

**FUB-FUB-END0204\_FBDDE6NWG FUB-FUB-END0204\_FBDDE6NWG - Hall sensor, camshaft - V.2&comma; VIN: KZ07432**


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ISTA system version	<b>4.07.31.21115</b>	Data version	<b>R4.07.31</b>	Programming data	-
VIN	<b>KZ07432</b>	Vehicle	<b>3'/E91/Sports Wagon/320d/M47/AUTO/ECE/LL/2006/02</b>		
Int.lev.works	-	Int.lev.(cur.)	-	Int.lev.(tar.)	-
Mileage	-				

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The camshaft Hall-effect sensor is mounted at the top front of the cylinder head cover. A rectangular lobe which moves past the Hall-effect sensor is located at the front of the camshaft. The DDE control unit evaluates the resulting voltage signal (one square-wave signal per camshaft revolution). This signal is used for synchronization purposes:

Synchronization sequence:

when the engine is started, the DDE control unit detects from the camshaft signal whether a cylinder is at TDC on the compression or exhaust stroke. At the same time, the crankshaft sensor signal must be detected in the correct sequence.

Only if those signals are correctly detected can the DDE control unit activate the correct injector at the correct time.

**Engine start is not possible without synchronization!**

## Troubleshooting

The following faults are monitored:

- **3EC0, No camshaft sensor signal**
- 3EC1, Camshaft sensor signal incorrect
- 3ED0, Temporary loss of camshaft sensor signal
- 3ED1, Camshaft sensor signal temporarily incorrect
- In addition, the speed difference between the camshaft and crankshaft is monitored

Consequences:

In case of failure during engine operation: No effect; however, the next time an attempt is made to start the engine, it will not start.