

CRYPTON

TECHNICAL BULLETIN

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BULLETIN 43/67
 DOWNTON CONVERSION DATA
 for B.M.C. Mini Models

JUNE 1967

Test data covering the well-known Downton engine conversions for B. M. C. Mini models is given below and overleaf.

If further information is required on this specialised type of tuning, enquiries should be referred to Downton Engineering Works Ltd., Downton, Salisbury, Wilts.

Model	Type of Tune	Compression Ratio	Static Ignition Timing BTDC	Distributor Lucas Serial No.
Austin & Morris Mini (848 cc)	Single HS2 & Single H4 conversion	9 : 1	TDC	40768 (Standard)
"	Twin HS2 conversion	9.3 : 1	TDC	40768 (Standard)
Riley Elf Wolseley Hornet	Standard conversion	10 : 1	4°	40819 (Special)
Austin & Morris Cooper (997 cc)	Touring	10 : 1	4° to 6°	40774 (Standard)
Austin & Morris Cooper (998 cc)	Touring	9.8 : 1	2°	40955 (Standard)
Austin & Morris Cooper 'S' (1275 cc)	Touring	10.5 : 1	TDC	40819 (Standard)

continued overleaf

Downton Conversion Data for B.M.C. Mini Models

DISTRIBUTOR ADVANCE DATA

Lucas Serial No.	Centrifugal Advance (C/Shaft degrees - Engine RPM)			Vacuum Advance (Ins.Hg - C/Shaft degrees)		
	No advance below	Advance of	Maximum advance	Advance starts	Advance ends	Maximum advance
40768	500	24-28 at 2500	34 at 4400	7"	13"	10°
40774	600	2-8 at 1000	18-22 at 2400	3"	8"	14°
40819	450	10-14 at 1600	28-32 at 7600	N I L		
40955	400	12-16 at 1800	30-34 at 6600	3"	8"	14°

ALL MODELS

Valve clearances - Inlet & Exhaust (hot) : .015" (0.38 mm)
 Distributor - Contact Breaker Gap : .015" (0.38 mm)
 - Dwell Angle : 60°
 Spark Plugs - Make & Type : K1G FE65P (except
 Cooper 'S' - FE 125P)
 - Gap : .025" (0.65 mm)

CARBURETTOR DATA

Model	Type of Tune	S. U. Carb. Type	Needle	Spring
Austin & Morris Mini (848 cc)	Single HS2 & Single H4 conversion	HS2 - H4 -	B3 No. 5	Blue Blue
"	Twin HS2 conversion		M6	Blue
Riley Elf Wolseley Hornet	Standard conversion	Twin HS2	H6	Blue
Austin & Morris Cooper (997 cc)	Touring	Twin H4	No. 5	Blue
Austin & Morris Cooper (998 cc)	Touring	Twin H4	No. 5	Blue
Austin & Morris Cooper 'S' (1275 cc)	Touring	Twin H4	No. 6	Blue