



Advance Information

This Service Information bulletin supersedes S.I. B12 10 02 **dated January 2003.**

NEW designates changes to this revision

SUBJECT

EDK Throttle Faults - Diagnostic Procedure

MODEL

E36/7: Z3 roadster 2.5/3.0; coupe 3.0 with M54

NEW E46: 325i, 330i with M54 up to 06/2003

NEW E39: 525i, 530i with M54 up to 06/2003

NEW E53: X5 3.0 with M54 up to 06/2003

NEW E85: Z4 with M54 up to 06/2003

NEW E46: 325i with M56 up to 06/2003

SITUATION

The "Check Engine" and EML lights are illuminated, engine may go into fail-safe mode. Some of the following intermittent and "currently not present" EDK related fault codes may be stored in DME fault memory:

On M54 (MS43) equipped vehicles:

- (112) 70 hex – Signal throttle sensor, potentiometer 1
- (113) 71 hex – Signal throttle sensor, potentiometer 2
- (115) 73 hex – Throttle range adaptation check
- (118) 76 hex – Plausibility, signal pot 1
- (119) 77 hex – Plausibility, signal pot 2
- (135) 87 hex – Limp home adaptation, plausibility
- (160) A0 hex – Throttle position controller, plausibility pot 1
- (161) A1 hex – Throttle position controller, plausibility pot 2

- **NEW** On M56 (MS45.1), and M54 with MS45.0/MS45.1 equipped vehicles (Z4 and E46 from 03/03):
- 28B3 – Throttle adaptation, lower mechanical stop not adapted
- 2796 – EDK adaptation values incorrect
- 2734 – Signal throttle sensor, potentiometer 1
- 2735 - Signal throttle sensor, potentiometer 2
- 27A5 – EDK new adaptation values required

CAUSE

The possible causes may include:

1. Internal failure (defective crimping) of the EDK throttle motor
2. Resistance fluctuation at X6390 EDK connector due to pin contamination
3. Signal interruption at X6390 EDK connector due to faulty crimping or defective female pins

CORRECTION

On a customer complaint basis only, follow the diagnostic and repair procedure described below.

PROCEDURE

1. Connect vehicle to DISPlus and read the fault memory
2. Remove air filter housing and rubber boot between air flow meter and EDK throttle. For removal instruction refer to RA 13 54 250 found in TIS. Do not remove throttle.
3. Check the EDK throttle production date printed on the black plastic housing of the throttle. If the manufacturing date is **"01- 05-02"** (1st of May, 2002) **or higher**, EDK has the latest level of improvements and should not be replaced. If the production date is **prior to "01-05-02"**, the EDK throttle has to be replaced with the improved part
4. Replace the engine electrical harness regardless of EDK production date.

PARTS INFORMATION

Part Number	Description	Qt.
13 54 7 502 444	EDK Throttle M54B25	1
13 54 7 502 445	EDK Throttle M54B30	1
NEW 12 51 7 506 791	E46 M54 Engine electrical harness up to 09/01	1
NEW 12 51 7 513 554	E46 M54 Engine electrical harness from 09/01 up to 3/03	1
NEW 12 51 7 528 597	E46 M54 Engine electrical harness from 03/03	1

NEW 12 51 7 528 594	E46 M56 Engine electrical harness from 09/02	1
12 51 7 503 611	E53 Engine electrical harness up to 10/01	1
12 51 7 513 548	E53 Engine electrical harness from 10/01	1
12 51 7 503 625	Z3 w/automatic trans; Engine electrical harness up to 10/01	1
12 51 7 513 545	Z3 w/automatic trans; Engine electrical harness from 10/01	1
12 51 7 503 626	Z3 w/manual trans; Engine electrical harness up to 10/01	1
12 51 7 513 557	Z3 w/manual trans; Engine electrical harness from 10/01	1
12 51 7 503 588	E39 Engine electrical harness up to 09/01	1
12 51 7 513 551	E39 Engine electrical harness from 09/01	1
NEW 12 51 7 524 106	E85, Z4 Engine electrical harness	1

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