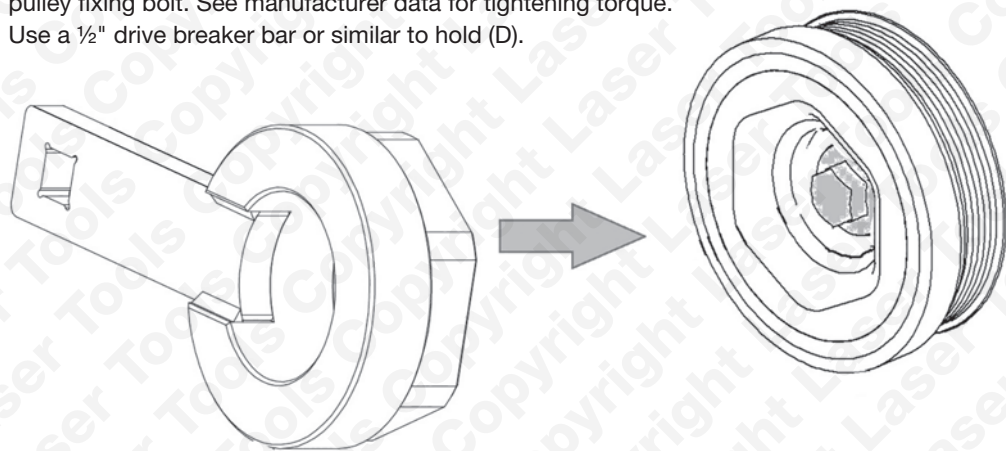## Crankshaft Pulley Holding Tool (D)

Component D is used to hold the crankshaft front pulley while loosening or tightening the pulley fixing bolt. See manufacturer data for tightening torque.

Use a ½" drive breaker bar or similar to hold (D).

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.

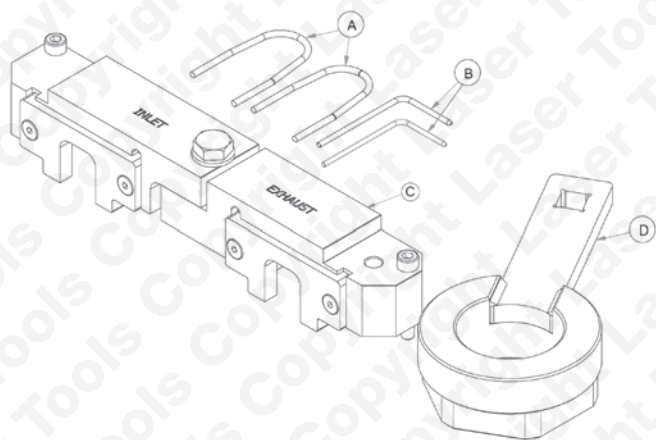6810_Instructions_v3

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LASER ®   6810

Engine Timing Tool Kit
Vauxhall/Opel SIDI Petrol

MADE IN SHEFFIELD

- Specially designed crankshaft pulley holding tool designed to be used with a 1/2"D power bar.
- Applications: SIDI Turbo, SIDI Turbo EcoFLEX: Vauxhall: Astra-J (2013-2015), Astra-K (from 2015), Cascada (from 2013), GTC (from 2015), Insignia (2013-2017), Zafira-C Tourer (from 2013).
- Specifically designed for A16XHT, A16SHT, B16XHT, B16SHT and B16SHL petrol turbo engines.
- Equivalent to OEM EN-51151, EN-50513, EN-51148, EN-51147.

Components

Ref	Code	OEM	Description
A	C769	EN-51153	Balance shaft sprocket locking x2
B	C774	EN-50513	Valve Timing Chain Tensioner pins x 2
C	C772	EN-51148	Camshaft Holding & Alignment Tools
D	C771	EN-51147	Crankshaft Pulley Holding Tool

Applications

Make	Model	Years	Type
Opel/Vauxhall	Astra-J	2013 - 2017	
	Astra-K	From 2015	
	Cascada	From 2013	Turbo SIDI
	GTC	From 2015	SIDI Turbo
	Insignia	From 2013	SIDI Turbo ecoFLEX
	Zafira-C Tourer	From 2013	

Engine Code	
1.6 SIDI	LVP/A16XHT, LWC/A16SHT, LVP/B16XHT, LWC/B16SHT, LWC/B16SHL

The following instructions are for guidance only. Please refer to OEM derived data such as the vehicles manufacturers own data or Autodata.

The use of this tool is purely down to the user's discretion and The Tool Connection Ltd. cannot be held responsible for any damage caused whatsoever.

Instructions

Basic component use

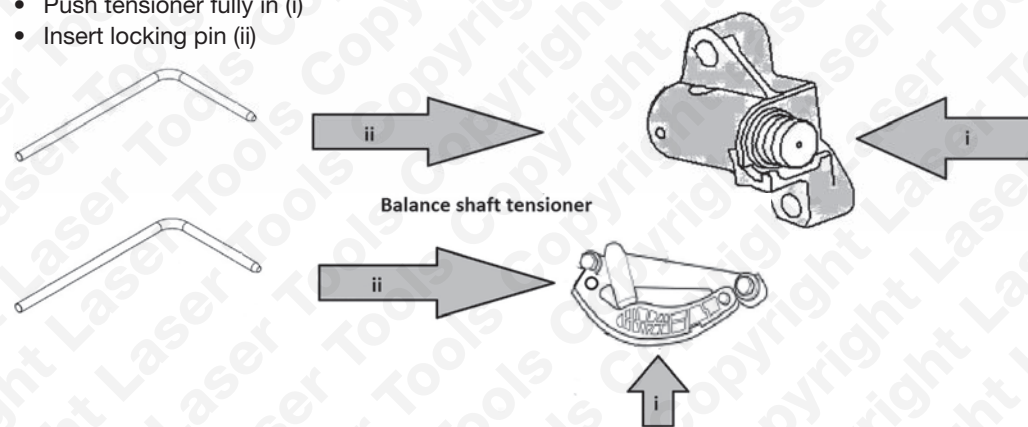#### Balance shaft sprocket locking x2 (A)

The balance shaft sprockets and chain are located at the rear of the engines. To gain access the flywheel must be removed.

- Engine at TDC No 1 cylinder.
- Camshaft locking tools (C) fitted in place to lock the camshafts.
- Ensure balance shaft timing marks align.
- Fit balance shaft holding tools as described in manufacturer's instructions to secure the timing position.

Valve Timing Chain Tensioner pins x 2 (B)

Component (B) is used to lock and hold the timing chain and balance shaft chain tensioners in their fully retracted position.

- Push tensioner fully in (i)
- Insert locking pin (ii)

Balance shaft tensioner

Camshaft Holding & Alignment Tools (C)

Component (C) is made up of two camshaft locking tools that are designed to bolt together on the engine to lock the camshafts.

- Set engine to TDC No1 cylinder.
- Ensure timing marks on crankshaft sprocket and camshaft sprockets align (See manufacturer's data).
- Fit Camshaft Locking tool (C) as shown.
- Tighten the holding bolts in the order shown to hand tight only.