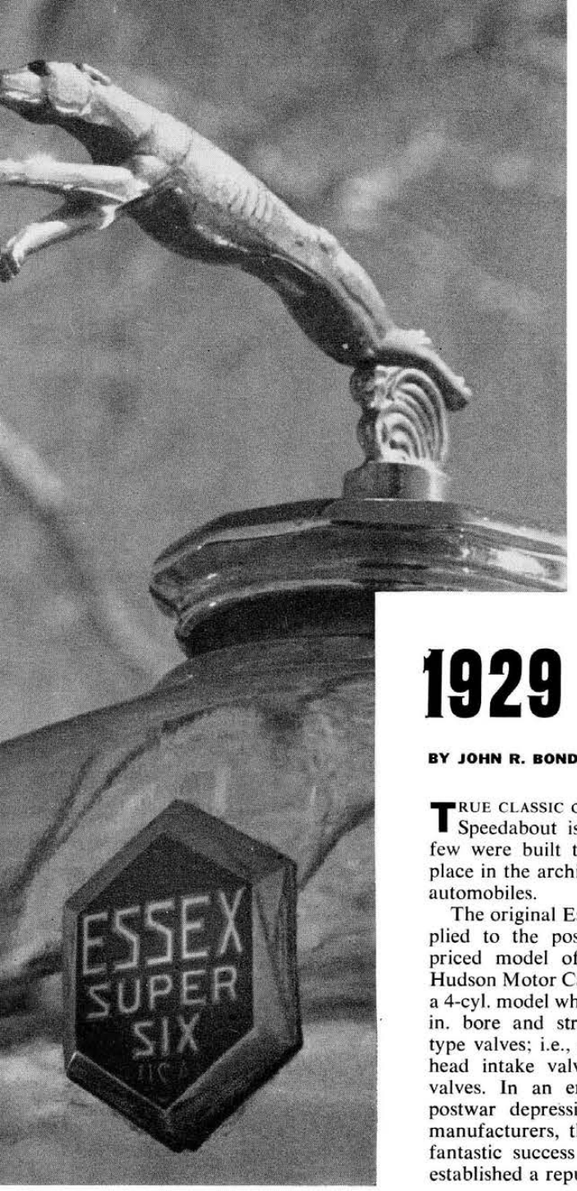
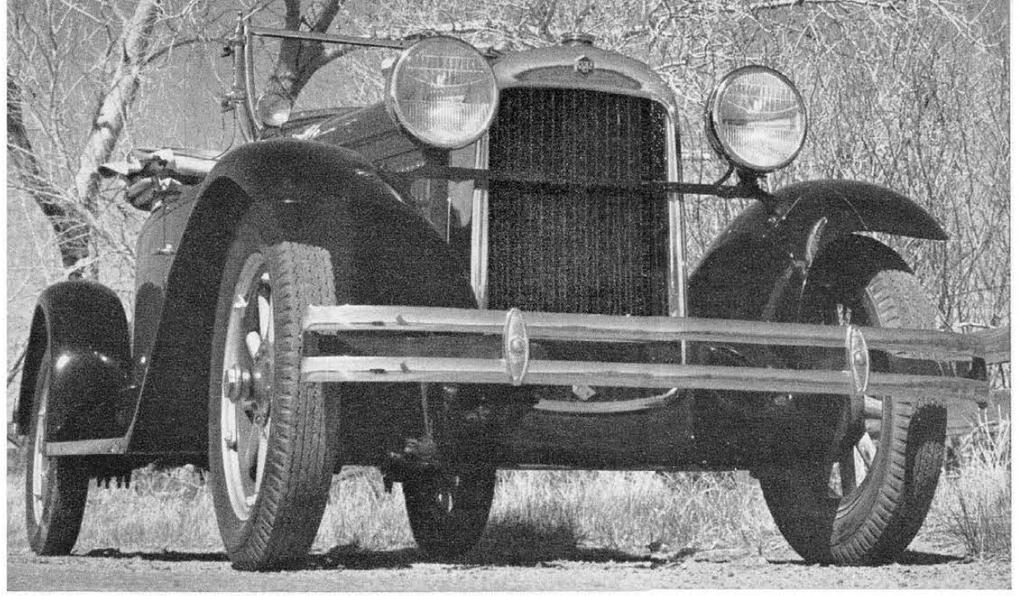
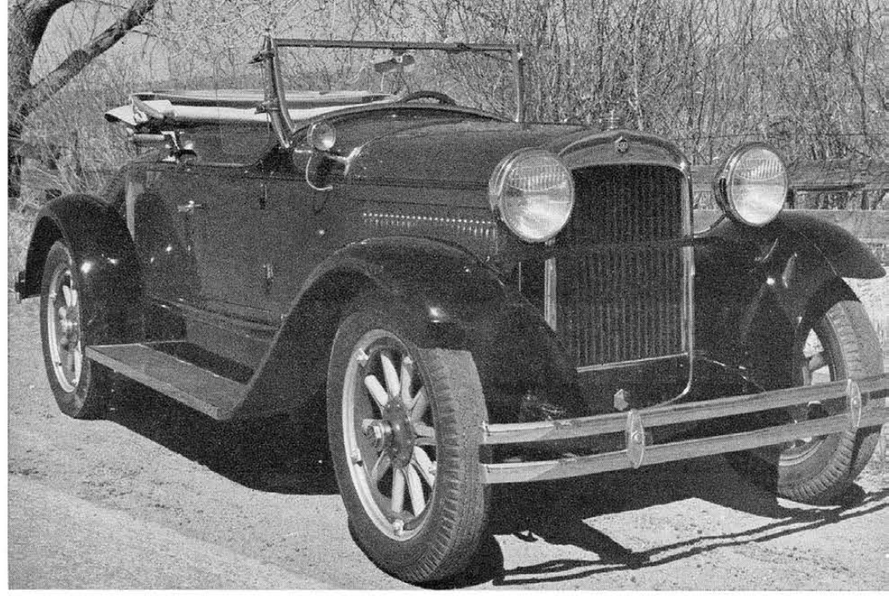
CAR LIFE CLASSIC

Essex Speedabout







1929 Essex Speedabout

BY JOHN R. BOND

PHOTOS BY MARVIN LYONS

TRUE CLASSIC or not, the 1929 Essex Speedabout is a rare bird, and so few were built that it rates a special place in the archives of special-interest automobiles.

The original Essex was the name applied to the post-World War I low-priced model of the very ambitious Hudson Motor Car Company. This was a 4-cyl. model which featured a 3⅜ x 5 in. bore and stroke with motorcycle type valves; i.e., an F-head with overhead intake valves and side exhaust valves. In an era during which the postwar depression affected all auto manufacturers, the Essex Four was a fantastic success and the car quickly established a reputation for solid durability. It was a good value, for its time.

A notorious and distinctive "sssis" accompanied it as it motored down the street, and this unusual sound could be traced to a unique air-valve carburetor.

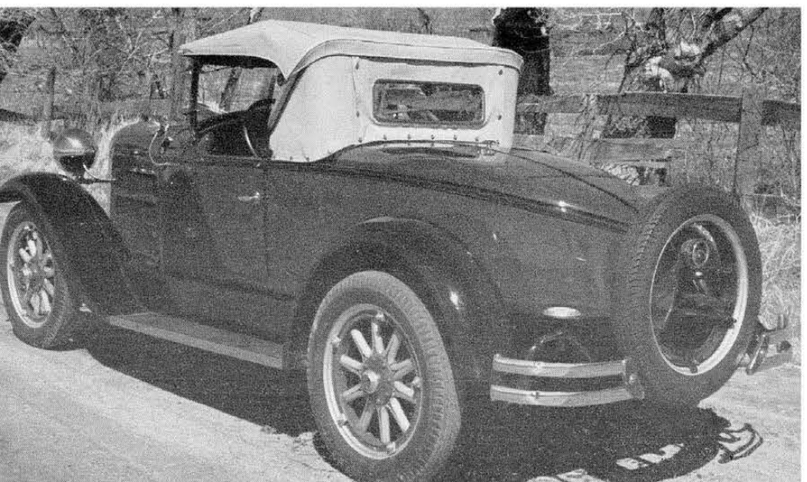
But Hudson wasn't content with the new and expanded market which the Essex achieved. In 1924 the old reliable 55-bhp four was replaced by a new "high-speed" six, offered in 2-door coach form at the fantastic price of $975.

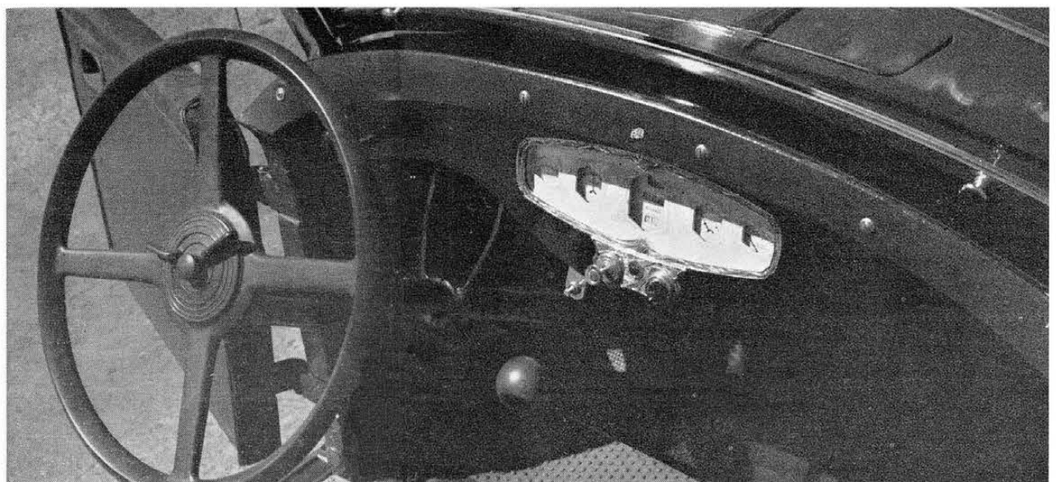
The Essex Super Six was perhaps the first of a long line of misguided attempts to offer the American public a smooth-running, small-bore, European-type engine. This engine had a cylinder bore of only 2⅝ in. and a stroke of 4 in., giving 129.9 cu. in. In retrospect, it was a miserable engine, yet in modified-expanded form it survived for 24 years! There were only three main bearings, and dippers on the rods provided splash lubrication. The axle ratio was 5.6:1 and, except for 1928, when the ratio dropped to 5.4:1, the engine revs per mile were kept at an unbelievable 3700.

For 1925 the bore and stroke went up to 2 11/16 x 4¼ in., with a 1927½ model change to a stroke of 4½ in. giving 153.2 cu. in. In those years Hudson-Essex was coy about the developed bhp—35-40 was probably close to the truth, but, like Rolls-Royce, no official figures were given out until 1929. At any rate, in 1927 the company decided to introduce a Speedster on the 110.5-in. chassis. Why, no one knows; the Essex was capable of about 55 mph (maximum, for 3 minutes only) and perhaps the company thought a speedy-looking boattail job would offset the onus of a 6-cyl. car that wouldn't go nearly as fast as the old four.

There was no Speedster/Speedabout in 1928, but for 1929 Hudson-Essex threw down the gauntlet to all competition. The Essex challenger was guaranteed capable of 70 mph, with "60 mph all day." The cylinder bore went up another 1/16 in. and for the first time the official bhp was 55 at 3600 rpm. The compression ratio of this engine was then the highest in the industry, by the way, at 5.80:1. The advertised top speed was easily attained via a very optimistic speedometer drive ratio, but the unique Speedabout of 1929 probably would come close to an honest 70 mph.

The 1929 Speedabout chassis and body were practically identical to the 1927 model except for the much more powerful engine, 2-shoe Bendix front wheel brakes, a pivoted windshield and ▶





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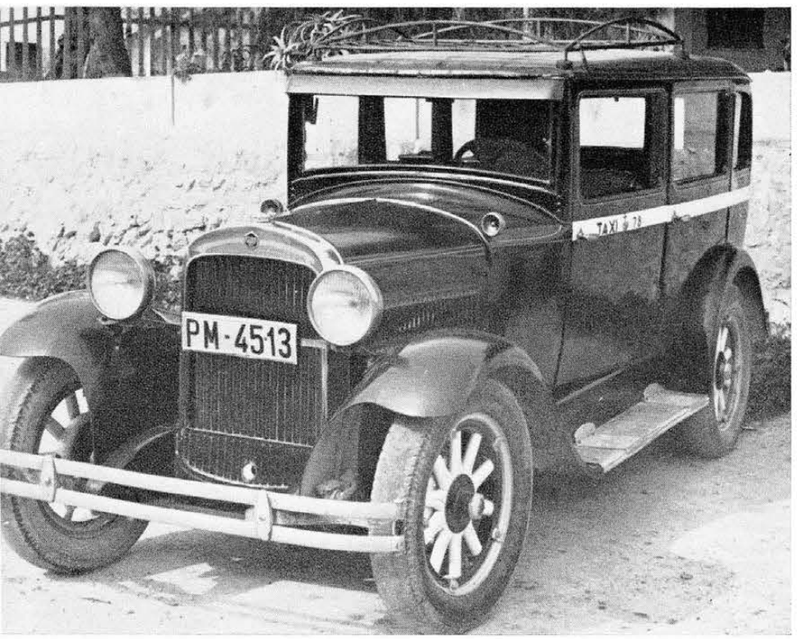
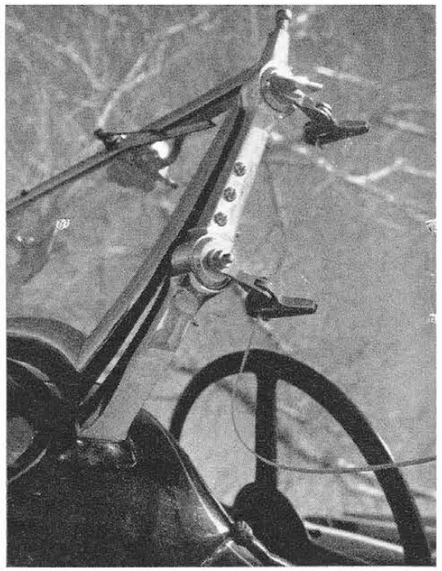
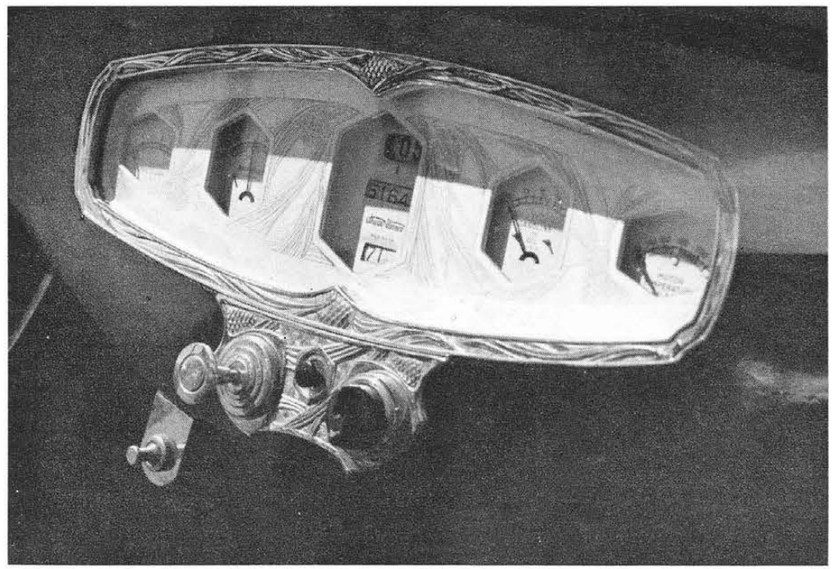
THIS 1929 ESSEX town sedan was still in use as a taxi in France after World War II.







the addition of a one-passenger rumble seat. The standard 1929 Essex models featured "a higher ratio of the final drive" (5.60:1), but they could have a 5.09 ratio installed upon special order. Hudson-Essex engineers, in a fit of realism, suddenly decided that even the 5.09 axle ratio wasn't ideal for the 2/3 passenger Speedabout of 1929. Accordingly, they developed one of the most unusual overdrive transmissions ever perpetrated upon an unsuspecting public.

Not that this transmission was bad—on the contrary it was extremely clever. By pure accident the Essex 3-speed transmission happened to have a cluster gear made in two halves. Thus, it was easy to alter the intermediate gearing so that instead of a 1.96:1 ratio, it gave a ratio of 0.7796:1. This, multiplied by the 5.09:1 axle ratio, was a true overdrive gear, actually 3.958:1 overall. The gear changes made in the forward half of the case raised the first gear ratio from 3.244 to 1.946—thus low was almost the same as the former 2nd gear ratio. The procedure for driving the car was as follows: start in first gear (1.946 x 5.09 = 9.905), shift to "high" (5.09:1). Then, at about 40 or 50 mph, shift into "2nd gear" or overdrive.

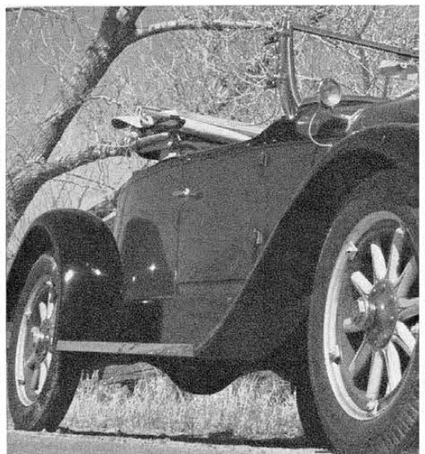
The top speed in high gear (direct drive) was, as we said earlier, about 70 mph, requiring an engine speed of 4000 rpm. A shift from high to second at 70 mph reduced the engine speed to 2580 rpm. But there wasn't enough power to hold 70 mph in this gear so the speed would gradually drop off to about 60 mph, dependent on wind direction and gradient.

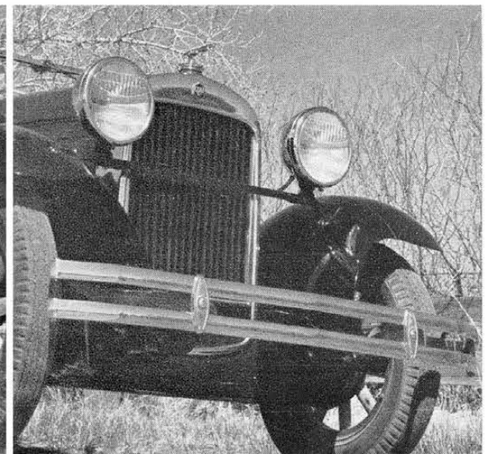
Then there was the noise problem. The transmission gears were straight-cut spur types and were far from quiet. However, the Speedabout was designed to be driven with its top down, so wind noise drowned out most of the gear howl. Maximum speed in low was 39 mph, requiring 4350 rpm. In actual use you could demonstrate "40 mph in low" once or twice, but the engine's habit of throwing rods was well known and if you persisted in driving at the claimed "60 mph all day" the babbitt-lined bearings developed an unhealthy tendency to melt. On a hot day, the thermosiphon cooling was inadequate: the heat gauge would go over 200° F even at a steady 50 mph and the oil temperature must have been 100° higher. The radiator shutters were manually controlled and were useful in the wintertime, except when the driver forgot to open them and boiled away half his antifreeze.

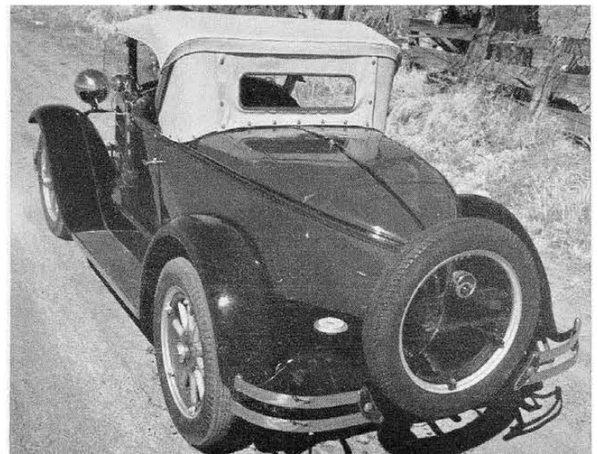
Hudson was the first to use what was described as a patented, fully compensated crankshaft. The Essex had bolt-on counterweights and these were designed so that a rod and piston assembly could be removed and replaced from below without disturbing the cylinder head. The three main bearings were of good size and the rods were extremely light in section. The Essex was also among the first to use aluminum pistons and these weighed only 8 oz.

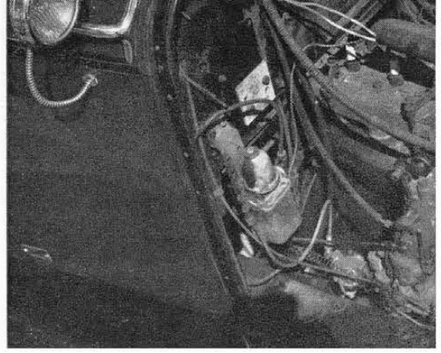
The Morse timing chain also encompassed a third sprocket, used to drive the auxiliaries. A small aluminum housing enclosed right-angle gears for the distributor, which was located on the right side just ahead of the Marvel updraft carburetor. A small rubber hose was used to drive the generator, tucked in under the carburetor, and a single-acting plunger pump bolted to the accessory housing. This pump pulled oil out of the crankcase and then to the No. 1 cylinder's dipper trough. A series of baffles collected the splash and directed the oil to each succeeding trough. Thus, rod bearing No. 6 got the hottest oil and was usually the first to let go.

The distributor of 1924 was the first ▶









ESSEX 6-CYL. ENGINES

	cu. in.	bhp
1924....2-5/8 x 4	129.9	28 approx
1925–7..2-11/16 x 4-1/4	144.7	35 approx
1927½..2-11/16 x 4-½	153.2	40 approx
1929....2-3/4 x 4-½	160.3	55 @ 3600
1931....2-7/8 x 4-½	175.3	60 @ 3400
1932....2-15/16 x 4-3/4	193.1	70 @ 3200
1934–47.3.0 x 5.0	212.1	90 to 102

ADDENDUM: Produced for 24 years with only minor dimensional changes. Rod length 8-3/16 in. on all engines. Crankpins enlarged and double-acting oil pump added in 1930, rear main bearing lengthened in 1934, block raised (decked) in 1932 and again in 1934. The 1932½ and later models (Terraplane) had revised cylinder blocks, water pumps and timing gears to eliminate the side-mounted accessory housing. A 1938 short-stroke 175-cu. in. engine had longer rods and was used in the short-lived Hudson 112. The postwar Hudson Jet (not listed) was a new 4-main bearing engine which used the older type rods and pistons but with full-pressure lubrication. Hudson's last big sixes were completely different engines.

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application of a full automatic advance but its location was beautifully planned to collect water, and whenever the car had been parked in the rain the engine wouldn't start.

Except for one English car, Hudson-Essex cars were the last hold-out for the wet clutch. This was a single-plate type with drilled holes, into which round cork disks were pressed and then expanded by heat and pressure to hold them in place. The lubricant was a 50/50 mixture of motor oil and kerosene. In service it was a very good clutch—smooth, yet positive—so long as the lubrication was kept up.

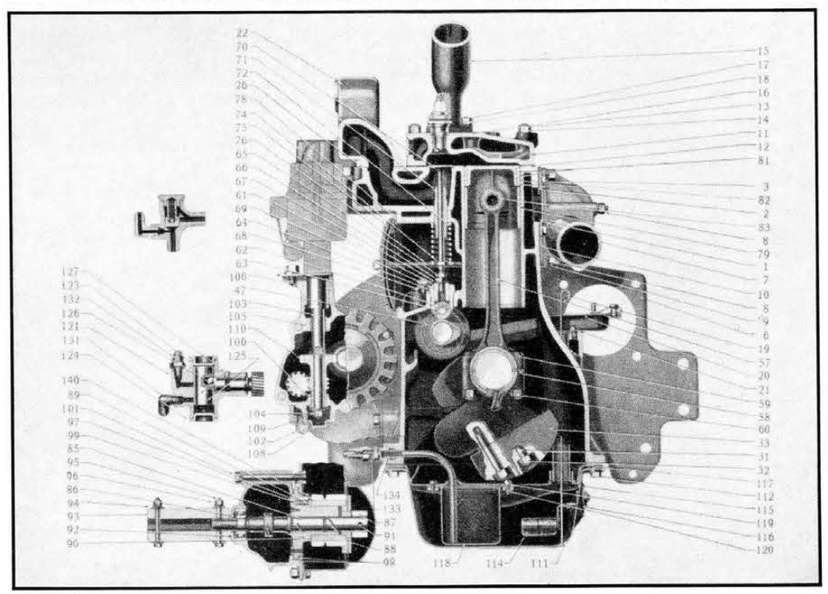
The transmission had an aluminum housing with integral arms going forward to house the clutch. A special interlock, recently rediscovered by Ford, made it impossible to move the shift lever until the clutch was disengaged. It was a very sturdy transmission, though it was almost impossible to shift the standard unit from 2nd to high without clashing gears.

The 1929 cars were available in six body types; the Speedabout, a roadster with rumble-seat, a coupe, 2-door sedan, a 4-door 4-window sedan and a 4-door, 6-window town sedan. There also was a truck on the same chassis; Hudson called it a Dover. Essex production in 1929 was just under 200,000 units, the largest number ever built in one year by Hudson. (This figure does not include 65,000 Hudson cars built in 1929.) The car shown here is one of over 600 assorted cars in the fabulous collection of Bill Harrah at Reno, Nev. Harrah, by the way, is not happy with the wooden wheels on this example and hopes to find a set of wire wheels, which were standard equipment on the Speedabout.

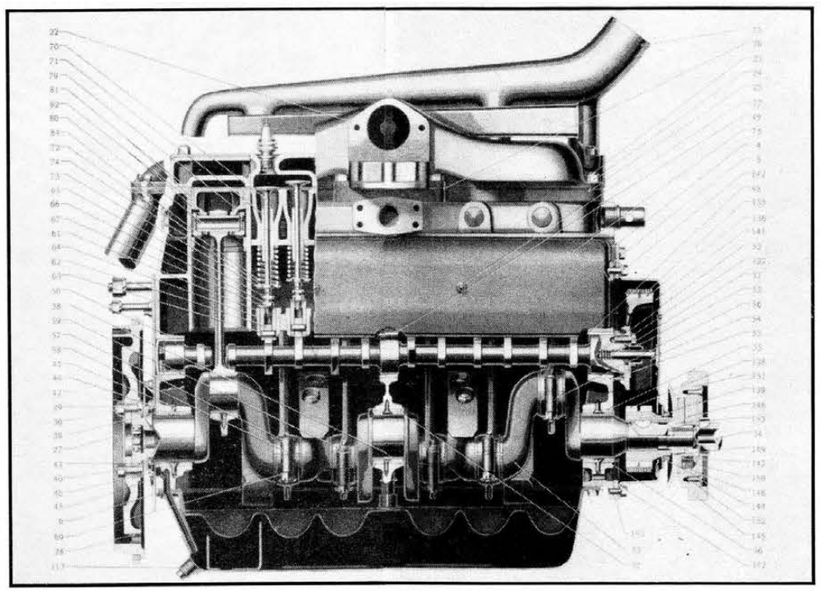
Given proper care, and driven no more than 50 mph, the Essex of this era was a smooth, quiet-running automobile, good for 30,000 miles before it needed rings, a valve job and all the bearings tightened. Its best known feature was a very good ride and a generally high level of finish, for the price. But it cost more than the 6-cyl. Chevrolet and couldn't stand any abuse. Chevrolet went on to outsell Ford, while Hudson-Essex's not-too-good reputation led to its own destruction. The Essex had a strong clutch, transmission and rear axle but a weak engine; the Chevrolet had a weak clutch, transmission and axle, but a strong engine.

There are those who say the Essex got what was coming to it and deserved its nickname (which was merely a mispronunciation of Essex). ■

CUTAWAY BELOW shows the 1930 engine, which had a unique double-acting oil pump (see inset). Note peculiar block casting, which includes an integral intake manifold.



SHOWN BELOW is 1929/30 Essex engine, with three main bearings, four bolt-on counterweights, offset connecting rods with dippers and roller tappets.



TECHNICAL SPECIFICATIONS
1929 Essex Speedabout

Wheelbase, in.	110.5
Tread, in.	56.0
Tire size	30 x 5
Engine type	6-cyl, sv
Bore & stroke	2.75 x 4.50
Displacement, cu. in.	160.3
Compression ratio	5.80
Bhp @ rpm	55 @ 3600
No. main bearings	3
Main bearing dia.	2.375 (avg.)
Crankpin dia.	1.8125
Carburetor	1-¼ in. Marvel
Lubrication	circulating splash
Engine cooling	thermosiphon
Fuel feed	vacuum tank
Trans. ratios	1.946, 1.00, 0.78
Axle ratio	5.09
Gas tank, gal.	11.5
Brakes	Bendix duo-servo
Curb weight (est.)	2500