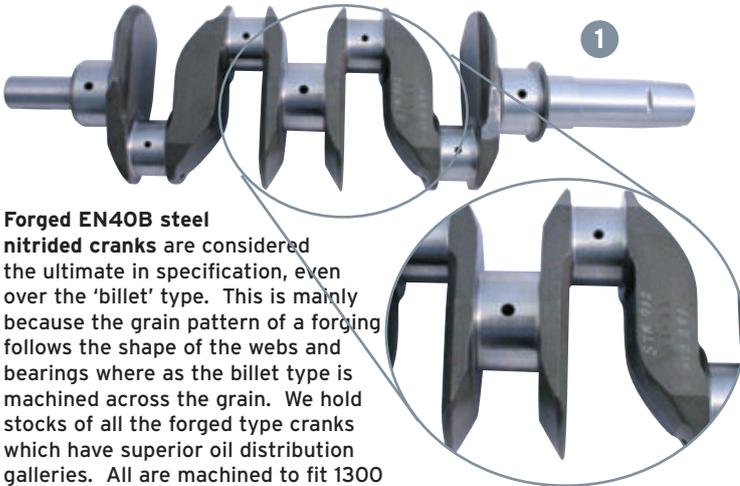




Forged EN40B Cranks



Forged EN40B steel nitrided cranks are considered the ultimate in specification, even over the 'billet' type. This is mainly because the grain pattern of a forging follows the shape of the webs and bearings where as the billet type is machined across the grain. We hold stocks of all the forged type cranks which have superior oil distribution galleries. All are machined to fit 1300 non 'S' center main except C-AEG479 which is 'S'.

1. a. **81.33mm stroke EN40B**, nitrided, 1.625" 'S' big end journal. For 'S' block. **C-AEG479**
- b. **76mm stroke EN40B**, nitrided, 1.625" 'S' big end journal. For 1300cc block. **C-AEG476**
- c. **84mm stroke EN40B**, nitrided, 1.625" 'S' big end journal. For 1300cc block. **C-AEG497**
- d. **86mm stroke EN40B**, nitrided, 1.625" 'S' big end journal. For 1300cc block. **C-AEG478**
- e. **81.33mm stroke EN40B**, nitrided, for 1300cc block with 1300cc big end journal diameter, = 1.7497" standard. **C-STR931**
- f. **81.33mm stroke EN40B**, nitrided, for 1300cc block with 'S' big end journal diameter, = 1.625" standard. **C-STR932**
- g. Same as C-STR932 but without primary gear circlip groove for special applications. **C-STR933**

Future forged EN40B crankshafts will be mass center balanced and benefit from latest technology in having leading edge chamfering on the crank webs, which helps reduce whip and resistance at high rpm giving smoother running and balancing properties. (as shown above)

Cranks for the short stroke 'S' are available to order only, and are cut from a steel billet as the forgings are no longer available.

- 1071cc 'S' steel billet crank, stroke length 68.26mm. **C-AEG170**
- 970cc 'S' steel billet crank, stroke length 61.91mm. **C-AEG329**

BORE/STROKE CAPACITY COMBINATIONS IN CC					
	.020	.040	.060	73.5mm	74mm
76mm	1209	1226	1243	1290	1308
79mm	1256	1274	1297	1341	1359
81.33mm	1293	1312	1330	1379	1399
84mm	1336	1355	1374	1425	1445
86mm	1368	1387	1407	1459	1480

Thrust Washers



When refitting crankshafts, thrust washers should always be checked and replaced. Available in standard and plus 3 thou only in an engine set of 4.

2. a for 1275 standard. **AEW2136**
b for 1275 at 3 thou oversize. **AEW2136-003**
3. a for 998 standard size. **AEW2122**
b for 998 at 3 thou oversize. **AEW2122-003**

As many as possible of our engine parts are supplied by Federal Mogul one of the worlds largest suppliers of automotive components, who purchased Vandervell, Glacier, Payen and AE Hepolite. All of these old names are synonymous with the BMC/Leyland A series engine and we have carried on the tradition.

End & Main Bearings

4. Our main range of bearings was Vandervell but owing to poor supply, varying tolerances and imperfections all the leading engine builders and Mini Spares have reverted to the superior ACL bearings which are steel backed lead indium copper race quality. * Please state oversizes when ordering bearings.



- a. Big ends 850/998/1100 and Cooper 'S', 1.625" diameter, available in std/10/20/30/40. **AEB572**
- b. Big ends 1275cc 1.749" diameter, available in std/10/20/30/40. **AEB91306**
- c. Mains 1300cc and all 'S', available in std/10/20/30/40. **AEM91120**
- d. Mains 1300cc A-plus, available in std/10/20 only, with center locating tab. **AEM91886**
- e. Mains 998/1100cc, available in std/10/20/30/40. **AEM3314**
- f. Mains 998 A-plus, available in std AE material only in std/10/20 only, with center locating tab. **AEM3427**

Cam Keys Offset & Standard



To aid accurate timing when using non adjustable timing gear systems, there is a range of proper CNC machined offset cam keys available. These come in 1° increments up to 9°. One tooth round on the gear represents 13° of cam timing, so if you are more than 9° out move the cam gear one tooth in the required direction and use the keys the other way round as they are bi-directional. They are available individually.



5. Standard camshaft key. Always replace when fitting a new camshaft. **WKN505**
6. Offset camshaft key, represents 1° offset. Change the number to order the required key, (ie. for 3°, WKN3 OSET). Available from 1° to 9°. **WKN1 OSET**
7. Crankshaft timing gear key. **6K836**
8. 360° Protractor for timing camshaft. **C-AJP337**

MPZ Engine Build Lubes

9. **MPZ Engine Assembly Lube.** Favoured by professionals for press fitting piston wrist pins, pre lubing bushes, plain bearings, roller bearings, journals and gears. Prevents scuff, seizure, wear, rust, waterproof and corrosion proof. (4 fl oz). **KCLUBE**
10. **MPZ Cam Lube.** As above but converted into a non-melting gel type grease. These features protect cam lobe, lifters and valvetrain components from scuffing and wear during initial start-up. Also useful for Mini oil pumps to stop drain back on start up. (1 fl oz). **KCLUBE1**

