ENGINE—Mark II Cars and Vans

The following differences exist between these engines and those used in previous Imp and Chamois cars.

Valves and seats

Larger diameter valves and seats are used.

Distributor

The distributor centrifugal and vacuum advance action has been altered. Details are given under IGNITION in General Data.

ENGINE—Fitted with twin Stromberg CD Carburettors

This engine differs from the standard engine as explained under the following headings. Dimensional differences are given, where necessary, in General Data.

It is very important that the correct parts are used for replacement. These will be found by reference to the Parts List.

Cylinder head and valves

The inlet and exhaust ports have been enlarged as needed. Larger inlet valves and inlet valve seats are fitted.

Exhaust valves having the correct part number stamped above the cotter groove, must always be used for replacements.

The lowest end of the cylinder head is connected by an oil drain pipe to the cylinder block.

Valve springs

Dual valve springs are used.

Inlet valve guide seals

These seals are not used with dual springs.

Camshaft and tappet block

A high lift camshaft is fitted and the tappet block altered to take the new camshaft and increased tappet movement.

Valve timing

The high lift camshaft gives different valve opening and closing angles. These are given in the General Data under VALVES.

Exhaust and inlet manifolds

A fabricated exhaust manifold, having separate outlet pipes joined to twin outlets that connect to the silencer, is used.

The inlet manifold is water heated.

Piston assembly

The piston bosses and crown have been strengthened and the gudgeon pin bore reduced, to meet the higher loading given by the increased power output.

The piston grade diameters given in General Data are slightly less than that of pistons used in other engines, to give an increased clearance in cylinder bores which have unaltered grade diameters.

The top piston ring is "double lapped" to give better bore contact during the running in period.

Oil cooler

An oil cooler is fitted just rear of the engine. It can be removed easily, to give increased accessibility to the carburettors, without disconnecting its flexible feed and return pipes that connect it to the oil filter upper body.

The lubricating oil passes through the cooler before passing through the filter element.

Oil filter

The oil filter top body has outlet and inlet unions to which the oil cooler is connected by two flexible high pressure hoses.

An oil cooler by-pass valve, situated between the oil cooler feed and return passages, allows oil to by-pass the cooler should a pressure drop occur between these passages. This by-pass valve is similar in appearance to the oil filter element by-pass valve.

Oil pump gears

The oil pump driven and driving gears are hardened by the "Tufftride" process.

Fan belt

A fan belt of higher quality is fitted to meet the requirement of high engine speeds. This belt, which has a green mark on its outer face, should be used when a replacement is needed.

Distributor

The centrifugal and vacuum advance figures are different from the other engines.

Details are given under IGNITION in General Data.