

## Applications

Make	Model	Type	Year
BMW	1 Series 118i	(E81/E2/E7/E8)	2004-2014
	1 Series 120i	(E81/E2/E7/E8)	2004-2014
	3 Series 316i	(E46)	2001-2007
	3 Series 318i	(E46)	2001-2007
	3 Series 318i	(E90/E1/E2/E3)	2005-2011
	3 Series 320i	(E90/E1/E2/E3)	2005-2014
	5 Series 520i	(E60/E61)	2007-2010
	X1 xDrive18i	(E84)	2010-2012
	X3 xDrive 20i	(E84)	2005-2010
Z4 2.0	(E84/E86)	2004-2009	

Engine Code	
1.6	N42 B18A, N46 B18
1.8	N42 B18A, N46 B18
2.0	N42 B20A, N46 B20, N46 B20B, N46T B20, N46T B20B, N46T B20BD, N46T B20BZ, N46T B2002

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by Sonic for incorrect use of any of our products, and Sonic 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.

**SONIC**  
equipment

## Instructions

### Engine Timing Kit BMW Petrol N42, 46 - 1.6, 1.8, 2.0

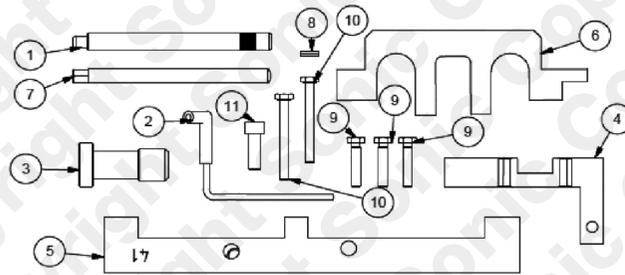


## 829031 - Engine Timing Kit

**Description:**  
The 829031 has been developed for the 1.6/1.8/2.0 BMW petrol engines found in the BMW 3, 5, X and Z4 series vehicles up to 2014.

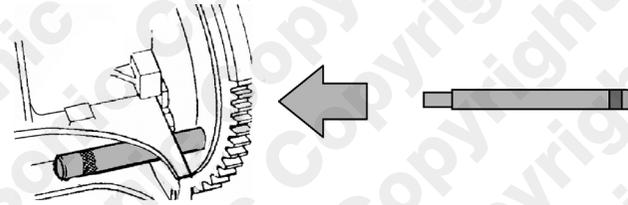
### Components

Ref	Comp	OEM	Description
1	4880018	11 5 120, 11 2 300	Crankshaft Locking Pin
2	4880025	11 9 190	Flywheel Locking Pin
3	4880026	11 9 340	Timing Chain Pre Tensioner Tool
4	4880017	11 9 292	Inlet Camshaft Alignment Tool
5	488	11 9 350	Vanos Sensor Gear Alignment Tool
6	4880029	11 9 291	Exhaust Camshaft Alignment Tool
7			Screw For 3
8			Washers x2 For 10
9			M6 x 30 Setscrews x3
10			M6 x 55 H.T. Setscrew x2
11			M8 x 25Mm Cap Screw x1

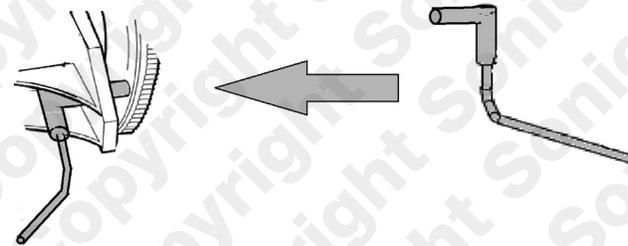


### Instructions

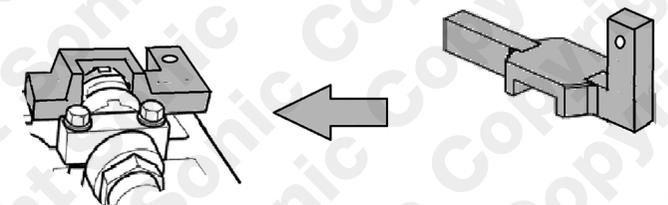
**Component 1 - Crankshaft Locking Pin**  
Ensure engine is set at TDC on number 1 cylinder and insert the crankshaft pin as shown



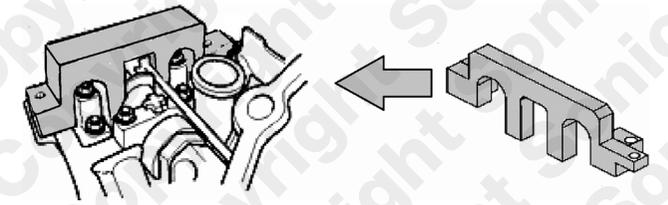
**Component 2 - Flywheel Locking Pin**



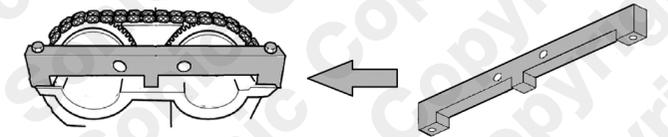
**Component 4 - Inlet Camshaft Alignment Tool**  
Component 4 is used to align the inlet camshaft. Fit component 6 after component 4.



**Component 6 - Exhaust Camshaft Alignment Tool**  
Component 6 is used to align the exhaust camshaft and hold down component 4.

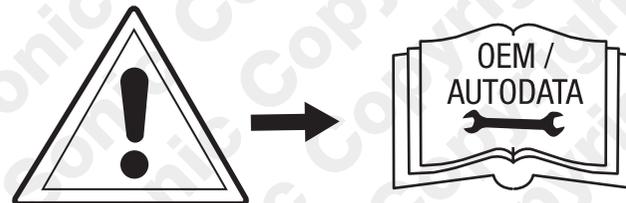


**Component 5 - Vanos Sensor Gear Alignment Tool**  
Component 5 is used to align the VANOS sensor gear after the camshafts are aligned.



### Instructions

The following instructions are for guidance only. Please refer to OEM derived data such as the vehicles manufactures own data or Autodata. The use of these engine timing tools is purely down to the user's discretion and Sonic cannot be held responsible for any damage caused what so ever.



**Components 3 & 7 - Chain Tensioner Pre-Load Tool**  
Component 3 & 7 are provided to allow the user to release the tension on the camshaft chain tensioner which is particularly required when

- Removing or replacing the Cam chain
- Setting/removing/replacing the VANOS units(s)