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 has been removed (unless specifically stated)
- Do not use the timing chain to lock the engine when slackening or tightening crankshaft pulley bolts
- Do not turn the crankshaft or camshaft when the timing belt/chain has been removed

- Mark the direction of the chain 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
- Check the diesel injection pump timing after replacing the chain
- Observe all tightening torques
- Always refer to the vehicle manufacturer's service manual or a suitable proprietary instruction book
- Incorrect or out of phase engine timing can result in damage to the valves

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.



7457 Instructions V1



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Guarantee

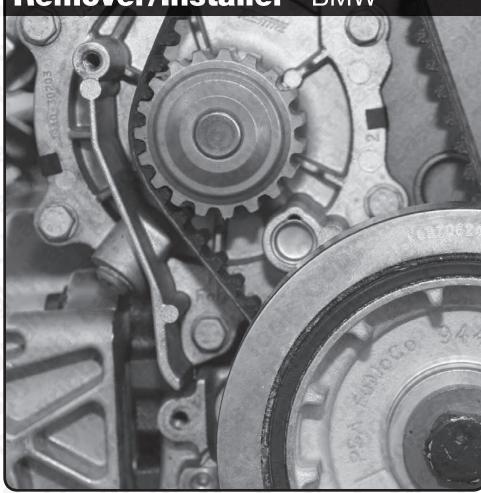
If this product fails through faulty materials or workmanship, contact our service department direct on: +44 (0) 1926 818186. Normal wear and tear are excluded as are consumable items and abuse.

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Part No. 7457

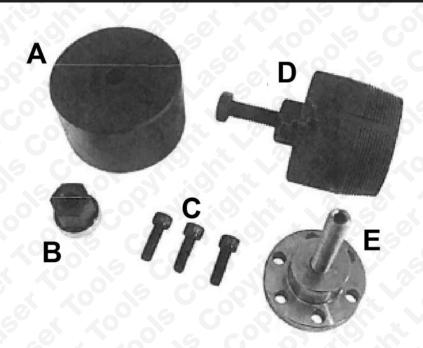
Front Crankshaft Seal Remover/Installer - BMW



Introduction

This kit has been introduced to remove and replace the front crankshaft oil seal found on the BMW 2L petrol engines with the minimum of dismantling and without removal of the front engine cover.

Plan Layout



Ref.	Comp. Code	OEM Ref.	Description
Α	C897	11 9 231	Seal Press Cup
В	C898	11 9 233 Force Nut & Bearing Assembly for E	
C	1000	4 / 6	Bolts for E
D	C899	11 0 371 Seal Extractor body	
		11 0 372	Screw Spindle
E	C900	2 212 822	Seal Fitting Guide

Applications

Manufacturer	Model	Capacity	Engine Code	Year (from)
BMW	1 Series	2L	N20 B16A N20 B20 N20 B20A N20 B20B N20 B20B/U0 N20 B20O0 N26 B20 N26 B20A	2012-2016
19 6	2 Series Coupe			2014-2016
	3 Series			2012-2016
	4 Series Coupe			2013-2016
VO. 92	5 Series			2010-2017
	Z4			2011-2017
	X1			2011-2015
	X3	Coo		2011-2017
	X4			2014-2018
25 0	X5			2015-2018

Instructions

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

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



Basic Component Use

NOTE: removal of the front crankshaft vibration damper is required to access the seal.

DO NOT remove the central crankshaft bolt – if this bolt is released the crankshaft timing chain pulley will be released and the engine timing will be affected.

Remove only the 6 pulley bolts shown.



Instructions

Seal Extraction

- Remove the threaded spindle from component D.
- Screw the body of component D in to the seal using a torque wrench, tighten to 50Nm.



- Apply Molybdenum Disulphide grease to the threaded spindle.
- Fit the threaded spindle, hold the body of component D and extract the seal by screwing in the threaded spindle.



• Cut the seal carefully from component D.



Instructions

Fitting New Seal

 Lightly lubricate component E outer body with engine oil and fit the new seal over component E. Use support sleeve provided with OEM oil seal to slide seal squarely on to E.



- Bolt E to the crankshaft using bolts (C) provided.
- Using component A and B push the seal into place.

