Denis Welch Motorsport
Sudbury Road, Yoxall, Burton on Trent,
Staffs, DE13 8NA, England.
Tel 01543 472214 Fax 01543 472339
PARTS HOTLINE 01543 472244
E-Mail: sales@bighealey.co.uk

CAM TIMING CHART

Austin Healey 6 Cylinder Profiles

Profile	DWR 1	DWR 8	DWR 2	DWR 3
Power Band rpm	1000-5500	1000-6000	3000-6000	3000-6800
Inlet opens BTDC	24º	33°	50°	60°
Inlet closes ABDC	64°	65°	70°	80°
Exhaust opens BBDC	59°	65°	75°	85°
Exhaust closes ATDC	29°	33°	45°	55°
Inlet Duration	268°	278°	300°	320°
Exhaust Duration	268°	278°	300°	320°
Inlet timing @ full lift ATDC	110°	106°	100°	100°
Cam lift at checking height	0.252" 6.40mm	0.282" 7.16mm	0.315" 8.01mm	0.315" 8.01mm
Valve lift with std. rockers	0.358" 9.09mm	0.401" 10.18mm	0.440" 11.17mm	0.440" 11.17mm
Valve clearance - Cold	0.015" 0.38mm	0.015" 0.38mm	0.015" 0.38mm	0.015" 0.38mm
Valve pockets required	NO	YES	YES	YES
Checking height for above	0.016" 0.406mm	0.014" 0.356mm	0.0125" 0.318mm	0.0125" 0.318mm
Inlet Cam Lift @ TBC	0.057" 1.45mm	0.092" 2.33mm	0.136" 3.45mm	0.164" 4.16mm

Inlet Duration @ 0.050" checking	228º	228º	245º	260º
Exhaust Duration @ 0.050" checking	228º	228º	245º	260º

DWR 1 profile is the only camshaft which will fit without any valve pocket reliefs. This profile is a little better than the BJ8 cam and so works well in any standard or mildly tuned car.

DWR 8 profile is higher lift with mild duration (requires valve pockets). This profile is ideal for fast road or mild rally and works well with twin 2" SU's or triple Webers for a smooth tractable car.

DWR 2 profile is high lift with 300 degrees duration (requires valve pockets). This profile is very similar to the original "works" profile and ideal for rally or track day cars and works well with triple Webers for a punch of power as it comes on cam.

DWR 3 profile is high lift with 320 degrees duration (requires valve pockets). This profile is very similar to the DWR 2 with a little extra duration and overlap. Ideal for race cars and works well with triple Webers.