



SUBJECT

PDC: Complete Failure of Front and/or Rear Sensors

MODEL

F25

Produced to February 27, 2013 with option 508 (PDC -- Park Distance Control)

SITUATION

When reverse gear is selected or the PDC button is pressed, neither the front and/or rear PDC sensors work. One or more of the following fault codes are stored:

- 0x803200 – Voltage supply for ultrasonic sensors
- 0x80320A – Rear outer left ultrasonic sensor
- 0x803210 – Rear centre left ultrasonic sensor
- 0x803216 – Rear centre right ultrasonic sensor
- 0x80321C – Rear outer right ultrasonic sensor
- 0x80322E – Front outer left ultrasonic sensor
- 0x803234 – Front centre left ultrasonic sensor
- 0x80323A – Front centre right ultrasonic sensor
- 0x803240 – Front outer right ultrasonic sensor

CAUSE

Short circuit in the wiring harness for the PDC ultrasonic sensors

PROCEDURE

1. Perform a vehicle test using ISTA.
2. Complete all related test plans and follow the test plan recommendations for the faults listed above.

Note: When the ISTA system message displays: Battery voltage only “XX.XX” V. Please connect charger. Please note the displayed battery voltage reading in the repair order comments section.

3. If the issue is not resolved and the faults return, the ultrasonic sensor wiring harness must be checked for the following:
 - Short to ground
 - Chafing

- Broken wires

4. Remove the rear bumper in accordance with Repair Instruction REP 5112156, “Removing and Installing Rear Bumper Panel.”
5. The following pictures are known locations of where the harness may be chafed, pinched or broken. Repair or replace the wire harness as needed as per ISTA Repair Instruction “6113...”
6. After repairing or replacing the wire harness, apply felt strip to the area on the trailer hitch or the vehicle body where the wire harness was damaged.
7. The following pictures identify some known areas where the PDC wire harness may be damaged. If other locations are found, please submit an Info Only PuMA case and attach at least two pictures of the affected areas.



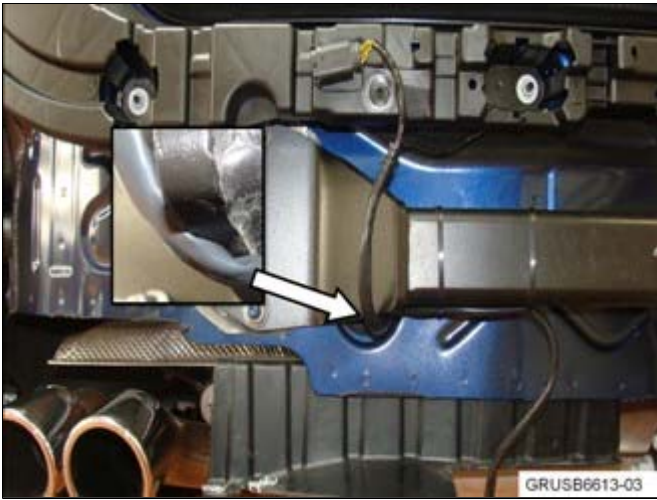
8. This picture shows a location where the rear PDC wire harness rubs against the trailer hitch if installed.

Note: This picture is a view of the left rear of the vehicle.



9. Apply felt strip to the trailer hitch in the location where the PDC wire harness rubs against the trailer hitch.

Note: The design of the trailer hitch may vary or differ from the pictures shown.



10. This picture shows a different trailer hitch installed, and another location where the PDC wire harness is pinched or rubs against the trailer hitch.
11. Apply felt strip to the location on the trailer hitch where the PDC wire harness contacts.

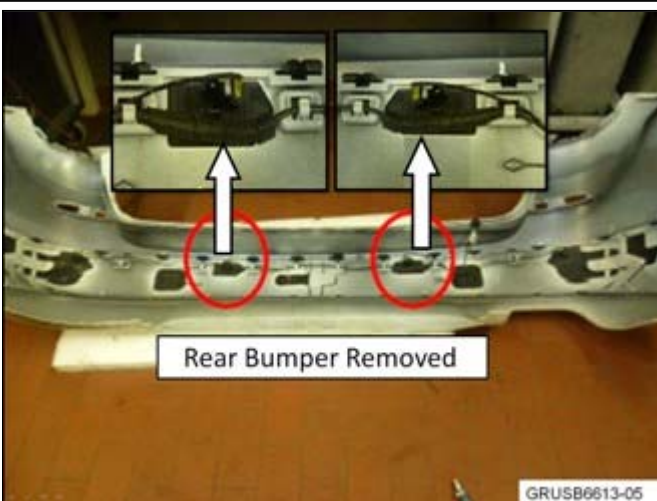
Note: This picture is a view of the left rear of the vehicle.



12. If needed, remove the rear bumper support. Refer to Repair Instruction RE5112050, "Removing and Installing Support for Rear Bumper Panel."

Note: This vehicle does not have a trailer hitch installed.

13. The arrows point to two locations where the PDC wire harness could be damaged.
14. Install felt strip on the bumper bracket as shown.



15. The arrows point to two locations where the PDC wire harness on the bumper could be damaged.
16. Wrap the wire harness using felt to prevent future damage.
17. Reinstall the bumper and verify the functionality of the PDC sensors.

PARTS INFORMATION

Part Number	Description	Quantity
Refer to EPC	Self-adhesive felt	As needed

WARRANTY INFORMATION

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

Defect Code:	61 12 52 79 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
and, as necessary		
66 20 000	Work time (WT)	Checking function of the Park Distance Control
51 12 656	Refer to KSD2	Removing and installing rear bumper
and		
66 20 600	Refer to KSD2	Additional work with Park Distance Control (removing and installing cable)
and		
66 99 000	Work time (WT)	Repairing the wire harness and applying felt

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 codes 66 20 000 and 66 99 000 both end in “000,” they are not considered Main labor operations.

Work time (WT) labor operations 66 20 600 and 66 99 000 both require an individual punch times.

Other Repairs

If performing other ISTA diagnostics and related test plans results with **eligible and covered work**, claim this work with the applicable defect code and labor operations listed in KSD2.

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