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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.

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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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LASER[®]

Part No. 6325

Engine Timing Tool Kit Vauxhall/Opel, Saab 2.0 Turbo



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Introduction

Developed to change the camshaft drive chain on the twin cam chain driven 2.0lt turbo petrol engines found in the Vauxhall and Saab ranges from 2002 to 2012.

N.B The information given below is for reference only. The Tool Connection recommends the use of Manufacturer data or Autodata.

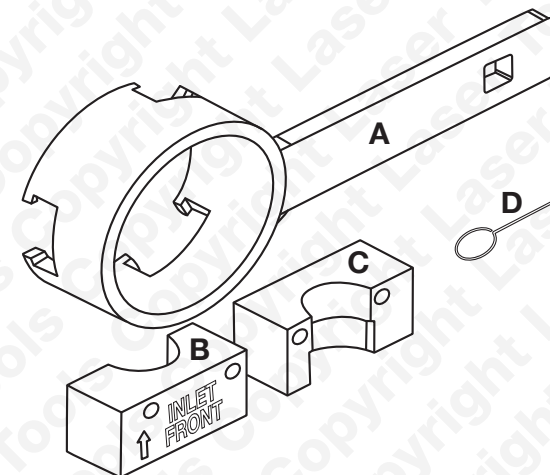
Warning

Incorrect or out of phase engine timing can result in damage to the valves.
The Tool Connection cannot be held responsible for any damage caused by using these tools in anyway.

Safety Precautions – Please read

- Disconnect the battery earth leads (check radio code is available)
- Remove spark or glow plugs to make the engine turn easier
- Do not use cleaning fluids on belts, sprockets or rollers
- Always make a note of the route of the auxiliary drive belt before removal
- Turn the engine in the normal direction (clockwise unless stated otherwise)
- Do not turn the camshaft, crankshaft or diesel injection pump once the timing chain/belt has been removed (unless specifically stated)
- Do not use the timing chain/belt to lock the engine when slackening or tightening crankshaft pulley bolts
- Mark the direction of the chain/belt before removing
- It is always recommended to turn the engine slowly, by hand and to re-check the camshaft and crankshaft timing positions.
- Crankshafts and Camshafts may only be turned with the chain drive mechanism fully installed.
- Do not turn crankshaft via camshaft or other gears
- Remove spark or glow plugs to make the engine turn easier
- Check the diesel injection pump timing after replacing the chain
- Observe all tightening torques

Plan Layout



Ref	Code	OEM Number Vauxhall	OEM Number Saab	Description
A	C710	KM-J-38122-A	83 96 210	Crank Holding Tool
B	C711	KM-6362-1	EN-48366-001	Inlet Camshaft Alignment Block
C	C712	KM-6362-2	EN-48366-002	Exhaust Camshaft Alignment Block
D	C184	KM-6077	83 96 392	1.0mm Tensioning Pin

Applications

The application list for this product has been compiled cross referencing the OEM Tool Code with the Component Code.

In most cases the tools are specific to this type of engine and are necessary for Cam belt or chain maintenance.

If the engine has been identified as an interference engine valve to piston damage will occur if the engine is run with a broken Cam belt.

A compression check of all cylinders should be performed before removing the cylinder head.

Always consult a suitable work shop manual before attempting to change the Cam belt or Chain.

The use of these engine timing tools is purely down to the user's discretion and Tool Connection cannot be held responsible for any damage caused what so ever.

ALWAYS USE A REPUTABLE WORKSHOP MANUAL

Model	Model	Engine Code	Year
Vauxhall/Opel	Signum Turbo, Vectra-C Turbo	Z20NET	2002-2008
Saab	9-3 1.8 Turbo	B207E, B207L, B207	2002-2011
	9-3 1.8 Turbo BioPower		2002-2011
	9-3 2.0 Turbo		2002-2012
	9-3 2.0 Turbo BioPower		2010-2012
	9-3XT		2009-2011

Instructions

Preparation

- Preparation will vary greatly dependent on the make and model.
Tool Connection recommend manufacturer data be consulted that is relevant to the model being worked on.
- Set engine to TDC number 1.

Component Descriptions:

Component A: Crank Holding Tool - Used to hold the crankshaft pulley while loosening and tightening the crankshaft pulley fixing bolt.

N.B. the manufacturer recommends the replacement of the fixing bolt, see manufactures instructions.

Components B: Inlet Camshaft Alignment Block & **C** Exhaust Camshaft Alignment Block -Used to lock the camshafts in their timed position.

Remove the camshaft bearing caps above number 1 cylinder and fit component **B** onto the inlet camshaft and **C** on to the exhaust cam. The arrows should be pointing toward the chain drive and camshaft sprocket timing marks should be aligned. Ensure **B** and **C** sit flat on the surface of the cylinder head.

N.B: If camshaft sprockets require loosening the bolts should be replaced (see manufacturer data) Refer to Fig. 1

Component D: 1.0mm Tensioning Pin - is used to lock the balance shaft drive chain tensioner in it retracted position.

Push the tensioner plunger fully home and insert the pin as shown in Fig. 2.

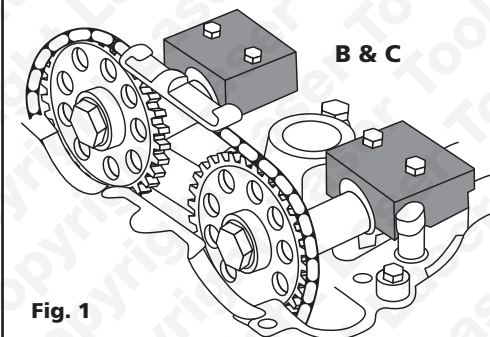


Fig. 1

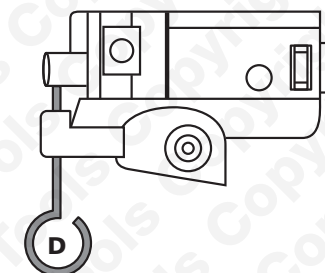


Fig. 2