

THE BRITISH MOTOR CORPORATION (AUSTRALIA) PTY. LTD.

Group Companies

THE AUSTIN MOTOR COMPANY (AUSTRALIA) PTY. LIMITED NUFFIELD (AUSTRALIA) PTY. LIMITED

VICTORIA PARK
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TELEGRAMS AND CABLES:
"BRITCORP." SYDNEY

SALES AND SERVICE DIVISION

AR/FH/SEP:47A.

AUSTIN WOLSELEY M.G. MORRIS

10th September, 1959.

Mr. R. Pettiford,
598 Homer Street,
KINGSGROVE.

Dear Sir,

re 1954 Series Austin Healey 100 (4).

We have for acknowledgment your correspondence dated September 1st concerning super tuning of an Austin Healey 100.

We apologise for the slight delay due to the information not being immediately at hand. However, we trust that the information as attached will be of assistance.

It is suggested that contact with our distributors, Larke Hoskins Pty.Ltd. be made regarding the supply of the required components. May be after perusal you will decide not to fit the full range but modify the specifications to suit your own requirements.

Yours faithfully,
THE AUSTIN MOTOR COMPANY (AUSTRALIA) PTY.LTD.

A. Rowe,
Service Technical Dept.

encl.

AUSTIN HEALEY HUNDRED MODEL B.N.I.

SPECIAL EQUIPMENT AND TUNING INSTRUCTIONS. - ENGINE.

To enable the engine performance to be increased a kit has been produced. This kit was fitted to the Austin-Healey cars that completed the Le Mans 24 hour race in 1953.

LE MANS ENGINE MODIFICATION KIT, PART NO. P.280.

AUSTIN PART NO.	DESCRIPTION.	NUMBER OFF.
1B.2814.	Valve Spring (Outer)	8
1B.2813	Valve Spring (Inner)	8
1B.2811	Valve Spring Cup (Upper)	8
1B.2812	Valve Spring Seat (Lower)	8
AUC.9004	1 $\frac{3}{8}$ " Carburetter (Front)	1
AUC.9005	1 $\frac{3}{8}$ " Carburetter (Rear)	1
1B.2893	Aluminium Carburetter Manifold (Front)	1
1B.2894	Aluminium Carburetter Manifold (Rear)	1
7H.1733	Carburetter Stud	8
7H.1734	Carburetter Gasket	2
6K.9688	Nut	8
LWN.205	Spring Washer	8
7H.1724	Carburetter Cold Air Box	1
7H.1725	Carburetter Air Tube	1
2H.979	Strip and Buckle Clip	1
17H.5247	Grommet	2
2K.8479	Set Bolt	4
2K.8606	Shakeproof Washer	4
1B.2892	High Lift Camshaft	1
1B.1219	Tab Washer	1
7H.1726	Steel Face Cylinder Head Gasket	1
7H.1727	Distributor - Special Advance Curve	1
1B.2751	Valve Guide Shroud and Oil Retainer	8
7H.1728	Near Side Bonnet Frame Support	1
2H.731	Lock Washer for Starting Nut	1

The Le Mans Engine Modification Kit enables the horse power output of the engine to be increased from 90 B.H.P. at 4,000 R.P.M. to 110 B.H.P. at 4,500.

The effect on performance is marked, and results in improved acceleration and speed. The low speed performance of the engine is not impaired.

Maximum performance will only be achieved by correct and careful fitting of the Kit, and the following installation instructions should be closely followed.

FITTING INSTRUCTIONS.

Drain off cooling water and remove the bonnet, radiator, radiator hoses, cylinder head, carburetters, and manifolds. Drain off engine oil and withdraw oil reservoir, oil pump, and distributor. Remove engine mounting bolts (4 at each mounting), detach tappet cover, and withdraw the tappets.

Extract the crankshaft pulley, take off the timing case cover, remove camshaft gear and chain, and withdraw the camshaft itself. Next, strip the cylinder head and carefully smooth off any roughness within the combustion chambers and ports.

Match and fit the inlet and exhaust manifolds and carburetters to ensure that no steps exist at the joints. It is important that the carburetters are carefully aligned so that the spindles are in line and the mechanism returns freely to its stops. The valves should be lightly ground in until perfect seatings are obtained. Fit the special camshaft, chain and gear, ensuring that the valve timing markings are correctly lined up. Refit the distributor with the timing set at 9° B.T.D.C.

Rebuild the engine and set the tappets to 015". Refill the radiator and oil reservoir, and when the engine has warmed up, re-tighten the cylinder head nuts and check the engine and cooling system generally for leakages. Cylinder Head should be tightened to 65/70 lbs.

A road test is now essential for final adjustment and it is recommended that the most satisfactory ignition setting is arrived at by timing top gear acceleration against a stop watch.

Under no circumstances should any attempt be made to raise the compression ratio by machining the cylinder head.

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