bearings.

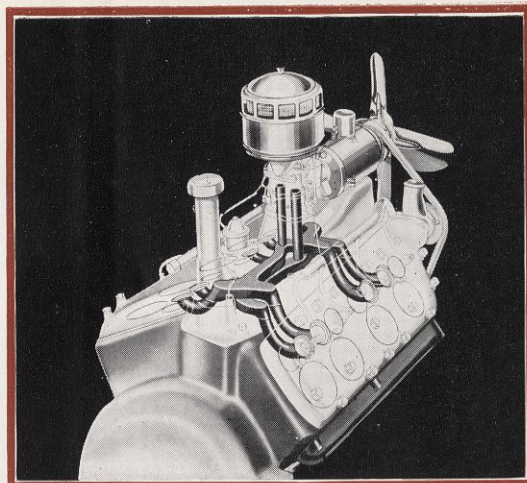
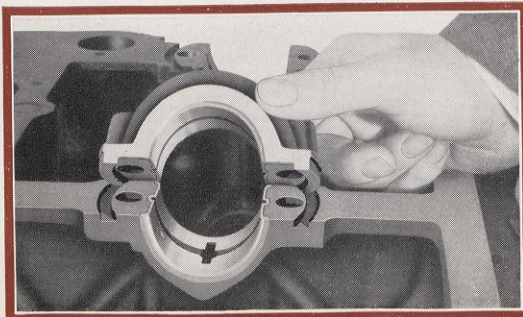
5 Cast alloy steel crankshaft. (Exclusive Ford feature.) Increases bearing life by providing hard wearing surface. Aids in smooth operation of engine since this material is more rigid than forged-steel.

6 Full-floating connecting rod bearings carried between two films of oil. Double the bearing area and have lower "rubbing speed" which increase bearing life. (Exclusive Ford feature.)



7 Large crankshaft and camshaft bearing areas. The large size of bearings reduces wear and increases life of engine between overhaul periods.

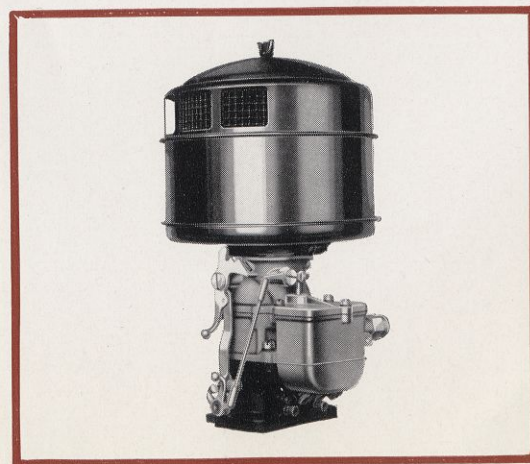
8 Piloted main bearing caps. Assure rigidity of bearing mounting, thus reducing possibility of misalignment. Increase bearing life and assist in smooth engine operation by permitting and retaining accurate "fit" around crankshaft bearing journals.

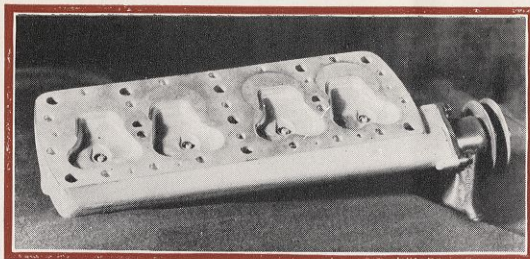


9 Dual carburetor with dual intake manifold. Increases engine efficiency and power output by assuring more even distribution of fuel to all 8 cylinders and aids in easy starting in cold weather. Reduces fuel consumption.

10 Combination intake manifold and valve chamber cover. (Exclusive Ford feature.) Assists in making the Ford V-8 engine compact. Short, direct passages provide feed of fuel vapor to all cylinders.

11 Intake silencer and air cleaner. Flow of air into carburetor is silenced. Particles of dirt are removed, preventing excessive wear and contamination of oil.





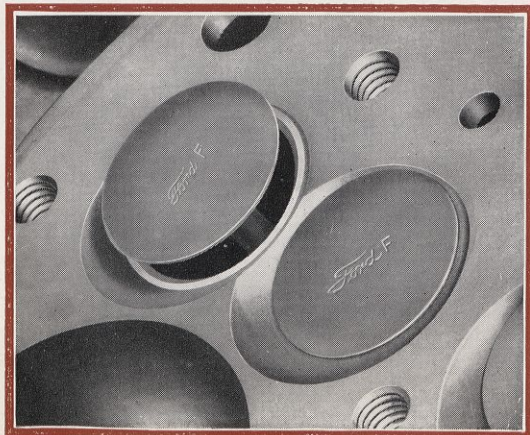
12 Aluminum cylinder heads. Give the increased efficiency and fuel economy obtainable from high compression with non-premium fuels. Add power, acceleration and fuel economy to engine and reduce carbon formation.

13 Downdraft carburetor. Makes fuel feed more responsive to the throttle. Aids in easy starting and acceleration.

14 Hot spot intake manifold. Reduces warming-up time in cold weather, assuring quicker, smoother running of engine. An aid to fuel economy.

15 Aluminum pistons. Improve acceleration. Relieve bearing pressures, thus reducing wear. Contribute to engine efficiency and economy of operation.

16 Light, hollow and extremely hard valve tappets. Low weight decreases power required to operate valves. Wear-resistant hardness maintains accuracy of valve adjustment.



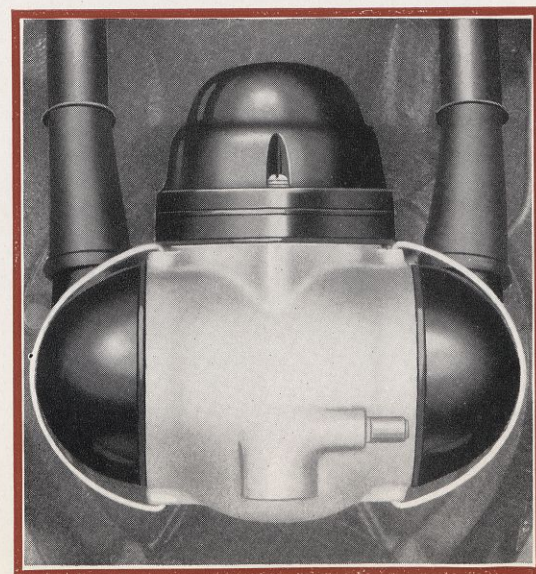
17 Non-adjustable, "precision-set" valve clearances. (Exclusive Ford feature.) Eliminate necessity for valve adjustment between complete engine overhauls or replacements.

18 Exhaust valve seat inserts. Prolong life of valve seats, making it seldom necessary to re-grind valves.

19 Valve unit assembly. (Exclusive Ford feature.) Valve, valve spring, split valve guide and retainer assembled as a single complete unit. Spring need never be removed from valve. Provides easy removal of valves for cleaning carbon, etc. Reduces service time and labor.

20 Large valve stem end. Area more than four times average. Practically eliminates wear, making possible the permanent precision setting of valve clearances at Ford factory.

21 Fully automatic spark advance. Combination of spark advance, centrifugal governor and automatic vacuum brake assure accurate automatic position of spark at all engine speeds and as required by various road and load operating conditions.



22 Direct driven ignition unit. (Exclusive Ford feature.) Ignition distributor driven directly from end of camshaft, eliminating gears and providing continuously accurate timing. Simple and free from mechanical trouble and gear noise.

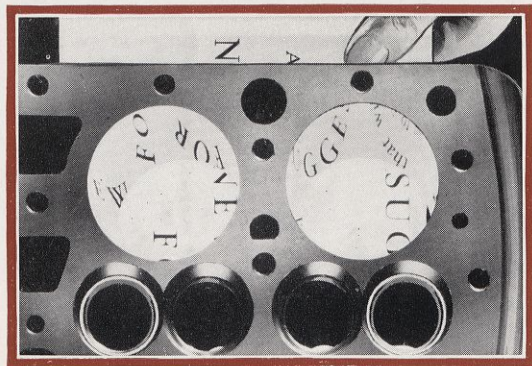
23 Enclosed ignition wiring. Prevents entrance of water during storms and assures easy starting in wet weather.

24 Short integral high-tension connection between coil and ignition unit. Assures hotter spark delivered at plugs.

25 Single ignition coil. Simplifies electrical system for 8-cylinder car.

26 Special ignition contact point operating system. Makes possible the use of a single coil with simpler electrical system through utilizing two sets of purposely non-synchronized contact points.

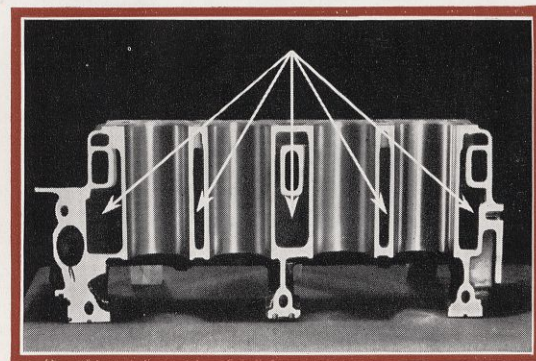
27 Easy re-installation of ignition distributor. Complete unit can be removed and replaced easily and without requiring re-timing of spark. Cannot be incorrectly assembled. Time required to make contact point adjustment materially reduced.



28 Polished cylinder walls. Their smooth surface reduces friction and wear, increasing useful horsepower and engine life and insuring maximum oil economy.

29 Accurate mechanical balance. All reciprocating and rotating parts of engine are accurately balanced for smoothest operation of engine at all running speeds, and to reduce wear.

30 Low back-pressure exhaust system. Water-cooled exhaust passages in cylinder blocks, ample piping and large low-pressure muffler give adequate silencing without impeding power output.



31 Full length water-jackets. The water jackets around the cylinders extend their full length. The pistons are kept cooler and the lubricating oil temperature is maintained within desirable limits at all times. By controlling the oil temperature, wear throughout the entire engine is reduced.

32 Waterline thermostats. Thermostats in the waterlines of the V-8 cooling system aid in enabling the engine to warm up quickly in cool weather and to maintain a more even operating temperature. Fuel economy is thus improved and the possibility of crankcase oil dilution minimized.

33 Two water pumps. The use of two water pumps assures plentiful flow of cooling water to both cylinder blocks. The engine runs cooler and maintains its full power in the hottest weather. The water capacity is $5\frac{1}{2}$ gallons.

34 Easy fan belt adjustment. Fan and generator combined on top of engine with adjustable mounting for easy fan belt tightening or replacement.

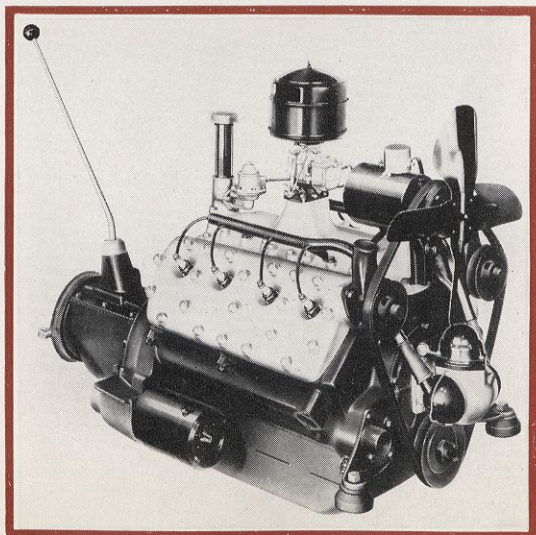
35 Fuel economy. Entire carburetion system including dual downdraft carburetor, dual intake manifold with hot-spot, valve arrangement and timing, designed for fuel economy. Economy further enhanced by low back-pressure muffler.

36 Oil economy. New type pistons and rings, baffle-plates in valve chamber, refinements in bearing design and other engine improvements reduce oil consumption to minimum. No need to add oil between 1000-mile oil changes under normal operating conditions.

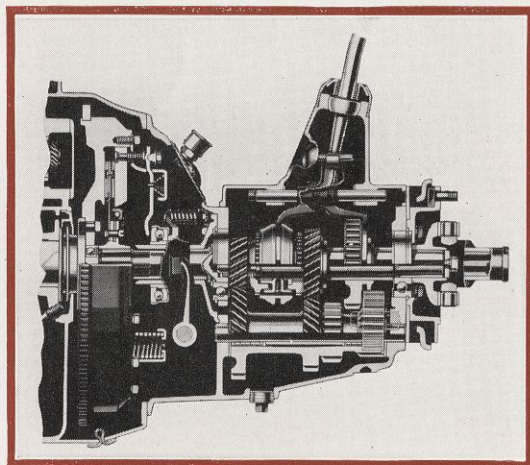
37 Pressure lubrication. Full pressure lubrication to all crankshaft and camshaft bearings. Increases bearing life and reduces engine friction, permitting greater power output.

38 Accessible, fully enclosed valve trough. Valves and valve tappets completely enclosed and lubricated by crankcase oil, yet are readily accessible by removal of valve chamber cover.

39 Rubber mounted power plant (3-Point Suspension). Entire power plant including clutch and transmission mounted in live rubber for smoothness of engine operation.



CLUTCH AND TRANSMISSION



40 Easy pedal action. The pressure required to throw out the clutch is exceptionally low. No "clutch foot" with this car. This will be appreciated by women drivers.

41 Smooth clutch engagement. Clutch cushion springs in the clutch plate assure smooth engagement.

42 Synchronized transmission gears. Shifting into second or high gears can be accomplished easily and silently whenever desired. Synchronizing unit for these gears prevent clashing.

43 Silent second. Running in "second" is relatively noiseless and smooth, due to the use of helical teeth on all gears which are in mesh when operating in this speed.

44 Gears matched in sets. As a further assurance of quiet operation, the second speed gears are burnished.

45 Anti-friction bearings in transmission. The gear train revolves on ball and roller bearings in all forward speeds. Loss in transmitting engine power to the rear axle is reduced to a minimum and operating economy enhanced.

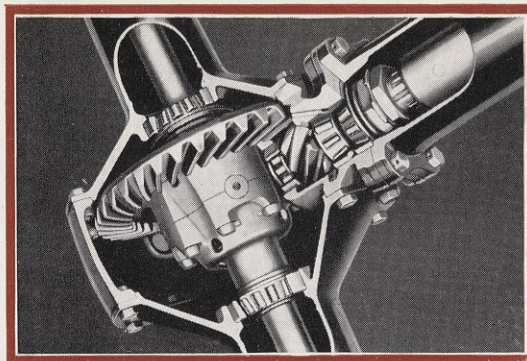
46 One universal joint. The transmission of power from engine to wheels passes through but one universal joint in the Ford V-8. Power losses and maintenance costs are reduced by the torque tube drive which permits the use of but a single universal joint in the entire fully enclosed transmission system.

47 Tubular drive shaft. Strength with low weight is obtained and smoothness of operation at high speeds is assisted by the use of a tubular drive shaft between transmission and rear axle gears.

REAR AXLE

48 Torque tube drive. (An important unit in the Ford spring suspension system.) Use of the torque tube drive assures alignment of rear axle at all times, aids in giving smooth brake application and easy riding. The design of the chassis is also simplified and made more substantial and rugged. With this type of drive the rear springs are not required to transmit driving and braking forces. They need only perform the function for which they are best suited, namely, to carry the load and cushion road shocks.

49 Three-quarter floating rear axle. With this type of axle the weight of the car is carried on the axle housing, not by the axle shafts. Axle shafts have the single function of transmitting power to the rear wheels. Unsprung chassis weight is reduced by this more expensive design.



50 Straddle-mounted axle pinion. The axle driving pinion is maintained in alignment under the severest shocks, giving silent axle operation and reduced wear.

51 Differential gears integral with axle shafts. By forging the differential side gears integral with the axle shafts two sliding joints are eliminated. Hence, wear is impossible between shafts and gears. This construction also assists in making the axle silent in operation.

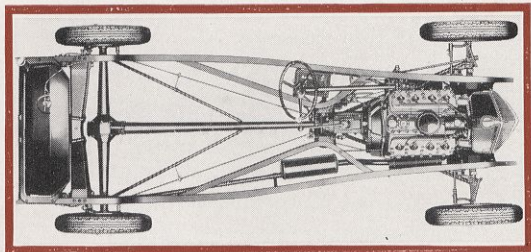
FRONT AXLE AND STEERING

52 Front radius rods. The front axle is maintained in position under the car by the front radius rods. It is perfectly safe even though a front spring should break. The radius rods also assure smooth front wheel brake action and give correct steering control. They contribute greatly to the inherent safety of the Ford car.

53 15 to 1 steering gear ratio. This ratio in the Ford V-8 for 1934 gives easier steering and reduces the reaction from road shocks on the steering wheel. The bearings in the gear are self-adjusting, automatically compensating for any wear that may occur.

SPRING SUSPENSION SYSTEM

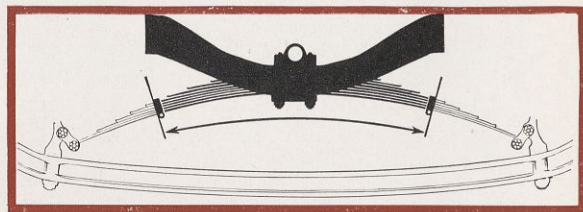
54 Transverse double cantilever springs. Ford cars for more than 25 years have utilized two transverse or "crosswise placed" springs for all *four* wheels. The heaviest part of each spring is attached to the frame at its center, with the lighter, more flexible tips attached to the axles close to the wheels. The wheels have free action under the chassis with this construction. In conjunction with the front radius rods and the torque tube drive (items 52 and 48), the transverse springs form a suspension system notable for its flexibility, security and stability. Yet all the advantages of the solid front axle are retained. There is nothing of an experiment about the Ford transverse spring suspension.



55 Axle mountings. Both front and rear axles are "three-point mounted" in much the same way as is the engine. This method of attaching the axles to the frame prevents frame distortion and permits the axles to move more freely under the car when riding over rough roads.

56 Low unsprung weight. By attaching the heavier centers of the springs to the frame, the unsprung weight (weight which must be moved before the springs

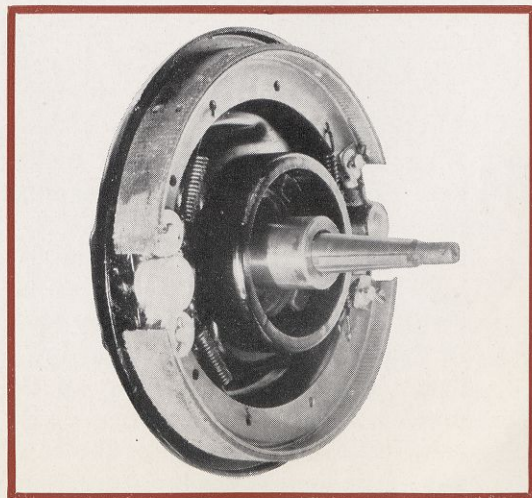
can act) is materially reduced. Low unsprung weight means easier riding, less tire wear and reduced maintenance. For more than 25 years all Ford cars have had this distinct advantage.



57 Non-squeak springs. By a new design of the tips of the leaves which form each spring, any tendency to squeak or scrape is practically eliminated.

58 Houdaille shock absorbers. The smooth riding qualities of the Ford transverse spring suspension system are enhanced by the use of Houdaille double-acting, thermostatically controlled hydraulic shock absorbers.

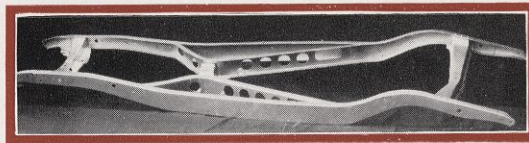
59 Softer springs. The springs for the new Ford V-8 for 1934 are more flexible and easier riding. They have been improved to give the Ford transverse spring suspension system further advantage over conventional springing systems.



B R A K E S

- 60** Large braking areas. Ford brakes have exceptionally large braking areas, a total of 186 square inches, larger in relation to the weight of the car than in most automobiles. Long life between adjustments and replacement of brake linings is definitely assured.
- 61** Mechanical brakes. Ford brakes are mechanically operated. Pressure on the brake pedal is transmitted to the wheels by direct mechanical action. Through the use of drop-forged brake levers, rods and other parts of the braking system, equalization is assured.
- 62** Smooth brake action. The torque tube drive and front radius rods (see items 52 and 48), by holding the axles in proper position under the car, assure freedom from uneven brake application, prevent "chattering" caused by axle motion and make every pound of pedal pressure exerted by the driver most effective in stopping the car.
- 63** Fully enclosed "two-shoe" brakes. Ford brakes are protected against the entrance of road grit, dust and moisture. Wear of linings and drums is reduced and only occasional adjustment required.
- 64** Alloy iron brake drums with cooling ribs. Front and rear brake drums are of special wear-resisting alloy iron. They resist warping and scoring. Strengthening ribs prevent drum flexure during severe brake applications. They are a further assurance that when the brake pedal is depressed, the effort of the driver is fully effective in stopping the car, not in distorting brake drums or any of the parts of the braking system.

C H A S S I S



- 65** X-braced double-drop frame. Ford V-8 frames are exceptionally rigid and free from distortion. The channels forming the X-member extend the full length of the main side-channels, making them doubly strong. The double-drop frame lowers the center of gravity of the car. Its rigidity and the Ford spring suspension make it possible to open and close the body doors even if one wheel of the car is raised as much as 18 inches. The possibility of body squeaks is practically eliminated.
- 66** Deep frame side-members. The side-members of the double-drop frame are deep and strong, preventing excessive flexure. The body is protected from undue distortion or strain.
- 67** Rubber mountings under bodies. Body noises and vibration are seldom experienced since the bodies are "rubber insulated" from the chassis.
- 68** Welded steel-spoke wheels. All Ford cars are equipped with steel-spoke wheels. The hub, spokes and rim are electrically welded into a single integral unit. There are no separate parts to work loose, rust, corrode, or become weakened. They retain their strength throughout the life of the car.
- 69** Large tires with angle valves. The tires on the Ford V-8 are 5.50 x 17 inch size, large for the weight of the car. Angle valve stems make them easy to inflate. The easy riding qualities of Ford transverse springs are further enhanced by the use of tires of this size.

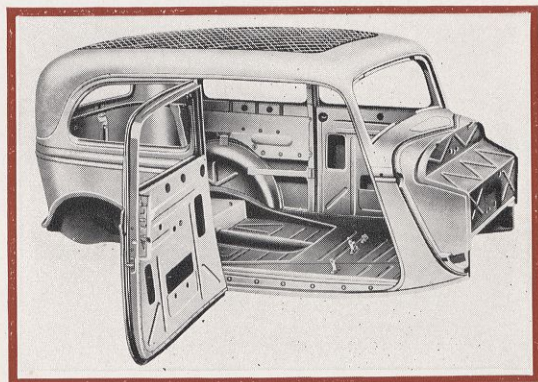
70 Large battery. The large size and capacity of the new 17-plate Ford batteries make them exceptionally effective in starting the car in cold weather, and in giving them long, useful life.

71 Welded gasoline tank. The gasoline tank is of terne plate (lead coated steel), welded into a single strong unit, and mounted high enough in the chassis for safe ground clearance. Tests show that it will withstand severe damage without bursting.

72 112-inch wheelbase. Due to compactness of the V-8 engine this wheelbase gives more body space than longer wheelbase cars using other types of engines.

BODIES

73 All-steel bodies. All Ford bodies are of steel construction, welded into a single unit. The strength and safety of all-steel bodies are recognized.



74 "Clear vision" ventilation system. All Ford cars are equipped with a clear-vision ventilation system, easily operated by the window handle. Draft-free circulation of air is provided for both front and rear seat passengers.

75 Windshield easily opened. During warm or hot weather the windshield of Ford closed bodies may be opened for complete ventilation of the body.



76 Ford body styles are the modern streamline type. With their slanting grilles, full-length hoods, slanting windshields and rounded contours, they not only are beautiful, but continue to possess their full utilitarian value. Comfort and driver visibility are paramount in their design.

77 Wide rear hinged doors. The doors of Ford bodies are wide and easy to enter and leave.

78 Roomy interiors. The short, compact V-8 engine allows more space for body length. There is ample room in both front and rear seats of all Ford V-8 cars. Adjustable drivers' seats have four-inch range of movement.

79 New Victoria body. For 1934 a new Victoria body has been designed. It too provides ample leg room with large baggage compartment in the rear. Its new flowing lines typify the modern trend in body styles.

80 Wide front seats. The front seats of all bodies are wide enough to seat three passengers comfortably.

81 Safety glass. The windshields of all Ford cars are fitted with safety glass. It is supplied in all windows of de luxe models and may be obtained in standard models at small extra charge.

82 Rustless steel. Exterior body hardware and other parts are of this rust-proof material. These parts are the same "all the way through," hence can always be polished to their original brightness with little more than a cleaning.

83 New enamel body finishes. All Ford bodies are finished in a new, long-wearing enamel. It retains its original lustre for a long time. The lustre can be renewed by thorough cleaning. Special "cleaner" is not required.

84 Sound insulated dash. The body dash is insulated against the transmission of sound into the body from the engine compartment.

85 Insulated bodies. The bodies are also insulated against "drumming" and other undesirable sounds. All-steel construction assures against squeaks.

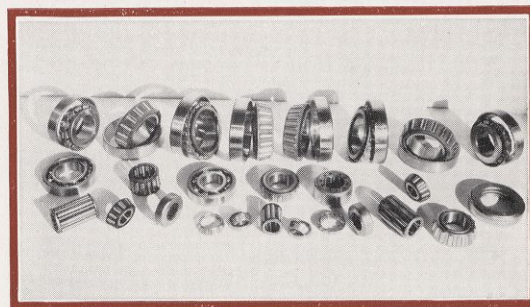
86 Long-wearing upholstery fabrics with appropriate selections for every body type. The wearing qualities, as well as other desirable characteristics of upholstery fabrics, are determined by extensive tests.



QUALITY FEATURES

87 Quality materials throughout. All the materials used in Ford cars are of the highest quality. More than 36 different kinds of steels are used. Everything that goes into the car is tested for its conformance to the rigid standards established by the engineers, metallurgists and chemists of this great company.

88 Extensive use of welded parts. To eliminate useless weight and to provide utmost strength, welding is extensively used in many Ford parts.



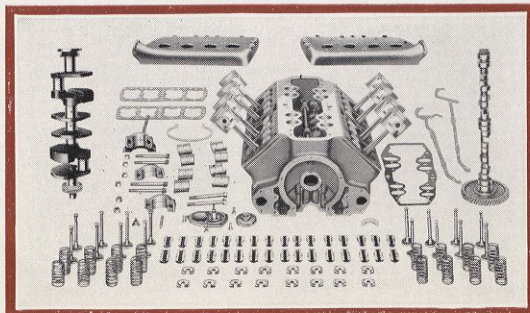
89 Twenty-five roller and ball bearings. To reduce friction to the lowest possible minimum and to make the car long lasting, 25 roller and ball bearings are used.

90 Maximum strength with minimum weight can be obtained only in drop forgings. This process, which forms the parts under pressure, when red hot, gives the metal strength and durability. That is why so many are built into the Ford chassis.

91 Bonderized parts. The fenders, wheels, splash guards and other metal parts of all Ford cars are bonderized to prevent the spread of rust should they become scratched or marred.

LOW UPKEEP COST FEATURES

- 92** Simplicity of design. Not only the engine, but every part of the car has been made as simple and rugged as possible. By careful design, complications have been eliminated, and the number of parts in the car reduced.
- 93** Low replacement and exchange parts costs. All the parts of Ford cars which may need to be replaced are obtainable at low prices. Many assemblies such as carburetor, generator, distributor, etc., may be replaced on the economical Ford parts exchange basis. Repair and maintenance costs are thus materially reduced.
- 94** Self-lubricating bushings. The spring shackles are equipped with self-lubricating bushings, hence never need be lubricated. Rubber insulators are used at other points for the same purpose and prevent squeaks and rattles.
- 95** Cylinder Reconditioning Plan. This convenient low-cost plan enables the car owner to obtain a virtually new engine, completely reconditioned at the Ford plant by the same men and methods employed in current production. After thousands of miles of service, a Ford owner can take advantage of this remarkable exchange plan with less cost and inconvenience than the conventional overhaul.



PERFORMANCE FEATURES

- 96** Fast acceleration. The new Ford V-8 for 1934, with dual carburetor and dual intake manifold has even faster acceleration than formerly. It "steps out" with ease. By keeping weight low, the engine power can more easily accelerate the car.
- 97** High maximum speed. This new car has a top speed of more than 80 miles per hour. Hence it can be driven at normal road speeds of 50 to 65 miles per hour without effort or strain.
- 98** Low overall weight. By eliminating excess weight, speed and acceleration are obtained with low fuel and oil consumption. There is no extra "dead weight" to be pulled along.
- 99** Low center of gravity. By using a double-drop frame and by careful attention to design, the weight of the car and passengers is kept close to the ground.
- 100** Buy it because it is a Ford. There is no greater assurance of quality, of the fact that the Ford car will give satisfactory low-cost service than to say, "It is a Ford V-8."

