
PuMA measure

Sporadic faults occur in the DME due to faulty coating on pins

US 65310006-02 - 10/2/20

Complaint:

Mainly sporadic, isolated but also permanent faults occur in the throttle grip sensor, throttle valve, crankshaft signal, camshaft signal, transmission signal, fuel pressure sensor, gear-lever sensor (Gear Shift Assistant), oxygen sensor and switching cam. These can result in functional impairments and malfunctions, fault messages and fault memory entries.

Cause

Besides isolated defective components, the sporadic faults are often mainly caused by contact problems and increased contact resistances. These can generally occur along the entire signal path of the respective affected component, but especially at plug connections. In this context, the plug connection to the engine control unit has emerged as the main focus of the fault. Analyses of defective parts showed that in many cases the passivation (coating) of the pins at the plug-in contact (plug connection) of the engine control unit does not meet the specifications, which can result in corresponding faults. A service solution for cleaning the pins has been created which can considerably improve contact if implemented correctly. In most cases, this means that exchanging expensive components like the DME or the wiring harness can be avoided.

Measure

Clean the pins on the connector of the engine control unit according to ... using special tool 61 13 8 779 140 according to work item 13 61 030, (+13 61 530)

Validity information

Model series:	[K80, K82, K60, K81, K84, K61, K83, K22, K21, K46, K67, K23, K48, K69, K47, K49, K71, K70, K73, K51, K72, K50, K53, K75, K52, K33, K54, K32]
Engine range:	[ALL]
Body style:	[ALL]

Fault codes:

[3A1874, 3A1875, 3A1872, 3A1873, 3A1876, 21F542, 21F660, 21F662, 21F540, 21F661, 3A1E00, 3A1E01, 3A1191, 3A1192, 3A1E02, 3A1190, 3A1195, 3A1193, 3A1870, 21F5E0, 3A1871, 21F5E2, 3A1863, 3A1864, 3A1861, 3A1862, 3A1867, 3A1868, 3A1865, 3A1866, 3A1180, 3A1181, 3A1182, 3A1860, 3A1F50, 3A1F51, 3A1E30, 3A14B0, 21F562, 3A14A2, 3A1E22, 3A1E23, 3A14A3, 3A14A0, 3A1E20, 3A1E21, 3A14A1, 3A14A4, 3A1E24, 3A1885, 3A1401, 3A1402, 3A1886, 3A1883, 3A1400, 3A1884, 3A1405, 3A1406, 3A1403, 3A1404, 3A1409, 3A1407, 3A1408, 21F550, 21F670, 21F552, 21F672, 3A1E11, 3A1E12, 3A1E10, 21FD32, 3A1881, 3A1882, 21FD31, 21FD30, 3A1880, 3A1B70, 3A1B71, 3A18C0, 3A18C1, 21FB22, 3A1B61, 3A1B62, 3A1B60, 21F572, 21FD51, 21FD50, 21F9B1, 21F9A0, 21F9B2, 21F9A3, 21F9A5, 21F9A0, 21F9A1, 21FAA4, 21FAA1, 21FAA8, 21FAA9, 3A1041, 3A1042, 3A1040, 21FAAA, 21F820, 21FA40, 21F821, 3A1C42, 3A1C43, 3A1C40, 3A1C41, 3A13D7, 3A13D4, 3A1D54, 3A1C33, 21FB50, 3A1D55, 3A13D5, 3A13D8, 3A13D9, 3A13DA, 21F961, 21F960, 21F963, 21F965, 3A1371, 3A1370, 3A1374, 21F950, 21F952, 21F951, 21F954, 3A1434, 3A1435, 3A1432, 3A1433, 3A1438, 3A1439, 3A1436, 3A1437, 21F862, 21F983, 21F982, 21F863, 3A1C10, 21F981, 3A1430, 3A1431, 3A1423, 3A1421, 3A1422, 21F972, 21F850, 21F971, 3A14B3, 3A14B4, 3A1E34, 3A1E31, 3A14B1, 3A14B2, 3A1E32, 3A1420, 21F520, 21F522, 3A13D2, 3A1C31, 3A1C32, 3A13D3, 3A13D0, 3A1C30, 3A13D1, 3A1D45, 3A1C25, 3A1C22, 3A1D44, 3A1C23, 3A1C28, 3A1C26, 3A1C27, 3A1452, 3A1453, 3A1450, 3A1451, 21F873, 21F872, 3A1C20, 3A1C21, 21F870, 3A1C13, 3A1C11, 3A1C12, 3A1C17, 3A1C18, 3A1C15, 3A1C16]

Production period:

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Repair overviews

13/61/002/14637, Engine control unit, BMS, Cannot be encoded with VFC, , Connector: contact fault, , Checking, repairing, replacing