



## SUBJECT

### Various Electrical Faults Caused by Shorted K-CAN2

## MODEL

F25 (X3)

Produced to January 13, 2014

## SITUATION

One or more of the following situations can occur when the K-CAN2 wiring in the vehicles is shorted.

- There is no communication with any K-CAN2 control modules during an ISTA vehicle test. The following control modules are on the K-CAN2:
  - ZGM – Central Gateway Module
  - FRM – Footwell Module
  - CAS – Car Access System
  - Headunit – Radio/Navigation
  - ComBox/TCB – Telematic Control Module
  - FZD – Roof Function Center Module
  - JBE – Junction Box Electronics
- The transmission will not engage a gear when with the engine running.
- The vehicle sporadically does not start.
- In rare cases, the vehicle may stop running while driving.

When the K-CAN2 is shorted, the vehicle will store many line and communication faults for the K-CAN2, including the following:

- JBE – C9140D No message, receiver JBE, transmitter CAS
- JBE – C90468 K-CAN2; Communication fault
- ZGM – CD0468 K-CAN2: Communication fault
- ZGM – CD1400 Message incorrect, receiver ZGM, transmitter JBE
- **CAS –D9045F K-CAN2: Line fault**
- CAS – D90468 K-CAN2: Communication fault
- FZD – DE8468 K-CAN2: Communication fault
- TCB – E14468 K-CAN2: Communication fault

- **TCB – E1445F K-CAN2: Line fault**
- NBT – E1C468 K-CAN2: Communication fault
- **FRM – E5845F K-CAN2: Line fault**
- FRM – E58468 K-CAN2: Communication fault

### CAUSE

The wiring harness gets pinched between the instrument panel and the locating tab on the passenger side of the instrument panel.

K-CAN2 High – GE/RT (Yellow/Red)

K-CAN2 Low – GE/BR (Yellow/Brown)

### CORRECTION

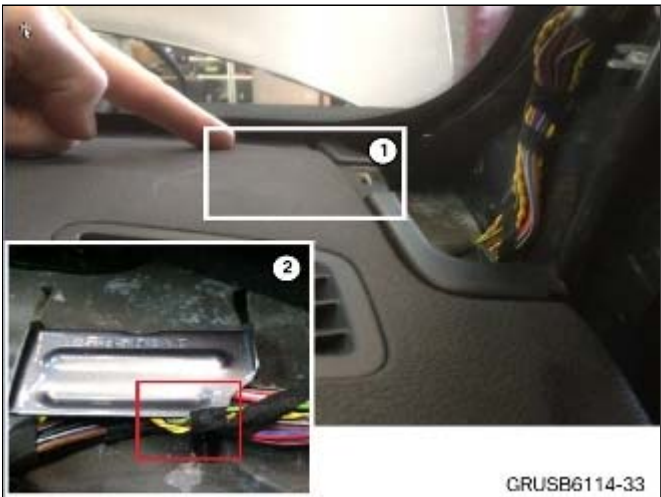
Locate and repair the shorted wires. Reposition the harness.

### PROCEDURE

1. Perform a vehicle test and complete the test plans linked to any K-CAN2 faults that are stored.

**Always connect a BMW approved battery charger/power supply (SI B04 23 10).**

2. If the results of the test plan lead you to checking for short circuits in the wiring, check the area identified in the next step first.

	<ol style="list-style-type: none"> <li>3. Remove the passenger side A-pillar trim panel per ISTA Repair Instruction 51 43 201.</li> <li>4. Inspect the area (1) using a mirror to see if the harness is pinched and rubbing against the locating tab (2).</li> <li>5. If the harness is rubbing against the tab, the instrument panel trim needs to be removed to repair and reposition the harness. Refer to ISTA Repair Instruction 51 45 030.</li> </ol>
	<ol style="list-style-type: none"> <li>6. Repair and tape the harness as needed.</li> <li>7. Reposition the harness away from the tab and route per the picture (1).</li> <li>8. Reassemble the instrument panel trim, ensuring that during reassembly, the harness stays in place and is not pinched. Refer</li> </ol>



to ISTA Repair Instruction 51 45 030.

9. Clear all stored fault codes and ensure that all K-CAN2 control modules are communicating and functioning properly.

Thanks to the following technicians for sending in PuMA Info Only cases with great documentation and pictures:

- Preston James – Flow BMW
- Keith Gilbertson – BMW of South Atlanta
- Matt Caldwell – Circle BMW

#### WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty or the BMW Certified Pre-Owned Program.

<b>Defect Code:</b>	<b>61 11 14 79 00</b>	
<b>Labor Operation:</b>	<b>Labor Allowance:</b>	<b>Description:</b>
00 00 006	Refer to KSD	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
and		
61 21 528	Refer to KSD	Connect an approved battery charger/power supply (indicated in KSD2 as “Charging battery”)
and		
51 45 529	Refer to KSD	Removing and installing trim panel for instrument panel
and		
61 99 000	2 FRU	Repair and reposition wiring

Labor operation code 00 00 006 is a Main labor operation. If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead.

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the “Search” button, and then enter the applicable flat rate labor operation in the FR code field.

Even though work time labor operation code 61 99 000 ends in “000,” it is not considered a Main labor operation. Also, since the “work time” FRU allowance to be claimed is specified, a separate punch time is not required.

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