

## GENERAL DESCRIPTION

Developed from the very successful Hillman Imp and Singer Chamois, these rally conversions feature an increase in engine capacity with special tuning, twin carburettors, engine oil cooler, and servo assisted brakes.

**ENGINE** *(It must be noted that it is not permissible to machine these cylinder bores oversize).*

### Cylinder head

The inlet and exhaust valves have larger diameter heads, the inlet and exhaust ports are ground and the contours modified to improve gas flow. Inlet and exhaust manifolds are matched to the ports. The inlet manifold is cast aluminium, water heated, and a specially designed 4-branch exhaust manifold with a high-efficiency silencer is fitted.

### Sparking plugs

Champion N.9Y plugs are used for all normal driving conditions.

For racing or competition driving use Champion N.64Y plugs.

### Camshaft

The modified camshaft has special high-lift cams, and the valves are fitted with high rate double valve springs.

### Distributor

A distributor having a modified advance curve, which is suited to the engine performance obtained by the new camshaft, is used.

### Carburettors

Two Zenith-Stromberg type CD 150 are used in conjunction with convolute, paper element air cleaners.

Oil vapour from the cam-box is passed through the air cleaner via a flame trap, thus providing clean air with maximum efficiency.

### Oil cooler

An oil cooler is fitted to all cars.

### Cooling system

All models have a heater fitted, the radiator has an increased capacity, and is of the Improved 4-row type.

### Brakes

The standard braking system is retained, but with the addition of a Girling servo unit, and different lining material. A larger master cylinder of .7in. (17.78mm) piston diameter is fitted.

### Suspension

To improve stability with the higher speeds involved, the suspension is lowered, the front end re-inforced, and "Monte-Carlo" type springs and shock absorbers fitted.

### Gearbox

The gearbox is the standard transaxle unit, but a close ratio version is available as an optional extra.

### Instruments

The range of instruments carried in the binnacle are:— Speedometer, with odometer and trip recording, an impulse tachometer reading up to 8,000 r.p.m. with the red sector starting at 6,500 r.p.m.; A water temperature gauge and fuel gauge complete the assembly. The rest of the equipment is standard and includes warning lamps for Ignition, Indicators, Oil pressure and full head-lamp beams.

### Fuel tank

The car is fitted with the standard tank of 6 galls capacity, but a larger tank of 10½ galls capacity is offered as optional equipment.