

# The Chalmers Automobile Newsletter

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This issue continues the series on the Chalmers production story that was started with the May newsletter featuring the "Forty", "30" and "36" model series. In this issue, I will focus on the "Six", "Master Six" and "Light-6" model series. I made some errors in the last newsletter regarding the "30" and "36" model series. Many thanks to Bob DuBois (#9), Allen Johnson (#24), and Rich Morgan (#36) for pointing out the corrections needed and providing other useful information. The manuscript has been corrected to reflect that: (a) there are three tire sizes for the Model 17 (36x4, 36x4½, and 37x5), (b) the F-head dual ignition included four coils (one for each spark plug), and (c) Mayer carburetors appeared on early models followed by Rayfield Carburetors on late models.

As stated previously, I strive to provide accurate information on a subject that is not well documented. I appreciate any corrections or missing data (particularly for the "?" marks in the table) that you may find or know about. This pertains to both the last newsletter and this one. My goal is to compile an accurate and historically correct reference document on the Chalmers automobile production.

## The "Six", "Master Six" and "Light Six" Model Series

The first 6-cylinder car produced by Chalmers was the Model 12 "Six" introduced in 1912 replacing the venerable "Forty" model series. In 1914, two new sixes became available, the "Master Six" and "Light Six". A new chief engineer, George Dunham, was responsible for all three of these early Chalmers six-cylinder cars. The "Six" is a conservative design that retained many of the successful design features from the four-cylinder era. The "Master Six" and "Light Six" introduced new improvements for the engine, clutch, and the dashboard and control layout.

This model series is composed of the 12 "Six", 18 "Six", 24 "Master Six", 26-A "Light Six", 26-B "Light Six", 26-C "Light Six", and 29 "Master Six". As with the previous four-cylinder nomenclature, the number represents the model and the term in quotes is the trade name. The Table below reflects the inherited engine design for the Models 12 and 18. Improvements and changes start to appear in the Model 24 and continue in the Model 26-A. Advertisements for the Model 24 called it the "new Chalmers six". This was because the Model 24 represented a

fresh new design instead of a further development of a previous design like the "Six". The Model 24, 7 passenger, limousine weighed 5475

pounds which is the heaviest Chalmers car produced. The Model 26-A introduced a smaller engine and an overall lighter weight car; both contributing to improved performance. Some confusion is created in the Chalmers factory literature concerning the Model 26-C where the trade name "Light Six" is sometimes replaced with "Six-48". Body styles for the entire series includes Torpedo, Touring, Roadster, Limousine, Coupe, Coupelet, and Sedan. Various combinations of passenger capacity and body styles were available. One unusual characteristic of the Model 24 is that all body styles (i.e., 4 passenger Torpedo, 5 & 6 passenger Touring, 3 passenger Roadster, 3 passenger Coupe, and 7 passenger Limousine) can share the same chassis. Consequently, bodies are interchangeable without chassis alteration.

Model	Production Years	Advertised HP	SAE HP	Cyl	Bore (in)	Stroke (in)	Tire Size (in)	Wheel Base (in)	Code Letter	Car Serial Number Range
12	1912-?	54	43.3	6	4 1/4	5 1/4	36x4 1/2	130	S	24001-24300
18	?	54	43.3	6	4 1/4	5 1/4	36x4 1/2	130	R	25301-27000 29200-29499 33500-34499
24	1914-?	60	38.4	6	4	5 1/2	36x4 1/2	132	V	34500-38499
26-A	1914-?	48	29.4	6	3 1/2	5 1/2	34x4	126	WA	38600-41599
26-B	?	48	29.4	6	3 1/2	5 1/2	34x4 1/2	126	WB	41701-44999
26-C	?	48	29.4	6	3 1/2	5 1/2	34x4 1/2	126	WC	45000-45799
29	?	60	38.4	6	4	5 1/2	36x4 1/2	132	VB	45801-47300

The car serial numbers for these Models is on a plate riveted to the right-hand frame side member under the front floorboard. Model 18 used three serial number ranges. A 37x5 inch tire size is used for the Model 24, 7 passenger limousine.

### The "Six" Model Series

Models 12 and 18 use an F-head unit engine/transmission design. Cylinders were cast in two groups of three with the same bore and stroke of the Model "36" four-cylinder engine. In fact, it appears as if one additional cylinder was simply added on to each of the two casting to create the six-cylinder engine. The two additional cylinders represent a 50% increase over four cylinders and the SAE horsepower increases accordingly. The F-head has the familiar overhead intake valves, ball bearing crankshaft, and Rayfield carburetor. A compressed air type starter is furnished on the Model 12 and 18 "Six".

The "Six" employs the same basic multi-disc clutch (running in oil) with four speed transmission (both integrally mounted to the engine), and expanding/contracting brakes as used on the Model "36" four-cylinder car.

The "Master Six" and "Light Six" Model Series

Engines for the Models 24, 26, and 29 are an improved T-head, long stroke, design with slightly less horsepower (and bore) and larger valves than the F-head. Some minor differences between the "Master Six" and the "Light Six" engines are evident as shown in the Table. The valves were made of nickel steel (intake) and tungsten steel (exhaust). Casting of the cylinder block was the same as the preceding models; two groups of three. The engine was advertised as a "non-stallable motor". This is accomplished with a silent type chain running constantly with the engine providing a self-starting feature when on the threshold of stalling. Water-jacketed intake manifolds, Rayfield carburetors, and electric starter are used on the Model 24, 26, and 29 engines.

All models in this series have an improved self-lubricating clutch of the multi-disc, cork-insert type. This is connected to a four-speed transmission on the "Master Six". The "Light Six" utilizes a three speed, rear axle mounted, transmission. Both model series make use of an improved driver control layout. All controls and indicator gauges are located around the center of the dashboard. This, combined with the introduction of left-hand drive, allowed easier entrance for the driver, and better organization of the controls and gauges. Some of the dash controls and gauges included: intake manifold primer, carburetor adjustment, oil pressure indicator, electric light switch, and battery indicator. Brakes consisted of a foot brake and a hand brake both acting on rear drums (expanding and contracting).