Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

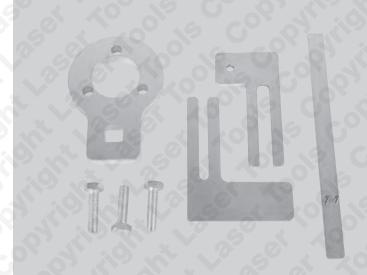
It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



6287

Balance Shaft Setting ToolsBMW

Instructions





Safety First. Be Protected.

Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: +44 (0) 1926 818186. Normal wear and tear are excluded as are consumable items and abuse.



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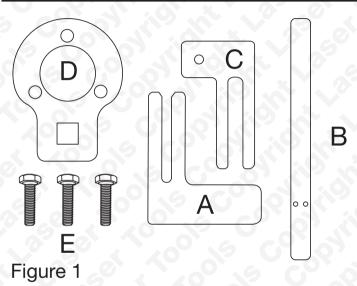
Kineton Road, Southam, Warwickshire CV47 0DR T+44 (0) 1926 815000 F+44 (0) 1926 815888 info@toolconnection.co.uk www.toolconnection.co.uk



6287 - Balance Shaft Setting Tools

A kit specifically designed to set the balance shafts on BMW engines when the balance shafts have been disturbed (see application list).

Components



Ref	OEM Ref	Description
A	11 8 700	Balance shaft alignment, fork type.
В	11 5 140	Balance shaft alignment bar, flat type.
С	11 9 330	Balance shaft alignment, fork type.
D	11 9 280	Vibration damper (crankshaft pulley) holding tool.
Е		Set Screws (x 3) for vibration damper holding tool.

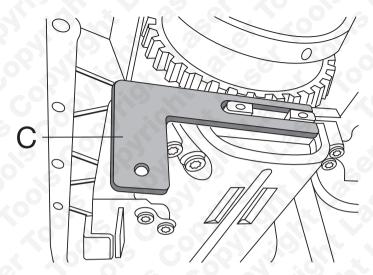


Figure 4

Refer to Figure 4:

- Rotate the balancing shafts until **Tool C** can be pushed from inlet side over ends of balancing shafts.

 Balancing shafts are now locked off and secured.

Applications

 $\mbox{N.B.}$ The information given below is for reference only. We recommend the use of Manufacturer data or Autodata.

We cannot accept responsibility for damage or personal injury caused by the use of the kit how so ever caused.

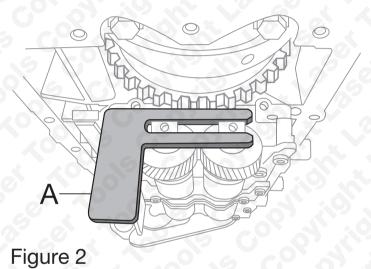
Tool	OEM Ref	Engine Codes
A	11 8 700	N43
В	11 5 140	N45, N46, N46T
С	11 9 330	N40, N42, N45, N46

Type/Chassis	Model	Year
1 Series	116i	2004-2015
2 20 1	118i	
	120	
3 Series (E46)	316i	2001-2004
0	316ti Compact	
	318i	
6 1	318ti Compact	
3 Series (E90/91/92/93)	316i	2005-2015
	318i	
100	320i	(b) (c)
	320si	
5 Series (E60/61)	520i	2007-2010
X1 (E84)	sDrive 18i	2010-2012
X3 (E83)	xDrive 20i	2005-2010
Z4 (E85/86)	0 0	2004-2009

Ref	OEM Ref
1.6	N45 B16A, N45T B16AC
1.8	N42 B18A, N46 B18
2.0	N46 B20B, N46T B20, N46T B20Bz, N46T B20O2 N42 B20A, N46 B20, N46T B20BD, N45 B20AA, N46T B20B

Instructions

There are three alignment tools included which are suitable for the three different versions of balance shaft setting up on these engines (refer to engine code). The correct tool must be selected for the type of balance shaft system that is fitted to the engine. You must follow the vehicle manufacturer's documentation and instructions on how to fit and/or set up the balance shafts using the following as a guide.



Refer to Figure 2:

- · Align balance weights of balancing shafts.
- Both balance weights point to oil sump.
- Slide in Tool A over the ground surfaces on the balancing shafts.
- · Balancing shafts are now locked off and secured.
- Do not remove Tool A until the oil pump gear is fitted and secured.

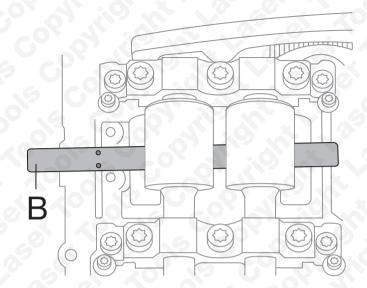


Figure 3

Refer to Figure 3:

- Slide in Tool B under the balancing shafts at the ground contact faces as far as it will go.
- · Balancing shafts are now locked off and secured.