

Product Information

43012850

Petrol Engine Setting/Locking Tools



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.



Applications:

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V W GROUP 1.2 Single (6v.) and Twin Camshaft (12v.) 3 cylinder Petrol engines (02-) in

SEAT

Ibiza/Cordoba

SKODA

Fabia

Fabia II

Roomster

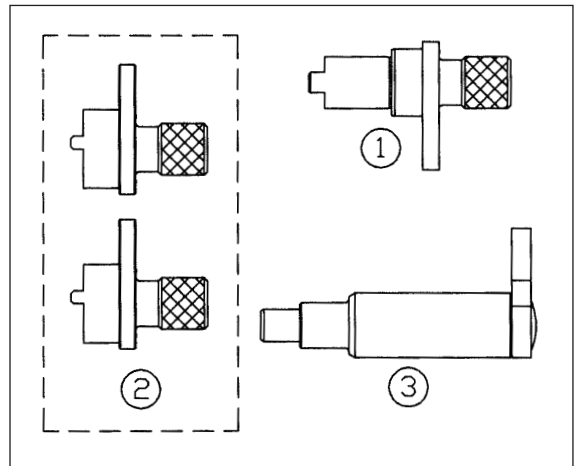
VOLKSWAGEN

Polo

Eos

Fox

AWY, AZQ, BMD, BME, BBM, BZG, CEVA, CGPB and LGP engines

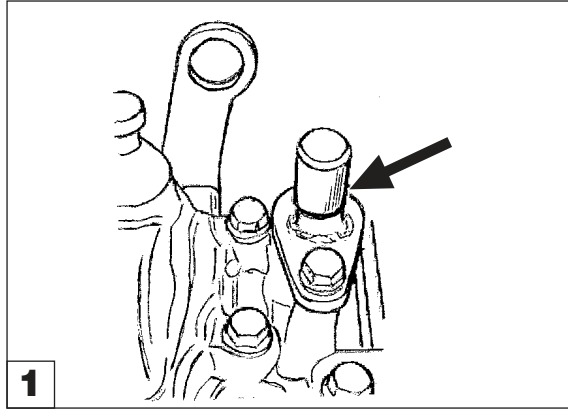


Kit contents/spares

Item	Part Number	Description
1	4811	Camshaft Setting Tool (AWY/BMD/BBM)
2	4812	Camshaft Setting Tool Set – PAIR (AZQ/BME/BZG)
3	4813	Flywheel Locking Pin
-		Case + Insert

The V W Group 1.2 engine range, introduced from 2001, can be a single camshaft 6 valve (AWY/BMD/BBM) variant or a twin camshaft 12 valve (AZQ/BME/BZG) engines.

Chain drive – crankshaft to camshaft(s), they require use of a Flywheel Locking Pin, common to both engines, and a Camshaft Setting Tool for s.o.h.c.-AWY/BMD/BBM, and a pair of Camshaft Tools for the twin camshaft-AZQ/BME/BZG engines.



4811 Camshaft Setting Tool – AWY/BMD/BBM

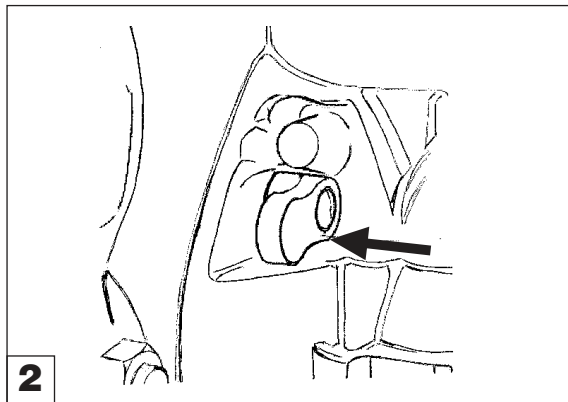
Checking valve timing

4811 enters through the top of the engine to locate the camshaft timing 'slot'.

Remove the air cleaner, Hall sender unit and engine speed sensor.

Turn the crankshaft, in the normal direction of rotation, so that the 'slot' in the camshaft is seen in the hole for the Hall sender unit.

Insert 4811 Camshaft Setting Tool. It should locate into the camshaft with ease. Secure in place with M6 bolt.



4813 Flywheel/Crankshaft Locking Pin (used for both twin camshaft and single camshaft engines (AWY/BMD/BBM + AZQ/BME/BZG))

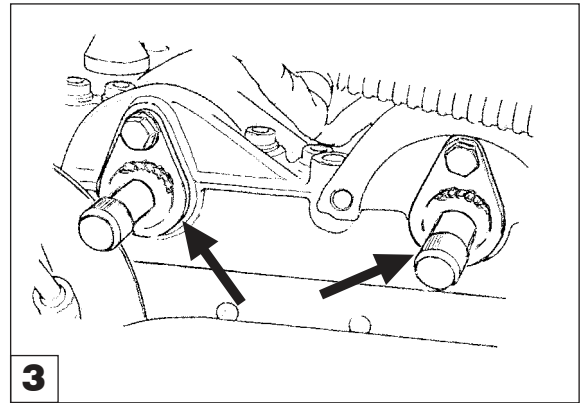
The crankshaft is locked in timed position by inserting 4813 Pin through housing and into the flywheel. If it is not possible to insert the 4813 Pin, remove 4811 Camshaft Tool, turn the engine 360°, and then insert Camshaft Tool and Flywheel Pin.

Valve Timing Adjustment

Should it not be possible to insert both the Camshaft Tool and Flywheel Pin with ease, the timing can be adjusted by positioning the 'slot' in the camshaft so it is visible in the hole for the Hall sender unit and inserting 4811 Tool. Then, using a suitable sprocket counter-holding tool, hold the camshaft sprocket and slacken its bolt. Turn the crankshaft until 4813 Pin can be inserted correctly into the flywheel.

Counter-hold the camshaft sprocket and tighten the sprocket bolt.

Remove both tools, turn the crankshaft 2 times, and recheck valve timing by ensuring 4811 and 4813 fit correctly and with ease.



4812 Camshaft Setting Tools (Pair) – AZQ/BME/BZG

Identical procedures to the AWY/BMD/BBM single camshaft engines except the pair of Camshaft Setting Tools – 4812, enter 'slots' at the rear of the camshafts.

Remove the air cleaner and both covers at the rear camshaft ends.

Remove the engine speed sensor and turn the crankshaft so that the 'slots' in the rear of camshafts are horizontal.

4812 Tools can now be inserted into the 'slots' and secured in place with M6 bolts, hand tight only.

For valve timing adjustment, fit the 4812 Camshaft Setting Tools and slacken both camshaft sprocket bolts.

Insert 4813 Flywheel Locking Pin and counter-hold camshaft sprockets whilst tightening the sprocket bolts.