

Servicing Diesel direct injection system

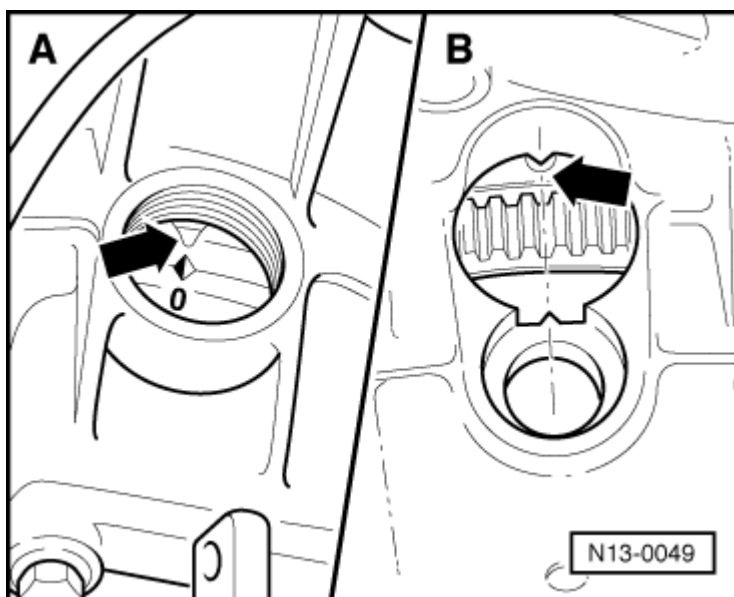
Checking valve timing

Special tools, workshop equipment, testers, measuring instruments and auxiliary items required

- ◆ Setting bar 2065 A
- ◆ Pin 2064
- ◆ V.A.G 1331 Torque wrench (5...50 Nm)

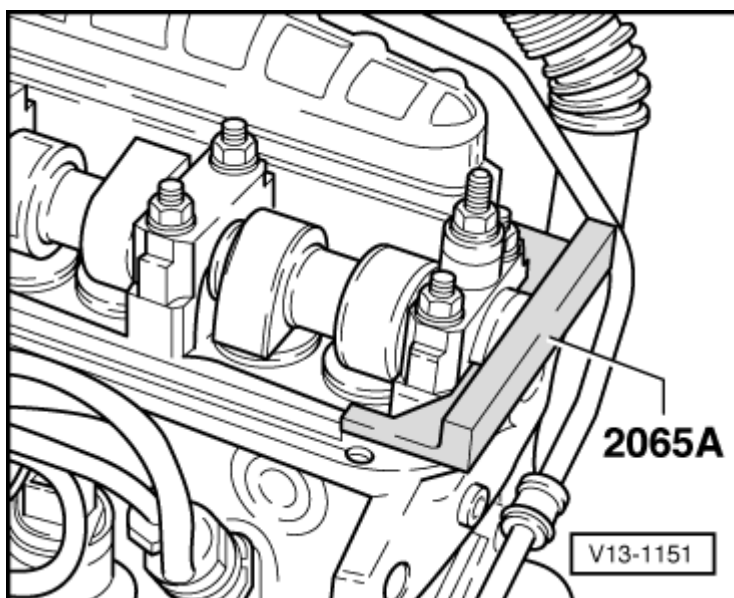
Work sequence

- – Remove upper toothed belt guard and cylinder head cover.
- – Check tension of toothed belt.
- – → Turn crankshaft to TDC No. 1 cylinder.
A: Engine code AEY
B: Engine codes AFN, AVG, AHU, ALE, 1Z



- – → Setting bar must fit into the slot in the camshaft. If it is not possible to insert the bar, adjust valve timing as follows.
- – Rotate camshaft so that setting bar can be inserted.
- – Centralize setting bar as follows:

Turn camshaft so that one end of setting bar contacts the cylinder head. Using feeler gauge establish the gap at the other end of the setting bar. Place a feeler gauge corresponding to half the gap between setting bar and cylinder head. Turn camshaft until the setting bar contacts the feeler gauge. Place a 2nd feeler gauge, of same thickness, at the other end between setting bar and cylinder head.



Note:

Never use setting bar as a counter hold when loosening and tightening the

camshaft sprocket, use retainer 3036.

- – Loosen camshaft sprocket securing bolt 1/2 turn. Release camshaft sprocket from camshaft taper by tapping with a hammer (using a drift through rear toothed belt guard opening).
- – → Lock injection pump sprocket with pin 2064.
- – Check TDC, if necessary turn crankshaft until TDC mark on flywheel aligns with casting mark on bell housing => Fig. N13-0049, Page [23-36](#)
- – Remove pin.
- – Tighten camshaft sprocket securing bolt to 45 Nm.
- – Remove setting bar.
- – Dynamically check commencement of injection
=>Page [23-32](#)

