

## Applications

Make	Model	Year
Chevrolet	Aveo	2011-2015
	Cruze	2013-2015
	Orlando	2012-2015
	Trax	2013-2015
Opel/Vauxhall	Adam	2012-2016
	Adam Rocks	2014-2016
	Ampera	2011-2015
	Astra-J	2009-2016
	Cascada	2013-2016
	Corsa-D	2006-2010
	Corsa-E	2014-2016
	Insignia	2011-2016
	Meriva-B	2010-2016
	Mokka	2012-2016
Zafira-C Tourer	2011-2016	

Engine Code	
1.0	A10 XEP
1.2	L2Q/A12XEL, LDC/A12XER, LDC/B12XEL, LWD/A12XEL, LWD/B12XEL
1.4	LDD/A14XEL, LDD/A14XER, L2I, LDD, LUJ, LUV, LUJ/A14NET, LUV, L2Z/A14XEL, LDD/B14XEL, LDD/B14XER, LUJ/B14NEH, LUJ/A14XFL, LUJ/A14NEL, LUJ/B14NEL, LUJ/B14NET, LDD/B14XEJ, LUJ/B14NEJ, LUH/A14NEL, LUH/B14NEL

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 Opel Petrol (Chain Drive DOHC (A12/A14) - 1.2, 1.4



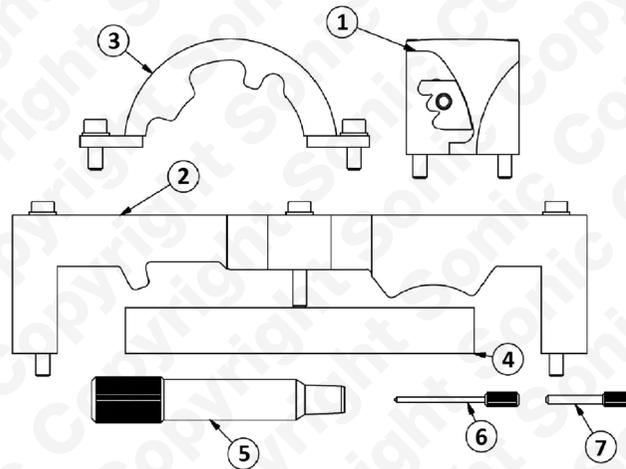
## 829060 - Engine Timing kit

### Description:

The 829060 has been developed to allow the user to lock the cam and crankshafts in position to allow the removal and replacement of the timing chain fitted to the Vauxhall/Opel twin Cam engines list below. The 829060 kit is a 7 piece tool kit made up of the required camshaft and crankshaft locking tools.

### Components

Ref	Comp	OEM	Description
1	4880276	EN-49977-200	Inlet Camshaft Adjuster Tool
2	4880244	EN-49977-100	Camshaft Sensor Disc Setting Tool
3	4880277	EN-49978	Camshaft Sensor Locating Tool
4	4880170	KM-953-A	Camshaft Setting Plate
5	4880171	KM-952	Crankshaft Locking Pin
6	4880173	KM-955-2	Tensioner Locking Pin 2.5mm
7	4880172	KM-955-1	Tensioner Locking Pin 4mm

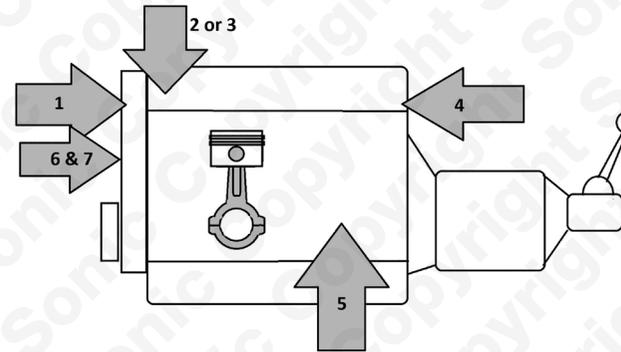


### Instructions

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.

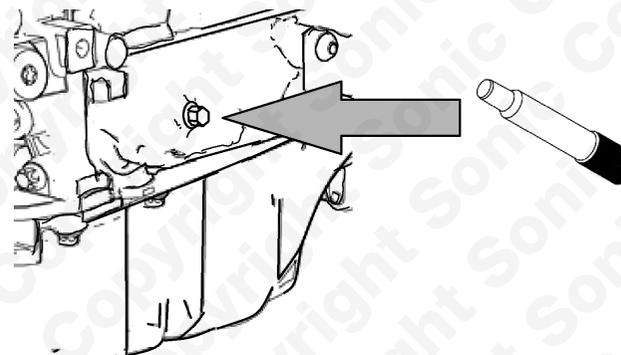


### Instructions

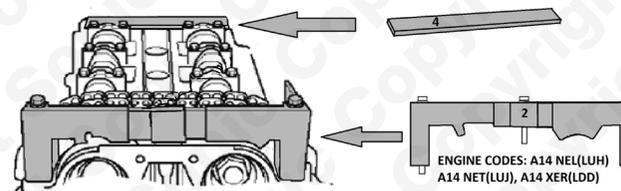


- Removal of the timing chain will require the removal of the sump.
- Ensure the engine is at TDC No 1 cylinder.
- Ensure the chain tensioner is fully retracted and held in the retracted position using a suitable pin.
- Remove the crankshaft pulley using an appropriate pulley holding to.

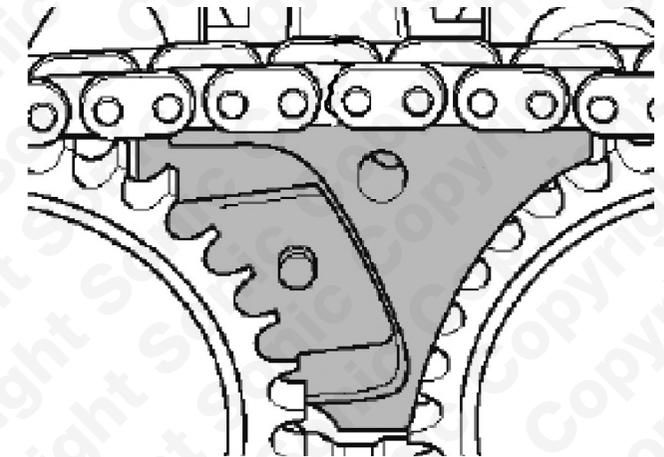
#### Crankshaft Locking PIN (5)



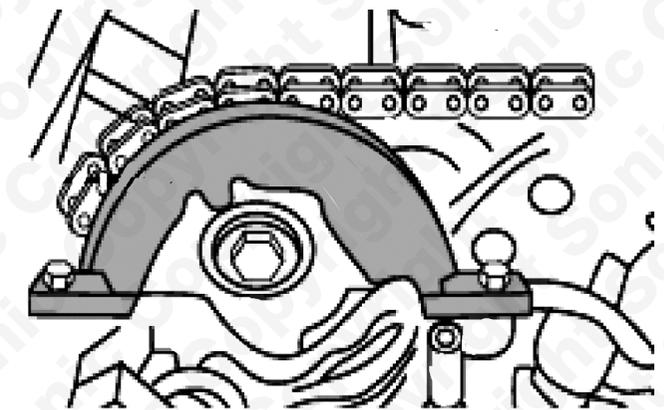
#### Camshaft Alignment Tools (2 & 4). Camshaft Sensor Disc Setting Tool 2 (use with 1)



#### Inlet Camshaft Adjuster Tool (1) Use with 2 and 3.



#### Camshaft Sensor Locating Tool (3) Used on A10 XEP engines.



#### Cam Chain Tensioner Locking Pin 4mm (7) Push the tensioner fully home and lock with the 4mm pin (7).

