

Barwell

INTRODUCE THEIR ALUMINIUM CYLINDER HEAD FOR THE B.M.C. 'A' TYPE ENGINE
suitable for
AUSTIN SEVEN, A35, A40 FARINA, HEALEY SPRITE, MORRIS MINI-MINOR & 1000



Specification

Casting material—RR 50
Valve guides & inserts—
HG. Cast Iron
Inlet valves—EN 52
Exhaust valves—KE 965
Valve springs—Terrys Acro
Compression ratio with
standard pistons—9.0:1

Designed by **J. Lucas and R. F. Golding**
Incorporating Patent No. 722149

Features of the Cylinder Head

- ★ Special port and combustion chamber design with large inlet valves giving
- ★ Increased gas flow and controlled turbulence for maximum efficiency.
- ★ Power increase throughout range.
- ★ Weight saving, alloy head 9lbs. — cast iron head 27 lbs.
- ★ Higher compression ratio with greater thermal efficiency.
- ★ Can be used with existing carburettor and manifolds or with twin carburettor arrangements.

£37

TERMS AVAILABLE

£13 DEPOSIT · 9 PAYMENTS OF £3.2.0 · 12 PAYMENTS OF £2.8.0

Performance data: Austin Healey Sprite
Top gear acceleration figures

M.P.H.	STANDARD CAR	MODIFIED CAR
20-40	12.6 secs	9.6 secs.
40-60	14.4 ..	10.2 ..
60-80	23.3 ..	13.6 ..
0-60	21.2 ..	13.1 ..
R.P.M.	STANDARD CAR	MODIFIED CAR
1,000-2,000	10.2 secs.	7.4 secs.
2,000-3,000	9.2 ..	6.6 ..
3,000-4,000	12.2 ..	9.0 ..
4,000-5,000	26.6 ..	14.2 ..

J. LUCAS & R. F. GOLDING

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Fitting instructions overleaf

Fitting and tuning instructions for the Barwell Aluminium A-type Cylinder Head.



1. Remove standard iron cylinder head and accessories in normal fashion. Remove all studs from head and fit to aluminium head.
2. Clean pistons and block, leaving $\frac{1}{4}$ in. wide rim of carbon on piston face.
3. Grease or, treat with jointing compound, both faces of standard copper asbestos gaskets and fit to block.
4. Fit Barwell Aluminium head and fit washers supplied on all short head studs and tighten down to 50lbs./ft. torque in the sequence shown in the hand book. THIS IS MOST IMPORTANT.
5. Replace manifolds.
6. Set plugs to .022in. Set tappets at .012", inlet and exhaust.
7. Set points to .012in.-.014in. at 8° B.T.D.C. for use with 100 octane fuel.
8. In the case of the engines fitted with Twin S.U. Carburettors, fit the needles supplied with the new cylinder head and adjust the jets, 5-6 flats down from the screwed up position. Adjust throttle stops as necessary.
9. Run engine lightly until working temperature is attained. Switch off and leave to cool. This is essential if best results are desired.
10. Finally, check that all water connections are sound with no leaks.
DO NOT: Remove head or slacken head nuts whilst hot.
DO NOT: Use low grade fuel.
DO NOT: Over advance ignition setting.
Use B.M.C. Gaskets.