

CAMSHAFTS

Four camshafts are listed below, all supplied by the MG Car Co. Old and new part numbers are given to minimise (?) confusion when ordering.

camshaft	intake		exhaust		duration	lift	setting hot
	opens BTDC	closes ABDC	opens BBDC	closes ATDC			
MG862/171 X24084 AAA5776	11°	57°	52°	24°	248° I 256° X	8 mm.	.019 in.
168553 AAA3096	5°	45°	45°	5°	230°	8.3 mm.	.012 in.
AEG122	13°	59°	50°	22°	252°	8.3 mm.	.015 in.
168551 AAA3095	32°	58°	60°	30°	270°	8.3 mm.	.012 in.I .019 in.X

X24084 was supplied originally in the TC and early TDs. Its characteristics are inferior to 168553 for acceleration and street use, and for higher revs it is inferior to AEG122.

168553 was introduced after TD2/24116. It has very good low speed characteristics, hence good acceleration and pulling on hills. Its peak power output is equal to, or perhaps a bit better than, X24084. Use this cam in any street machine, whether standard or of fairly high tune.

AEG122 should be used with not less than 10:1 compression, larger valves and $1\frac{1}{2}$ SUs, extractor exhaust, and preferably, $1\frac{1}{2}$ litres. There is a noticeable loss of power below 4000 rpm, and it adds only 1-2 hp to the top end (above 5500 rpm). Therefore it is not suggested except for the car that is going to be used frequently in the 4000-6000 rpm range.

168551 is a full race camshaft, having erratic running below 2000 rpm. The usable range is well above 4000 rpm, making it totally unsuitable for running on the street. It is only acceptable for Mille Miglia type courses, and must be fitted with the extractor system, as the stock manifold would seriously inhibit the gas flow, negating the effects of the camshaft.

Camshafts from independent grinders, with a wide variety of durations and lifts, are readily available. Their use will depend on the engine characteristics desired, and on the ability of the technician to prepare and to test the engine for these desired results. Usually, those who suggest a "wild" cam are hot rod boys who consider the camshaft some sort of magic wand, to be used but not understood. The 168553 camshaft is strongly recommended.

Please note that any change from the camshaft originally fitted to a given engine will likely require a change in the ignition advance curve. Otherwise, maximum performance will be slightly inhibited. This is discussed next.

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