

Unit Power Plant of the Oakland Eight is Supported at Three Points. The Fr Chain-Driven. Note the Aluminum Funnel Fitted to Stromberg Carburetor.

NEW EIGHT has just been announced by the Oakland Motor Car Company, Pontiac, Mich., and will be known as Model 50. The motor is of the V type and has detachable cylinder heads. Aluminum pistons are used. The crankshaft is of very liberal dimensions and in addition is provided with balance weights, to facilitate high speed operation. Its bearing dimensions are as follows: Front, 2 x 31/2 inches; centre, 21 x 3 inches; rear, 21/8 x 3H inches. The A. L. A. M. rating of the motor is 39.22 h.p., but on brake tests it is said to develop 71 horsepower at 2600 r.p.m

A special Stromberg carburetor is used, with a hot-air pipe to the primary air intake. The needle adjustment and primer are operated from the dash. A novel feature in connection with the carburetor is an aluminum funnel similar in shape to a steamer ventilator, which is intended to increase the volumetric efficiency at high speed. Lubrication is by force feed, the oil from the sump being drawn through a screen and forced to the main bearings, whence it passes through drill holes in the crankshaft to the connecting rod bearings. There is an oil level indicator at the side of the crank case and an oil pressure gauge on the dash.

Ignition is effected by the Delco system, which is independent of the starting and lighting apparatus. Automatic spark advance is used. A centrifugal pump forces the water through a V-type German silver radiator, as has been used in previous Oakland models. The fan behind the radiator is driven by chain and is provided with a slip clutch for the sake of safety. Starting and lighting is by the Delco two unit system. The starting motor drives to the flywheel by means of a Bendix drive. An Exide storage battery is carried.

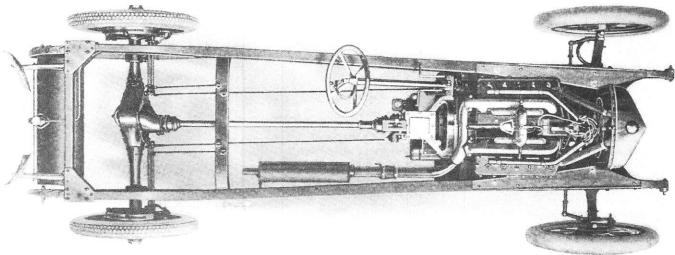
The clutch is of the cone type and is

made very light to facilitate gear changing. It is provided with a clutch brake. The transmission is of the three-speed selective type and is entirely mounted on ball bearings. Its gears are made of high carbon chrome nickel steel. In accordance with long established Oakland practice, engine and transmission are combined into a unit power plant which is supported at three points.

The rear axle is of the single bearing, floating type. The differential unit is easily reached by removing the cover plate at the back to the axle housing. A pressed steel housing is used, while the rear axle driving gears are of the spiral bevel type. The front axle is the usual I section drop forging. There are two universal joints in the propeller shaft, which is tubular. Torque reaction and driving thrust are taken up by the rear springs, in accordance with the so-called Hotchkiss principle.

SPECIFICATIONS.
Price \$1,585
Cylinder numberEight
Cylinder dimensions.31/2x41/2 inches
Carburetor Stromberg
Fuel capacity18 gallons
Fuel feed. Stewart vacuum system
IgnitionDelco battery system
IgnitionDeico Dattery system
Lighting and Starting, Delco
Two-Unit System
LubricationForce feed
Clutch typeCone
Number of forward speeds Three
Location of transmission
On engine
Rear driveSpiral bevel gears
Wheelbase127 inches
Tire size34x4½ inches
Tire size
Manufactured by the Oakland
Motor Car Co., Pontiac, Mich.

There are two sets of brakes on the rear axle, and special attention has been given to the matter of making the adjustments accessible. The service brakes are



Simplicity is the Keynote of the Oakland Eight Chassis. The Rear Axle is Inclosed in a Pressed Steel Housing with Cover Plate of Large Size in Rear and Hotchkiss Drive Through the Rear Springs is Featured.