



This Service Information bulletin supersedes SI B61 38 14 **dated January 2015.**

NEW designates changes to this revision

SUBJECT

Drivetrain Malfunction (CCM 794) with Isolation Faults

MODEL

I01 (i3 and i3 REx)

SITUATION

The Drivetrain Malfunction check control message (CCM 794) is displayed, either while driving or when starting up. The following faults are stored in the vehicle:

EME: 22280F and/or 222814

SME: 21F0E3 and/or 21F0E4

When the CCM is present, there are no apparent drivability concerns. After allowing the vehicle to rest and then restart, the CCM typically does not reappear.

NEW CAUSE

The cause of an isolation fault is generally a resistance between HV+ or HV- and the shield/chassis ground, which is below a predetermined threshold.

The following procedure addresses these faults when caused by a defect in the cable between the HV battery and the EME, as well as when excess moisture is present inside the REx eMachine.

This moisture condenses and triggers the above-mentioned faults after a long REx runtime followed by rapid cooling.

PROCEDURE

Perform ISTA test plan ABL_DIT_AT6100_HVISO. If the fault is present, this test plan uses process of elimination to pinpoint the component at fault. If the fault is not currently present, the test plan will state that isolation resistance is okay and then the test plan will end. If this situation occurs, continue with the following procedure.

All vehicles: Follow **Procedure A**, described in **SI B61 38 14 Attachment.pdf**, to determine if the cable between the HV battery and the EME needs to be replaced. Replace if necessary.

REx vehicles only: Follow both **Procedure A** and **Procedure B**, described in **SI B61 38 14 Attachment.pdf**, to check and replace the HV cable, as well as remove excess moisture from the REx eMachine.

PARTS INFORMATION

Part number 12 31 8 628 772 is blocked from ordering and requires a TC PuMA Case.

Part number	Description	Quantity
61 12 9 346 573	HV cable	1
07 12 9 900 395	Bolt – M5x25	2
12 31 8 628 772	REx eMachine	1 (only if required)

07 11 9 905 544

Hex nut – M6x8

2

NOTE: If the REx eMachine must be replaced, refer to SI B00 03 06 to determine if a TC PuMA case is required prior to replacement.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty.

Defect Code:	12 31 90 82 00	
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NEW Main Work

Labor Operation:	Labor Allowance:	Description:
00 62 222	19 FRU	Check and replace the HV cable
Or:		
00 62 221	24 FRU	Check the HV cable, check and dry the REx eMachine
Or:		
00 62 235	37 FRU	Check and replace HV cable; check and dry the REx eMachine
Or:		
00 62 223	142 FRU	Check the HV cable, check and replace the REx eMachine (includes wheel alignment check and adjustment)

NEW Plus Work

Labor Operation:	Labor Allowance:	Description:
00 62 896	18 FRU	Check and replace the HV cable
Or:		
00 62 895	23 FRU	Check the HV cable, check and dry the REx eMachine
Or:		
00 62 925	36 FRU	Check and replace HV cable; check and dry the REx eMachine

Or:		
00 62 897	140 FRU	Check the HV cable, check and replace the REx eMachine (includes wheel alignment check and adjustment)

ATTACHMENTS

View PDF attachment [B613814 Attachment](#).

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