

SALON

MARMON 16

*A stately scorcher came
from years of racing experience*



PHOTOGRAPHY: LESLIE W. DUNNING

AN ALL ALUMINUM ENGINE and straightforward body design will be "discovered" presently by sundry U.S. builders, who may conveniently forget the impressive contributions of the Marmon 16 nearly three decades ago. There is, indeed, ample evidence that America never produced a finer classic; if price is considered, the Marmon clearly puts the Duesenberg in the category of an overpriced if most desirable luxury.

The last of a line of production cars that began in 1904, the V-16 was built in 1931 and 1932 but still sold the following year. Under the direction of Colonel Howard Marmon, whose previous engineering triumphs had included a V-4, an air-cooled V-8 prototype (in 1907!) and the use of aluminum engines from the time of World War I, work began on the 16 in 1926. Cadillac's 16 (Road & Track, April 1958) reached the showrooms first; Howard Marmon had known it would, and it is to his credit (not his financial credit, alas) that he delayed production until he could build a superior car which also cost less to buy. Its 491 cubic inches—the current Lincoln is the largest production car with 430—led the horsepower race of the early Thirties excepting Duesenberg, which had 265 to the Marmon's 200.

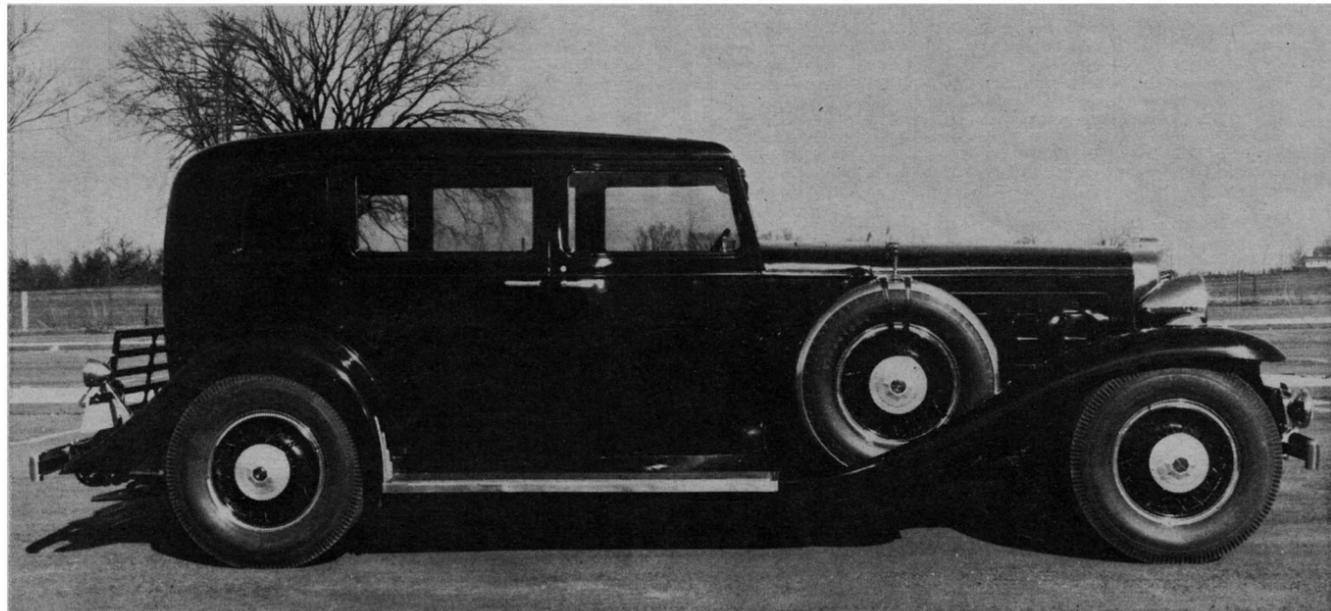
Size alone had little to do with the engine's fame. Set in a 45° V, the multiple cylinders had wet liners sealed to the block with rubber and weighed a total of 930 pounds. It had overhead valves and a fairly typical compression ratio of 6:1, and developed its maximum horsepower at 3400 revolutions per minute. Cast aluminum formed the Y block, cylinder heads, valve covers, oil pan, bell housing, oil pump, crankcase breather, and the dual water pump in its single housing. Exhausts, mufflers and pipes were dual. The Society of Automotive Engineers was sufficiently impressed to give a special award for the engine.

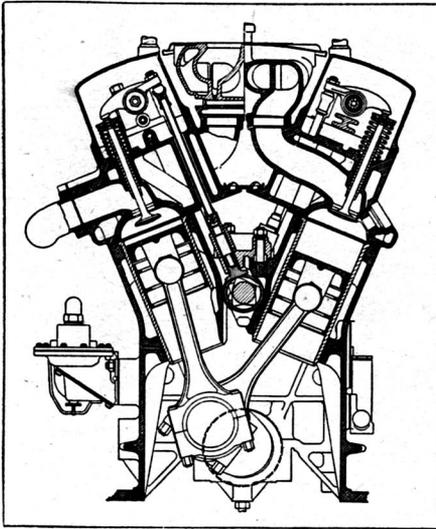
Built in Indianapolis, the Marmon 16 inevitably took to the Speedway, where a stock close-coupled sedan went more than 1800 miles in 24 hours. Its record stood for 22 years!

Without independent front suspension, the ride (partially due to the 145-inch wheelbase and to the great weight) was still not harsh. The huge semi-elliptic springs had sealed ball-bearing shackles at the rear of all but the right front; the others were set in rubber.

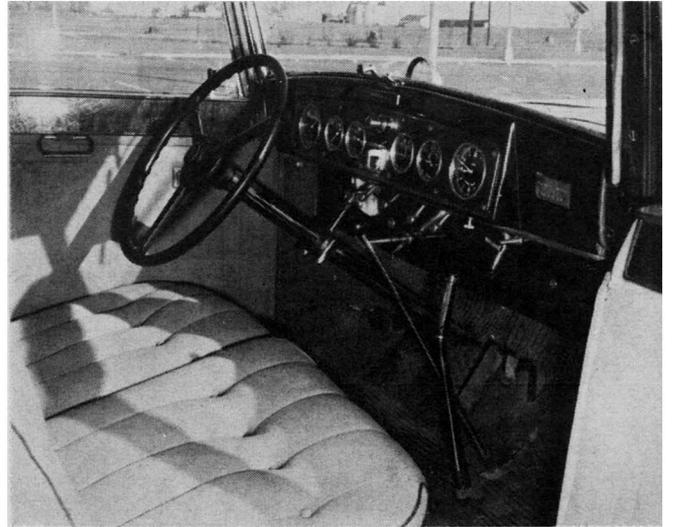
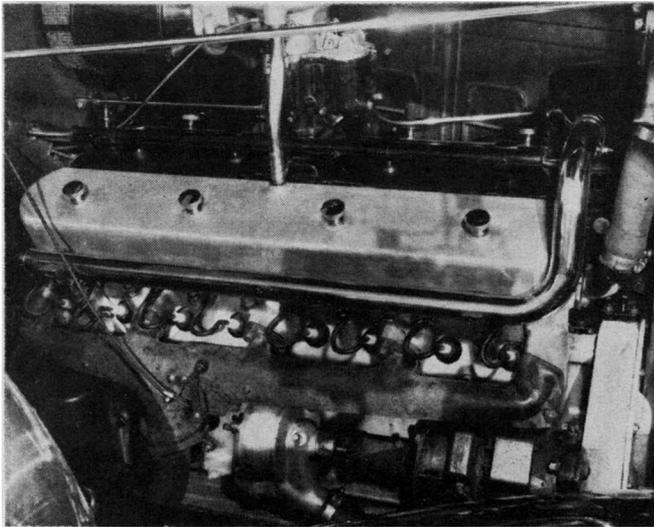
Walter Dorwin Teague's designs, built by LeBaron, were so calm they were actually a sales deterrent. (*continued*)

Orville Miller's 1933 sedan is in daily use, "like any other car." No repairs or even cleaning have been done inside.





As austerey handsome under the hood as it was outside, the Marmon V-16 had a 3½-inch bore and a 4-inch stroke, with a displacement of close to 500 cubic inches. The cast aluminum crankcase held 8 quarts. A car similar to this one averaged nearly 77 miles per hour for 24 hours at Indianapolis.



Chrome gewgaws were much in favor among the buyers of big cars then, as they are today, and the Marmon's quiet bulk was as inconspicuous an example on consumption as could be had in the \$5000 class.

Orville Miller, of Philo, Ill., bought this sedan from its original owner just three years ago with 27,000 miles on its odometer. After a three-state tour this spring, it now has 46,000. The 5300-lb car's body is steel except for its aluminum hood, front and back splash aprons, and running board aprons. Marmon's fondness for aluminum also shows in the cast aluminum side mount, headlight and tail light brackets, and the gas filler pipe.

The tank holds some 30 gallons, a useful amount because the car gets 10 miles per gallon. Miller writes, "It will still show 100 mph, and it handles itself like an MG (king size). It will start in high and pick up fast on level roads. It starts well at any time of year and does not use oil. We have needed no repairs except fuel pump diaphragms and oil seals on the driveshaft; these were dried out and had to be replaced before we used the car, which had been in storage since 1934."

Few novelties are evident in the driving compartment.

The big Bendix duo-servo brakes have a power booster, and the dampers can be firmed up for a burst of speed. White lettering on the aircraft-type instruments combines with a panel inclined toward the driver (unlike those in most contemporary cars) for readability.

Miller obviously found one of those nearly new classics that collectors dream of. The English broadcloth interior has never even been cleaned except for brushing and dusting. He is searching for the proper carpet to replace the front floor mat, on which someone set the battery (a 6-volt, 88-pounder), and an electric fuel pump temporarily replaces the original AC on the left side of the engine. Repainting (black enamel) and some rechroming have been the largest expenses. The car has a Pines Winterfront (remember?) without the usual homely medallion that characterized other installations, and the chromed shutters indicate that it is one of the last 16's.

The closest contemporary approach to the philosophy that produced the Marmon is the Mercedes 300-D, which conceals such still rare features as its one-shot lubrication, swing axle and overhead camshaft engine under a conservative if relatively overdecorated body.

1932 Marmon Sixteen

Ed. Note: This is not an actual road test of the car described; in this case, no factual test data could be found. However, our technical department has evolved a predicted performance system which has proved to be accurate.

JULY 1932. While the old-line firm of Nordyke and Marmon of Indianapolis cannot claim to be first with a 16-cylinder automobile, there is little argument over the truly outstanding engineering merit of their entry in the top-quality luxury car market. This is in line with their long-established policy, even though their reputation was more than a little tarnished by a low-priced straight-8 which proved to be one of the most miserable automobiles ever offered to a gullible and unsuspecting public (specifically, the Roosevelt).

The justly famous Marmon 34 of the early Twenties was a large, comfortable car of remarkably low weight, and the new 16 introduced only last year carries this theme to its logical conclusion. Here is a car of magnificent design and proportion which represents an almost unique wedding of engineering ideals and the stylist's art. As on the model 34, aluminum is used extensively and without regard for cost. Despite its size the 16 weighs only just over 5000 pounds, ready for the road. It is powered by one of the largest engines ever offered to the public (490.8 cubic inches and 200 brake horsepower), yet the engine weighs only 930 lb.

The net result of all this is a truly luxurious machine, yet one that is remarkably easy to drive, offering tremendous performance with incredible smoothness. We will state without equivocation that the Marmon V-16 is the finest and best all-around luxury car on the market today.

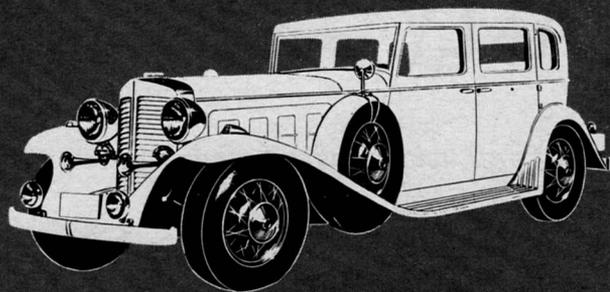
Consider, for example, the performance figures. Very few cars can even approach its 0-60 acceleration time of 14 seconds, done, incidentally, using only 1st and 2nd gears. Likewise, the top speed of 105 honest miles per hour can only be exceeded by a few cars—all but one of which are built in Europe—and none can do it so smoothly and quietly. And the 16 is not even designed to be fast, for its matching of axle ratio and power curve was designed for flexibility (105 mph requires 4100 revolutions per minute, far beyond the peak power point of the engine). It is quite possible to pop the gear lever into high at 5 mph and forget it, for this car accelerates from this speed as most cars do in 2nd, and noiselessly. Even in high gear, hills simply do not exist, as shown by a Tapley reading of 260 pounds per ton, equivalent to a grade ability of over 13%.

The 3-speed transmission is totally silent in 2nd gear. With the servo-cam synchronizers provided it is possible, though not recommended, to shift down from high to 2nd at 75 mph, with no assist by the driver. There is a faint grunt, the engine buzzes a bit, and the car slows down.

As with the transmission, all other controls are remarkably light, and despite its size the car is very easy to drive. Even when braking down hard from 100 mph, the pedal pressure required is extremely light, thanks to a combination of enormous brake drums, duo-servo shoes and a competent power booster. The ride, too, is as good as in any car we have ever tried. An anti-kick shackle on the left front spring insures accurate steering without kickback at the wheel.

Everything about this car, inside and out, shows quality; yet its appearance (by Walter Dorwin Teague) is extremely dignified and in quiet, unostentatious taste. Personally we think the Marmon should make a certain firm, which advertises "The Best Car in the World," change its tune—or introduce a new model with more cylinders. 

ROAD & TRACK CLASSIC TEST 29



MARMON V-16

SPECIFICATIONS

List price (1932)	\$5500
Curb weight	5300
Test weight	5600
distribution, %	48/52
Dimensions, length	210
width	72
height	68
Wheelbase	145
Tread, f and r	58
Tire size	7.00-18
Brake lining area	n.a.
Steering, turns	4.0
turning circle, ft	42
Engine type	V-16, ohv
Bore & stroke	3.13 x 4.0
Displacement, cu in	490.8
cc	8046
Compression ratio	6.00
Bhp @ rpm	200 @ 3400
equivalent mph	87.1
Torque, lb-ft (est)	390 @ 1800
equivalent mph	46.1

PERFORMANCE

Top speed (3rd), mph	105
best timed run	107
3rd ()	
2nd (4300)	70
1st (4300)	36

FUEL CONSUMPTION

Normal range, mpg	8/11
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ACCELERATION

0-30 mph, sec	3.5
0-40 mph	6.0
0-50 mph	9.4
0-60 mph	14.0
0-70 mph	20.1
0-80 mph	28.6
0-90 mph	38.5
0-100 mph	54.0
Standing 1/4 mile	18.8
speed at end, mph	68

GEAR RATIOS

0/d (n.a.), overall	
4th (n.a.)	
3rd (1.00)	3.69
2nd (1.57)	5.79
1st (3.08)	11.4

TAPLEY DATA

4th, lb/ton @ mph	@
3rd	260 @ 45
2nd	400 @ 35
1st	off scale
Total drag at 60 mph, lb.	240

CALCULATED DATA

Lb/hp (test wt)	28.0
Cu ft/ton mile	120
Mph/1000 rpm (3rd)	25.6
Engine revs/mile	2340
Piston travel, ft/mile	1560
Rpm @ 2500 ft/min	3750
equivalent mph	96.0
R&T wear index	36.5

SPEEDOMETER ERROR

30 mph	actual, n.a.
40 mph	
50 mph	
60 mph	
70 mph	
80 mph	
90 mph	
100 mph	

