

ALEXANDER

ADDED PERFORMANCE CONVERSIONS



B. M. C.

“A” SERIES

A35. A40. A40. Mk. II.
MINOR 1000

**“A” SERIES ALEXANDER
CROSS FLOW HEAD**

B.M.C. A35 *SALOON, VAN, COUNTRYMAN.*
"A" A40 *SALOON, COUNTRYMAN.*
SERIES Minor 1000 *SALOON, VAN, TRAVELLER*
CONVERTIBLE.



SPECIFICATION

The Cylinder Head is extensively modified and airflowed and the Combustion Spaces are re-shaped and polished. The ports are modified, air-flowed and polished; the Compression Ratio is raised from 8.3 to 8.9:1. Special Valve Springs are supplied giving r.p.m. without valve bounce. Two 1½" semi downdraught S.U. Carburettors are fitted to a specially designed and air flowed aluminium alloy manifold with integrally cast balance pipe, together with a pair of non-restriction air filters. The whole of the induction system is completely assembled and ready for fitting. Included in the Kit is a complete new de coke set of gaskets, all, necessary linkages, fuel pipes, carburettor gaskets.

PERFORMANCE FIGURES

Performance figures for the Stage I Conversion on these models are, of course, slightly different but the figures given below, which were taken for the converted A35, are typical.

| Acceleration through gears. | * Standard | Converted. |
|-----------------------------|-------------|------------|
| 0—30 m.p.h. | 6.8 secs. | 5.8 secs. |
| 0—40 m.p.h. | 11.6 secs. | 8.0 secs. |
| 0—50 m.p.h. | 18.7 secs. | 13.2 secs. |
| 0—60 m.p.h. | 30.1 secs. | 17.8 secs. |
| 0—70 m.p.h. | | 28.5 secs. |
| 0—80 m.p.h. | | 39.5 secs. |
| Maximum in top gear. | 73.2 m.p.h. | 80+ m.p.h. |

WHAT IT WILL COST

| | | |
|--|--------|---------|
| Complete set of parts for ALEXANDER Stage I Conversion | | £45 0 0 |
| A deposit of £15 is charged in addition to the above pending the return, carriage paid of the displaced cylinder head, inlet and exhaust manifold and carburettor in good condition at these works within 21 days. | | |
| Returnable packing case. | | £2 0 0 |

ALEXANDER have produced the following Extras to give even greater all-round performance coupled with the same superb reliability and smoothness throughout the range.

| | | |
|--|--------|----------|
| 3 Branch exhaust manifold including silencer and tail pipe, from | | £15 15 0 |
| Straight Through Silencer | | £2 0 0 |
| Sports Camshaft, from | | £13 10 0 |
| Servo Brake Kit | | £13 0 0 |
| Anti Fade Brake Linings, exchange shoe with linings, from | | £4 16 4 |

FITTING EXTRA

THIS CONVERSION CAN BE PURCHASED IN COMPONENT PARTS TOGETHER WITH MANY MORE EXTRAS SEE BACK PAGE

BUY YOUR NEW CONVERTED 'A' SERIES THE "ALEXANDER WAY"

12 Months Tax. Plates. Heater. Delivery. Conversion. Inclusive Price.

Ask for Leaflet.

ALEXANDER

CROSSFLOW ALLOY CYLINDER HEADS

B.M.C.
"A"
SERIES

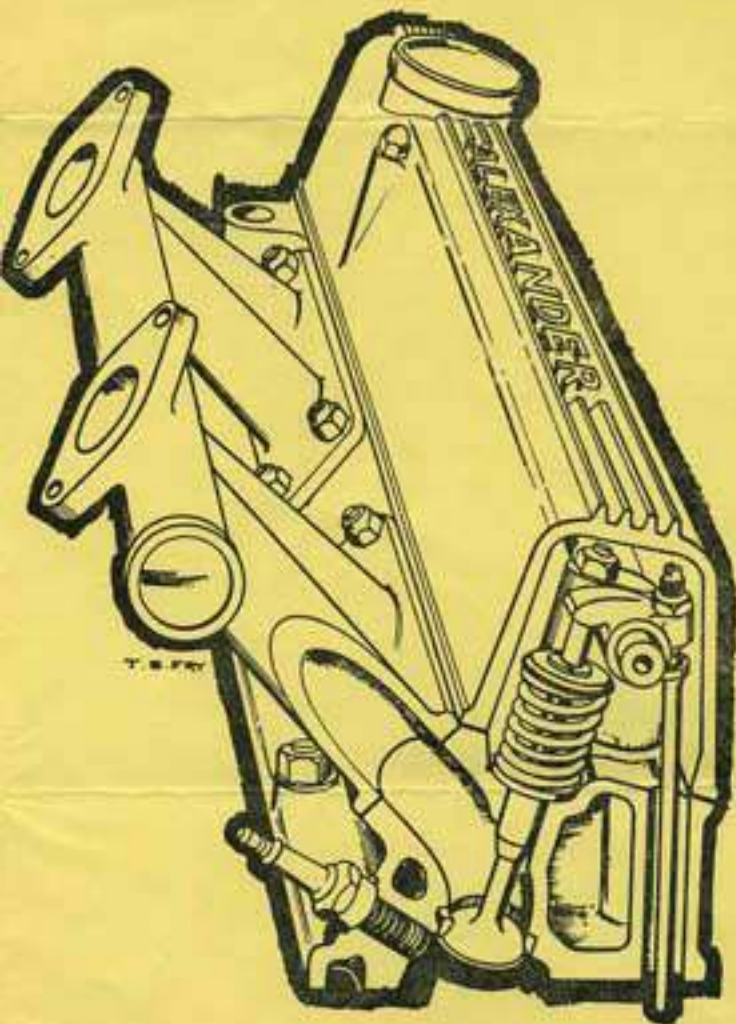
Cylinder heads of production cars are designed as the best possible compromise for a wide variety of drivers and motoring conditions. These heads can be specially modified for added performance, but basic design shapes invariably limit the extent to which this work can be taken.

So to take performance improvement beyond these limitations, Alexander can supply alternative cylinder heads of a completely new design.

These light, aluminium alloy, cross-flow heads for B.M.C.'s "A" and "B" series engines give much higher average speeds with considerably increased safety for overtaking, using ordinary premium fuel, without detriment to consumption.

"A" SERIES ALLOY HEAD SPECIFICATION AND MAIN FEATURES ARE—

Four separate inlet ports moved to the other side of the head to avoid excessive exhaust heat: this improves volumetric efficiency and provides a cross-flow head. Wedge-shaped full machined combustion chambers to provide good squish for full and part throttle operation. Compact valve gear of unusual design for higher r.p.m. to be reached without valve bounce. Larger inlet and exhaust valves—inlets by $\frac{1}{16}$ " to 1.25" and exhausts by $\frac{1}{16}$ " to 1.06". Exhaust porting, not as vital as the inlet, has been left more or less standard, but with improved flow, to enable the normal exhaust manifold and system to be retained if desired; alternately, a three branch system may be used. Emphasis throughout has been on efficiency, and for this reason, aluminium alloy having a high thermal conductivity has been used, enabling it to run satisfactory on ordinary premium grade fuel at 9.5:1 compression ratio.



PRICE LIST

| | |
|---|----------|
| B.M.C. Series 'A' alloy head, completely built up valves ground in, valve springs, inlet manifold crackle-black rocker cover, centre exhaust port adaptor | £90 0 0 |
| Series 'A' High Compression Pistons | £ 7 10 0 |
| Twin $1\frac{1}{4}$ " S.U. Carburettors, complete with linkages for 'A' series alloy head | £18 15 0 |
| Twin $1\frac{1}{4}$ " S.U. Carburettors, complete with special competition manifold and linkages for 'A' series alloy head | £28 15 0 |

FOR FURTHER EXTRAS SEE BACK PAGE

ALEXANDER "APPROVED" EXTRAS AND COMPONENT PARTS

| | |
|---|-----------------------------|
| Axle ratio can be changed from 4.5:1 to 4.2:1. Supplied with a recalibrated speedometer | £15 0 0 |
| Balance crankshaft, flywheel, clutch, con-rods and pistons. | £15 0 0 |
| Extra charge for stripping and rebuilding engine (any faulty parts will be renewed and charged extra). | £12 10 0 |
| Extra charge for removing engine from car and refitting | £ 5 10 0 |
| Line bore and fit camshaft bearings, (if carried out when engine is stripped). | £ 8 10 0 |
| Pair of 1½" S.U. carburettors complete with fuel pipes and throttle linkages. | £18 15 0 |
| Pair of 1½" S.U. carburettors, complete with fuel pipes and throttle linkages. | £23 15 0 |
| Stage I modified cylinder head, 8.9 compression, polished and air flowed (on exchange) | £17 10 0 |
| Stage I twin 1½" S.U. carburettors, inlet manifold, air filters, fuel pipes and throttle linkages and exhaust manifold blanking plate. | £26 10 0 |
| Set of parts for exhaust centre port conversion | £ 1 10 0 |
| Special pistons giving 9.4 compression. | £ 7 10 0 |
| Stage III specially modified racing cylinder head, 10:1 C.R., 8,000 r.p.m. valve springs built up ready for fitting. To be used with 9.4 pistons. | £36 0 0 |
| Stage III twin 1½" S.U. carburettors with fuel pipes, throttle linkages and inlet manifold. | £30 10 0 |
| Competition crankshafts suitable for all stages of tune. | £12 10 0 £16 0 0 |
| Complete set of lead indium bearings, big end and mains. | £ 3 8 4 |
| Competition clutch | £11 16 6 |
| Special distributor. | £ 8 14 0 |
| Three branch exhaust manifold | £10 10 0 |
| Oil cooler kit with high pressure hose and adaptors | £12 10 0 |
| Alloy racing flywheels. | £12 10 0 |
| Standard flywheel lightened (on exchange) | £ 5 0 0 |
| Anti-roll bars (front only) A.40, A.35, Sprite | £ 7 10 0 |
| Close ratio gears—1st 2.25, 2nd 1.67, 3rd 1.23. Special racing strength. | £45 0 0 |
| Close ratio gears—1st 2.57, 2nd 1.68, 3rd 1.23. | £32 10 0 |
| Z.F. Limited Slip Differential, will fit the above cars. | £61 0 0 |
| Electronic rev counters, up to 9,000 r.p.m. | £18 18 0 |
| Special Camshafts — from | £13 10 0 |
| Road Racing Camshaft 146 | £14 10 0 |
| Special Road Racing Camshaft | £33 0 0 |
| Lockheed Servo brake kit | £13 0 0 |
| Exchange Brake Shoes with Anti Fade Linings fitted for use with servo. | |
| A.35 | £ 4 16 4 |
| A.40 | £ 5 6 3 |
| Minor 1000 | £ 5 0 2 |
| Plus surcharge of approx. 15/- | |
| Set of Special Valve Springs | £ 1 10 0 |
| Set Racing valve springs | £ 2 10 0 |
| Air Cleaners (Pair) | £ 2 10 0 |

ALEXANDER ENGINEERING CO. LTD.
HADDENHAM, BUCKINGHAMSHIRE, ENGLAND
Tel: HADDENHAM, BUCKINGHAMSHIRE 345/6

ALEXANDER-MOTORTUNE LTD.
 6 ADAM & EVE MEWS,
 KENSINGTON HIGH STREET,
 LONDON, W.8. Tel. WESTERN 1166

ALEXANDER CONVERSIONS LTD.,
 1a CAROLINE STREET,
 BIRMINGHAM, 3 Tel. CENTRAL 0665

ALSO AGENTS IN ENGLAND, SCOTLAND, WALES AND OVERSEAS