



PETROL ENGINE SETTING/ LOCKING TOOL KIT

MANUAL

94313445

SAFETY NOTICE

To understand the functioning of the tools, it is necessary to read the manual first!

- > Read these instructions before assembling, during installation and throughout use and in the proper sequence
- > Always refer to the OEM manufacturer's instructions and service manuals for the latest data and to maintain the correct sequence
- > These work instructions and the recommended tools are meant to serve as aides only and are by no means a guarantee for certain results.
- > This tool kit is a special collection and it has been tested and used successfully on several occasions. It is of the utmost importance to maintain the correct procedure as per the instructions
- > The use of the tools should only be carried out by qualified personnel!



ATTENTION

Special caution



CORRECT



LIGHT BULB

Hint or recommendation



WRONG



SAFETY GOGGLES

Wearing safety goggles
necessary

APPLICATIONS:

AUDI:

A1/S1 A7
A3/S3 A8
A4 Q3
A5 Q5
A6 TT

SEAT:

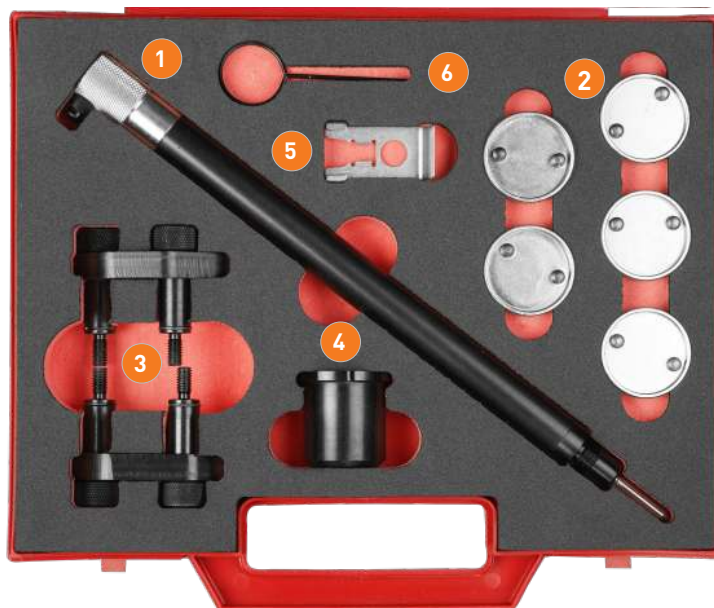
Alhambra
Altea/XL
Exeo
Ibiza
Leon
Toledo

VOLKSWAGEN:

Amarok Scirocco
Beetle Sharan
Eos Tiguan
Jetta Touran
Passat/CC Transporter
Polo

SKODA:

Octavia II/III
Superb II/III
Yeti



ENGINE CODES:

1,8

BYT	CDHA	CJSB
BZB	CDHB	CJSC
CABA	CGYA	CYGA
CABB	CJEB	DAJA
CABD	CJED	DAJB
CDAA	CJEE	
CDAB	CJSA	

2,0

CAWA	CFKA	CPLA
CAWB	CFPA	CPPA
CBFA	CHHA	CPSA
CCTA	CHHB	CULA
CCZA	CJKA	CULC
CCZB	CJKB	CWZA
CCZC	CJXA	CYNA
CCZD	CJXB	CYNB
CDNB	CJXC	CYPA
CDNC	CJXE	DEDA
CDND	CJXF	DYKA
CESA	CJXH	
CETA	CNCD	

Item	Description	OE Ref.
1	TDC Positioning Tool	T10170A
2	Control Valve Socket Set	T10352C
3	Camshaft Locking Tool Set	T40271, T20208
4	Camshaft Position Adjuster	T10567, T40266
5	Timing Chain Tensioner Locking Tool	T40267
6	Oil Pump Tensioner Locking Pin	T40011
	Case + Insert	-



IMPORTANT

Always refer to the vehicle manufacturer's service instructions, or proprietary manual, to establish the current procedures and data. Product Information Sets detail applications and use of the tools with any general instructions provided as a guide only.

INTRODUCTION

94313445 covers engine setting and Timing Chain removal and installation procedures for EA888 1.8/2.0TSi engines fitted in Audi, Volkswagen, Seat and Skoda models.

This group of chain driven petrol engines have seen a number of developments since their introduction in 2008. The OE repair procedures and associated tooling requirement have also been updated. **94313445** covers all Gen I, Gen II and Gen III engines featuring single or twin variable valve timing technology.



Socket Set is used to remove and install the camshaft adjusters control valves. There have been a number of variants of the control valve, IT contains 5 sockets that cover all variants.



IMPORTANT

The control valves feature a LEFT HAND thread.



Crankshaft Pulley Hold Tool is used in conjunction with a suitable handle such as **60388810**.



Crankshaft pulley holding tool can be used to rotate the crankshaft to the correct timing position and also to counter hold the crankshaft pulley when releasing and tightening the crankshaft pulley central bolt.



Positioning Tool is installed in the spark plug aperture of cylinder no.1 to indicate that the piston is at TDC position when the crankshaft pulley and timing chain cover have been removed from the engine. **43021350** is used in conjunction with a suitable DTI gauge.



Crankshaft Pulley/Sprocket Retainer is used to retain the crankshaft pulley/vibration damper and crankshaft sprocket in position against the crankshaft while the pulley central bolt is removed from the engine. It can also be used to rotate the crankshaft when making adjustments to the TDC position.



IMPORTANT

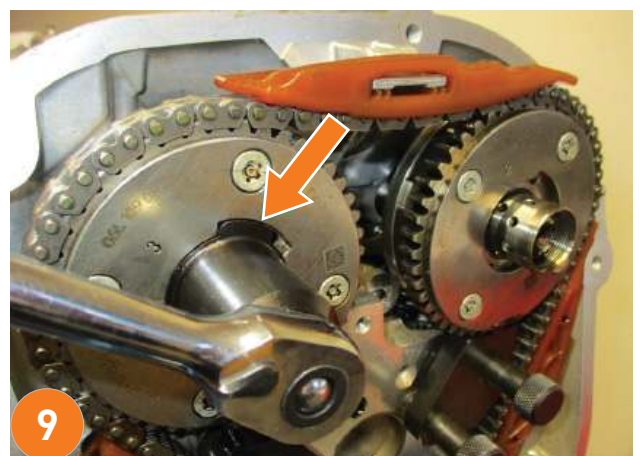
The crankshaft sprocket is not keyed to the crankshaft, removal of the central bolt may result in movement of the timing position and damage to a number of engine components. Use **94313445** to retain the sprocket on the crankshaft before removal of the central bolt.



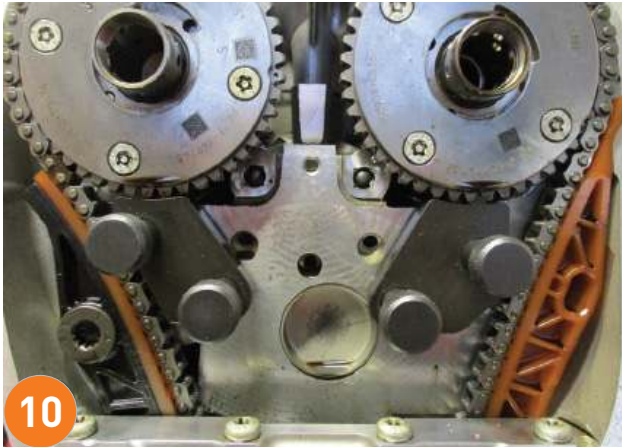
Tensioner Pin retains the oil pump chain tensioner in its compressed position, releasing tension from the oil pump chain drive.



Tensioner Tool retains the timing chain tensioner in its compressed position, releasing tension from the engine timing chain drive.



Camshaft Adjuster is used to adjust the position of the camshaft sprockets when installing the camshaft locking tools. For engines with VVT on the inlet camshaft only, a 2 pin wrench or open ended wrench can be used to adjust the position of the Exhaust camshaft.



Camshaft Locking Tool Set is used to lock and maintain the position of the camshafts while the timing chain is being installed.



IMPORTANT

Do not use a counter hold when installing or removing engine components

ASSOCIATED TOOLS

VIBRATION DAMPER / CRANKSHAFT SPROCKET RETAINER

60487850



VAG DIRECT IGNITION COIL REMOVER

AST4990



COIL PACK REMOVAL TOOL

60409070



CRANKSHAFT PULLEY HOLDING TOOL

94313324



DTI GAUGE

AST3054-10



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