

# How Morris Engines are Tested

A distinct departure from the more usual practice is the new engine testing plant recently installed in our engine factory at Coventry. In this instance by means of suitably arranged controls the power generated by the engine on test is returned to a common power line and used to drive round other engines during the first period of their running in. The engine after leaving the assembly line is mounted in a suitable cradle and coupled to a dynamotor, petrol, gas and water services also being joined up by quick acting connections. At first the engine is driven by the dynamotor at a speed of 350 r.p.m., a red light on the control board indicating that current is being taken from the power line and other instruments above the red light showing the actual number of r.p.m. and the power being absorbed. As the running-in proceeds the speed is gradually increased and when at 750 r.p.m. the engine is "free" a white light shows on the indicator and the first stage of the test is completed. Then by means of push button controls the speed of the motor is increased to 1,250 r.p.m. and when the engine is free at this higher speed the white light again shows. For the third stage of the test the engine is run on town gas and made to drive the dynamotor which delivers power back to the transformer, the latter being used to convert the town alternating current to direct current as used in the test. During this stage a green light shows on the indicator and if the whole plant is being run economically there will always be an even number of red and green lights showing. When the engine develops a certain horse-power the white light again shows. As soon as this stage is reached the fuel is changed from gas to petrol and the engine allowed to run-in for a further period, under a dummy load, an orange light showing on the indicator during this test. Finally the engine is run up to pull a pre-determined load and as soon as the maximum power is obtained a blue light shows and the engine is passed off test. This is acknowledged to be the most advanced system in use in Europe.

*This article was printed in The MORRIS Owner in June, 1925. I have re-typed it from Morris Cars 1913-1930 by Philip Garnons-Williams, published by the Bullnose Morris Club in 1978. This is a limited edition book of about A3 size and 412 pages which contains reproductions of factory brochures and articles from the motoring press of those times.*  
Alan Gulleford

## THE 8 hp MORRIS MINOR FOR 1931

MORRIS MINOR cars represent the very acme of economical motoring. With their roomy bodies, sparkling road performance, absolute reliability, extensive equipment, low first cost and equally low upkeep cost, this range has brought motoring pleasure within the reach of many thousands who hitherto considered the possession of car transport beyond their means.

Capable of speeds in excess of 50 mph with an average petrol consumption of approximately 45 miles per gallon, and possessing road-holding qualities of unusual excellence, these cars are comparable in performance on the open road with many cars of far more pretentious dimensions, while for town use their small turning circle (32 ft.) and general manoeuvrability render them pre-eminent.

The general design of the Morris Minor in no way departs from the orthodox. It is a big car in miniature, possessing a full-length chassis frame, semi-elliptic springs fore and aft, progressive shock absorbers, unit constructed engine with efficient overhead valves, sturdy propeller shaft, and spiral bevel rear axle equipped with differential. The materials from which it is made are the very best procurable, and its workmanship beyond reproach. The modest prices at which it is offered have only been made possible by the vast resources and manufacturing facilities of the Morris organization. To those whose garage accommodation is restricted, this range will make a particular appeal.

*I did not have access to a write-up from the factory on the Morris 8, but the Minor was a fine car as well and certainly set high standards which we have also enjoyed with our models.*

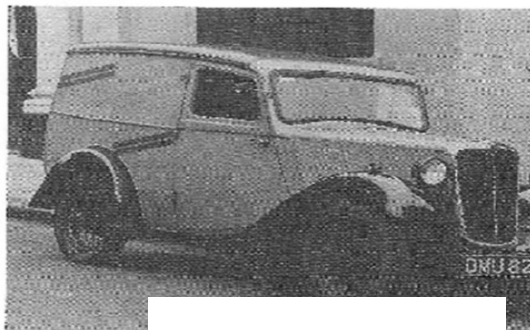
*Alan Gulleford*

**The most successful Morris vehicle** of the 1930's was the Morris Eight, which made its debut at London's Olympia Motor Show in October 1934. The specification of the Morris Eight 5cwt van was almost identical to the car and included a newly designed 918cc side-valve engine and Lockheed hydraulic brakes. However, the car-type bumpers were not fitted and, while the car had 17in Magna wire wheels, the van wheels were small hub-type wire wheels with 18in diameter tyres.

When, eventually, the Morris Eight car was updated to the Series II model with a modified radiator shell and Easiclean wheels in 1937, the van continued as before, right up to the outbreak of war in 1939, by which time the car version had been out of production for a year, superseded by the Series E Morris Eight.

These extremely long and breathy sentences come from Harry Edwards as published in 1992, in his book, *Morris Commercial Vehicles*. In New Zealand the vans followed the cars for the Export market by having 17in wheels while Export cars had 16in. New Zealand bodied vans were built from the top of the windscreen back. Australian versions had a great deal of variation from many different builders. The habit of continuing commercial versions of car models long after the newer models had arrived was yet another quirk of Morris's economy of manufacture. Take as another example the Series Z van which continued until 1953 or even the replacement Morris Minor O-type which ran on until 1971.

*Alan Gulleford - Kaikoura*



English assembled Morris Eight Van