B.M.C, M.G, & Morris Engine Codes.

This list cover the 1936 Morris engines, and the 1952 to 1990 BMC/BMH/BL/Austin Rover 'A', 'B', and 'C' series engines you will find in the companies cars. It is intended to help identification of an engine.

1936 to 1956.

Consists of four letters, followed by the engines number.

(1)MODEL	(2)Valves	(3)Bore & H.P.	(4)Make.
U Morris 8	S Sidevalve	H 57mm 8HP	M Morris
M Morris 10/4	P OHV	J 63.5mm 10HP	G M.G.
X late Morris 10/4	C OHC	A 66.5mm 11HP	W Wolseley
T Morris 12/4		B 69.5mm 12HP	C Commercial
Q 2ltr 6 cyl		E 72mm 13HP	
O 3 1/2 ltr 6cyl		D 75mm 14HP	
A Austin A30		D 61.5mm 6cyl	
		H 69mm 6cyl	

ie; XPAG 1250cc MG TB OHV engine 11HP.
XPJM 1140cc Morris 10/4 ohv engine 10HP.
XPJW 1140cc Wolseley 10/40 ohv engine 10HP.
USHM 918cc Morris Minor MM SV engine 8HP.
XPEG 1488cc MG TF OHV engine 13HP.
MPJG 1292cc MG TA engine ohv 12HP.
MPJM 1292cc Morris 12/4 OHV engine 10HP.
MPJW 1292cc Wolseley 12/48 OHV engine 10HP.
APHM 803cc Morris Minor MM OHV engine, 8HP. (first 'A' series.)
APJM 948cc Morris Minor 1000 OHV engine 10HP.
TPBG 1549cc MG VA ohv engine 12HP.
TPDG 1705cc MG 'Cream Cracker' TA engine.
QPJG 2322cc MG WA ohv engine 18HP.
QPHW 2561cc Wolseley 18/80 ohv engine 18HP.

BMC 'B' Series, 1947 to 1981.(First real 'B' series was in 1953.)

With the arrival of Austin based 'A' & 'B' series amongst those used, a system of engine 'cc' was added. It basically followed the post 1956 system, but put 'BP' infront to denote 'B' series, 'P'ush rod ohv.The first car to use the 'B' series was the M.G. Magnette ZA, in 1489cc form, in 1953. The earlier Austin A40 Devon 1200cc unit was that developed into this later 1489cc and 1200cc 'B'.

ie. BP15M was a 1489cc Morris Oxford.
BP15GA was the ZA Magnette of 1489cc.
BP15GC an improved ZA Magnette, with full flow oil filter.
BP15GB was the first MGA 1489cc engine,
BP 15GD followed it.

BC16GB was the MGA Twin Cam, 'B' series, 'C' camshaft.

1956 to 1970 'A', 'B', and 'C' Series engine Prefix.

The 'BP' prefix was dropped once BMC had its three engine types, A, B, and C. Again, there is a prefix, consisting of a number, then letter/letter/letter, then the engine number.

Cubic capacity	Make	Type	Ancillaries	Compression
8 803cc	B BMC Industrial	A to Z	A automatic	H high comp
9 948cc	G M.G.	,,	M manumatic clutch	L low comp
10 1098cc	A Austin	,,	P police spec.	
12 1200cc	W Wolseley	,,	U central gear change	
12 1275cc	H miscellaneous	,,	N column change	
15 1489cc	J Commercial	,,	O overdrive	
16 1588cc	V Van den Plas	,,		
16 1622cc	M Morris	,,		
18 1798cc	R Riley	,,		
22 2200cc				
25 2500cc				
26 2600cc				
29 2912cc				

ie, 15W / U / H 1234 1489cc Wolseley 15/50, central gear change, high comp.
15GE / U / H 1234 1489cc M.G. Magnette Mk3, central gearchange, high comp.
16AMW / U / H 1234 1622cc Austin, Morris & Wolseley Farina, central gear, high c.
16GA / U / H 1234 1588cc MGA 1600,central gear change, high comp.
15AC / N / L 1234 1489cc Austin 15cwt van, column change, low comp.
18GA / O / H 1234 1798cc MGB 3 main B. with overdrive, high comp.
29WA / O / H 1234 2912cc Wolseley 6/110, overdrive, high comp.
29GA / A / H 1234 2912cc MGC GT, automatic, high comp.

1970 onwards.

After 1970 the system was again changed, and simple types were just numbered.

85 848cc	99 998cc	10 1098cc	12 1275cc
16 1622cc	18 1798cc	22 2200cc	

with either a 'V' or an 'H' after it. 16V meant vertical,(in-line), as in the Sherpa van, or 18V as in both the later Sherpa and MGB, and Morris Marina 1800. 12V would be in an Ital, and 12H in Metro, H meaning horizontal, (FWD.) It was the group of numbers/letters after that denoted the fitment, ie, 18V-584F for a UK specification engine on the MGB. 18H was in the FWD 1800.

As an aside, the big BMC 6 cylinder 'C' series was a Morris Engines design, where as the 'A' & 'B' were Austin designed.

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BMC 'B' SERIES ENGINES USE.(1953 to 1981.)

Model	cc	Prefix	BHP/RPM	Torque
Austin A40 Devon	1200	BP12M	40/4500	58lb/ft
Austin A40 Somerset	1200	BP12M	42/4500	58
Austin A40 Sports	1200	BP12M	42/4500	58
Austin A40 Sports	1200	BP12M	46/4500	58
Austin A40 Cambridge	1200	BP12M	42/4500	58
Morris Cowely series 1	1200	BP12M	40/4500	58
Austin Metropolitan 1200	1200	BP12M	42/4500	58
Austin Metropolitan 1500	1489	BP15M	52/4500	70
Nash Metrpolitan 1500	1489	15F (USA only)	52/4500	70
Massey Harris combined harvester	1200	1HLC	40/4500	50
Morris Oxford series 2	1489	BP15MH	50/4500	70
Morris Oxford series 2	1489	BP15ML	45/4500	65 (LC)
Morris Cowely series 2	1489	BP15M	50/4500	70
Morris Oxford series 3	1489	15M	55/4500	72
Morris Oxford series 4	1489	15M	55/4500	72
Wolseley 15/50	1489	BP15W	50/4500	70
Wolseley 15/50	1489	15AMW	55/4500	72
Wolseley 1500 Mk1	1489	BP15LAW	50/4500	70
Wolseley 1500 Mk2	1489	15W, 15WA	55/4500	72
Riley 1.5 Mk1	1489	15R, 15RA	60/4800	77
Riley 1.5 Mk2	1489	15RB	66/5200	82
M.G. Magnette ZA	1489	BP15GA	60/4800	77
M.G. Magnette ZA & ZB	1489	BP15GC,15GC	68/5200	82
M.G. MGA	1489	BP15GB,15GB	68/5200	82
M.G. MGA	1489	15GD	72/5500	85
M.G. MGA 1600	1588	16GA	80/5600	87
MGA Twin Cam	1588	BC16GB	108/6700	
Austin/Morris 1/2ton,) van,pick up,)	1489	BP15ML,) 15AC, VS15C)	50/4200	74 (LC)
Diesel Engine	1489	BP15J,15Y,15J,15Z	40/4200	90
Austin A50 Cambridge	1489	1H	50/4500	70
Austin A55 Cambridge	1489	15	55/4500	72
Austin A55 Mk2 Camb.	1489	15AMW	55/4500	82
Morris Oxford series 5	1489	15AMW	55/4500	82
Wolseley 15/60	1489	15AMW	55/4500	82
Riley 4/68	1489	15RA, 15RB,	68/5200	85
M.G. Magnette Mk3	1489	15GE	66/5200	85
Morris Oxford series 6	1622	16AMW, 16AA	61/4500	90
Austin A60 Cambridge	1622	16AMW, 16AA	61/4500	90
Wolseley 16/60	1622	16AMW,16AA	61/4500	90
M.G. Magnette Mk4	1622	16GE, 16GF	68/5200	89
Riley 4/72	1622	16RA,16GF	72/5500	90
M.G. MGA 1600 Mk2	1622	16GC	90/5500	97

A60 commercials	1622	16AC,16AE	61/4500	90
Farinas with alternators,	1622	16C (1971 only)	61/4500	90
BMC 1/2 ton van	1622	16AD	61/4500	90
Sherpa van	1622	16V	58/4500	82 (LC)
Sherpa van	1798	18V	80/5000	85 (LC)
Morris Marina 1800	1798	18V	85/5000	90
Morris Marina 1800TC	1798	18V	95/5400	110
Austin 1800 Mk1	1798	18C,18AMW	80/5000	90
Morris 1800 Mk1	1798	18C,18AMW	80/5000	90
Wolseley 18/85	1798	18C,18AMW	80/5000	90
all 1800 Mk2	1789	18C	86/5300	92
all 1800 Mk3	1798	18H	86/5300	95
Austin 1800S	1798	18H	96/5400	106
M.G. MGB (3 mainbearings)	1798	18G,18GA	95/5400	110
M.G. MGB* (5 mainbearings)	1798	18GB,18GD,18GG, 18GH,18GF,18GJ, 18GK, & 18V	95/5400	110
		(power down to 84bhp by 1975 for USA.)		
Hundustani	1489	?	50/4200	74
Navigator Marine	1489	?	42/4200	60
Navigator Marine	1622	?	58/4500	85

Differing compresion ratios gave different BHP/Torque figures. (LC) indicates low comp, usually about 7.2 to 1, the normal, or high comp, was usually 8.3 to 1. Later cars such as the MGA & MGB ran with 9 to 1 and 9.5 to 1, as did some 1800 fwd cars. An 'H' or 'L' in the number is usually a clue to the ratio, though a simple change of pistons will change the ratio if the 'dish' differs in the crown. 48G is a 'B' series Gold Seal recon unit. The 'A' series was 8G, and the 'C' series 68G. (** All pre-1956 reconditioned engines were prefixed 8G, only when the Gold Seal Exchange engine arrived, was there any difference.)

The MGB used the 1800 for a long time, so there were codes to denote the differences between the engines, peculiar to MG;-

prefix	bearings	model	market	dates if known
18G	3	Mk1 GHN3/D3	all	Oct 1962/April64
18GA	3	Mk1 GHN3/D3	all	April 1964/Oct64
18GB	5	Mk1 GHN3/D3	all	Oct1964/67
18GD	5	Mk2 GHN4/D4	UK/Europe	Oct1967/69
18GF	5	Mk2 GHN4/D4	USA	Oct1967/69
18GG	5	Mk2 GHN5/D5	UK/Europe	Oct1969/71
18GH *	5	Mk2 GHN5/D5	Europe	Oct1969/70
18GJ	5	Mk2 GHN5/D5	USA	Oct1969/70
18GK	5	Mk2 GHN5/D5	USA	Oct1970/71
18V**	5	Mk3 GHN5/D5	see below	Oct 1971 onwards.

* After 18GH there were extra letters after the prefix, 'U' still meant central gearchange; 'RU' now meant overdrive; 'We' all synchromesh gearbox; 'RWe' all synchro with overdrive; 'Rc' automatic gearbox.

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18V was followed with a code for the market, such as if a 'Y' appears in the prefix, it is a Europe spec car; if a 'F' a UK spec car; if a 'Z' a north America spec car. An 'AE' after 1975 is a car with a catylist fitted for California. The emmission controls, timing changes, etc, require a workshop manual to identify the huge numbers of changes.

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BMC 'A' Series Engines. (1952 to 1999)

Just like the 'B' series, BMC used the same system as above to denote the use of the engine.

Car Model	Engine cc	Prefix number .
Austin A30	803cc	2A
Austin A35	948cc	9A
Austin A35 van (optional)	848cc	8G (post 1962 all GPO.)
Austin A40 Mk1	948cc	9A or 9D
Austin A40 Mk2	948cc	9DB
Austin A40 Mk2 1100	1098cc	10D or 10DD
Austin Healey Sprite Mk1	948cc	9CG or 9CC
Sprite Mk2/ MG Midget Mk1	1098cc	10CG
Sprite Mk3/ MG Midget Mk2	1098cc	10CC (2" main bearings.)
Sprite Mk4/ MG Midget Mk3	1275cc	12CC or 12CE home market
.. ..	..	12CD or 12CJ N. America
.. ..	..	after Oct '72, 12V/586F/H home market
.. ..	.. ..	12V/671Z/L N. America
Austin Allegro	1275cc	12H/A (same as Metro)
Austin Mini	848cc	8A
Morris Mini	848cc	8MB
Austin & Morris Mini after 1962,	848cc	8AM
Austin/Morris Mini automatic	848cc	8AH
Mini Automatic closed circuit breather	848cc	8AK
Mini floor change closed circuit breather	848cc	8AJ
Mini GPO saloon & van	848cc	85H (1" restrictor in carb.)
Mini Clubman	1098cc	10H
Mini 1000	998cc	99H
Mini 1000 unleaded high comp	998cc	99HE20
Mini 1000 unleaded low comp	998cc	99HE22
Mini 1000 Automatic	998cc	99HB82P
Mini 1275cc	1275cc	12H
Mini Moke	848cc	8AC
1275GT & Cooper Mk3 'S'	1275cc	12H
Later Cooper models	1275cc	12A
Wolseley Hornet, Riley Elf Mk1	848cc	8WR
Wolseley Hornet, Riley Elf Mk2	998cc	9WR

Austin, Morris, Wolseley fwd 1100	1098cc	10AMW, 10H
.. ..	1098cc closed circuit breather	10AH
Austin, Morris, Wolseley 1100 Automatic	1098cc	10AG
.. ..	1098cc closed circuit breather,	10AJ
MG 1100 Mk1 & Mk2, Riley 1100	1098cc	10GR
MG & Riley 1100 closed circuit breathing	1098cc 1965 on	10GRB
Vanden Plas 1100	1098cc	10GR, 10V
MG 1300 Mk1	1275cc	12G (single SU.)
MG 1300 Mk2 , Riley 1300	1275cc	after April '68 12GR
All fwd 1300 Automatic	1275cc	12A
Vanden Plas 1300	1275cc	12GR, 12V
Austin 1300 'S' Mk1, Mk2	1275cc	12FA
Austin 1300 'S' Mk3	1275cc	12H
Austin Maestro/Montego 1.3	1275cc	12HA ('A' Plus) (Uses Marina 1.3 type block.)
Austin Metro 1 ltr	998cc	99HA (all 'A' Plus)
Metro 1 ltr1985 on	998cc	99HA, 99HB, 99HC, 99HD, 99HE, 99F.
Metro 1300 HLE	1275cc	12HA08AA
.. ..	1275cc	12HB, 12HC, 12HD, 12HE, 12HF.
MG Metro 1300 leaded fuel pre 1989	1275cc	12H996AA, 12HD24
MG Metro 1300 unleaded post mid-1989	1275cc	12HF01
MG Metro Turbo leaded fuel pre 1989	1275cc	12HD26
MG Metro Turbo unleaded	1275cc	12HF01
Austin Metro Sport ..	1275cc	12HF02
Austin Metro GTa ..	1275cc	12HF02
Austin Metro's with unleaded engines,	1275cc	12HE24, 35, 39, 40, 41, 42, 67 up to 75.

Morris Minor Series 2	803cc	APHM
Morris Minor 1000 series 3	948cc	APJM
Morris Minor 1000 series 4 after 1956	948cc	9M
Morris Minor 1000 series 5	1098cc	10MA
Morris Minor series 5, close circuit breather	1098cc	10ME
Morris 1000 GPO van	948cc	8AG after 1962
Morris 1000 van, low compression	1098cc	10AB
Morris 1000 van closed circuit breather	1098cc	10V
Morris Marina 1300	1275cc	12V

Specialist engines...

Mini Cooper	997cc & 1070cc 'S'	9F/SA/H	comp 9.1
Mini Cooper	997cc	9F/SA/L	8.3
Mini Cooper	970cc 'S'	9F/SA/X	10
Mini Cooper	1275cc 'S'	9F/SA/Y	9.75
Mini Cooper	998cc	9FA/SA/H	9.1
Mini Cooper	998cc	9FA/SA/L	8.3
Mini Cooper	970cc 'S'	9FC/SA/H	9.1
Mini Cooper	998cc	9FD/SA/H	9.1

Mini Cooper	1070cc 'S'	9FD/SA/H (engine 33661 to 33948,)	9.1
Mini Cooper	998cc	9FD/SA/L	8.3
Mini Cooper	970cc 'S'	9FD/SA/X	10
Mini Cooper	1275cc 'S'	9FD/SA/Y	9.75
Mini Cooper	970cc 'S'	9FE/SA/X	10
Mini Cooper	1275cc 'S'	9FE/SA/Y	9.75
Mini Cooper	1070cc 'S'	10F	8.3

Still being fitted to the 1275cc Mini as 12HE.....(1999)

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BMC 'C' SERIES Engines.

(Not a complete list yet.)

1954 Morris Isis,	2693cc	C26M	85bhp
1954 Wolseley 6/90	2693cc	26W	95
1954 Austin A90 Zenith carb	2693cc	26A	83
1956 Riley 2.6	2693cc	26R	95
1956 Austin A105	2693cc	26A	102
1956 Austin Vanden Plas A105	2693cc	26A	102
1956 Austin A95 Westminster	2693cc	26A	92
1956 Austin Healey 100/6	2693cc	26A	102
1959 Austin Healey 3000 Mk1	2912cc	29A	124
1961 Austin Healey 3000 Mk2	2912cc	29A	132
1963 Austin Healey 3000 Mk3	2912cc	29A	150
1959 Austin Westminister A99	2912cc	29A	103
1959 Wolseley 6/99	2912cc	29WA	103
1959 Vanden Plas Princess Mk1	2912cc	29VA	103
1961 Austin Westminister A110 Mk1 & Mk2	2912cc	29A	120
1961 Wolseley 6/110 Mk1 & Mk2	2912cc	29WB	120
1961 Vanden Plas Princess Mk2	2912cc	29VB	120
1967 Austin 3 Litre (7 main bearings,)	2912cc	29AA	124
1967 MG MGC (,, ,,)	2912cc	29GA	145

The Austin models used Zenith carbs up to the farina Westminster in 1959, then they had SU's as all the others used all along. Healeys had different cylinderheads, separate manifolding, and camshafts.

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GOLD SEAL EXCHANGE ENGINES.

BMC like many firms did an exchange scheme for worn engines, one was the Gold Seal engine, a complete engine ready to fit and painted gold in colour. The other was

the Silver Seal exchange engine, basically a short-block for the owner/garage to fit the old head,sump, and ancillories onto.

Both used a similar system of engine numbering, the original number being struck off. Initially all engines in the scheme were prefixed 8G, soon a better system followed:-

'A' series engines were prefixed 8G,- 803cc, 848cc, 948cc, 1098cc, 1275cc.
'B' series were prefixed 84G,- 1200cc, 1489cc, 1588cc, 1622cc, 1798cc.
'C' series were prefixed 86G,- 2693cc, 2912cc.

The code after was to do with rebore/regrind sizes and a job number.

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