



## RECALL CAMPAIGN 19V-599 REPLACE THE ELECTRIC MOTOR ELECTRONICS (EME)

Please perform the procedure outlined in this Service Information on all affected vehicles before customer delivery. In the event the customer has already taken delivery of the vehicle, please perform the procedure the next time the vehicle is in the shop.

This Service Information Bulletin (Revision 2) replaces SI B12 27 19 **dated October 2019**.

**What's New** (Specific text highlighted):

- Added emissions certificate instructions
- Warranty Information section updated

### MODEL

Engineering Designation	Model Description	Production Date
I01	i3	December 19, 2018 thru March 29, 2019
I12	i8 Coupe	February 7 thru March 6, 2019

### AFFECTED VEHICLES

Vehicles which require this Recall Campaign to be completed will show it as "Open" when checked either in AIR, the "Service Menu" of DCSnet (Dealer Communication System), ISPA Next or Warranty Vehicle Inquiry.

### SITUATION

BMW of North America, LLC is conducting a Voluntary Safety Recall (effective August 8, 2019) on a small number of Model Year 2019 BMW vehicles that were produced between December 19, 2018 and March 29, 2019.

The Electrical Machine Electronics (EME) Printed Circuit Board (PCB) may not have been produced to specifications.

Approximately 139 vehicles are affected by this recall.

In the event of failure of the electrical machine electronics (EME); the system will shut down high-voltage electrical power. A shut down of high-voltage electrical system would result in a loss of propulsion, increasing the risk of a crash. However, the 12-volt electrical power remains functional to support power steering and braking.

A red check control message (CCM) is displayed to alert the driver of the shutdown of high-voltage components.

#### **Note:**

**The electric drive function may be restored by switching the drive-readiness state off and on again.**

Recall notice and Q&A have been attached for further information.

### CORRECTION

Replace the Electrical Machine Electronics (EME).

### PROCEDURE

Replace the electrical machine electronics as per **REP 12 36 610** – "Replacing electrical machine electronics (EME)".

#### **Note:**

**Version 3 of the repair instructions should be used in ISTA / AIR.**



**Important warning for working on the high-voltage systems on the I01 (i3 BEV and REx), and I12:**

**Only properly trained personnel, who have passed all applicable technical training courses, should perform any maintenance or repairs on any Hybrid or Electric Vehicle. Work performed by unqualified persons may**

result in severe injury or damage to the vehicle. Additional information is found in Repair Instruction 61 00... Observe safety instructions when handling electric vehicles.

## **PARTS INFORMATION**

Performing a part number look-up in ETK or AIR by VIN or model in place of using/invoicing the following part numbers may result with the wrong parts being invoiced and installed.

**Note:**

The applicable Electrical Machine Electronics (EME) is to be determined and selected from the Electronic Parts Catalogue based on the specific type of vehicle being repaired.

**I01 (i3):**

<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
<b>I01</b>		
12 36 9 454 916	Electrical motor electronics	1
<b>Or:</b>		
12 36 9 454 917	Electrical motor electronics	1
<b>Or:</b>		
12 36 9 454 922	Electrical motor electronics	1
<b>And, for all I01:</b>		
61 27 7 629 345	Torx socket screw	10
12 37 8 605 128	Hexagon screw	6
24 14 7 605 027	Spring nut	8
22 11 6 879 664	External Torx	2
07 11 9 905 433	Hexagon screw with washer	3
33 30 6 854 285	Torx bolt	4
18 30 8 614 953	Clamping collar	1
33 30 6 859 119	Hexagon screw	2
12 36 7 616 288	Decoupling element	3
12 37 7 626 090	Cover	1
31 50 8 743 675	Shaft seal with locking ring	2
33 40 6 858 534	Collar bolt with compression spring	2
17 73 8 605 844	Sound Insulation	1

**I12 (i8 Coupe):**

<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
<b>I12</b>		
12 36 9 896 043	Electrical motor electronics	1
<b>And:</b>		
61 27 7 629 345	Torx screw inner	10
12 37 7 626 090	Cover	1
24 14 7 605 027	Spring nut	3
27 20 8 647 486	Set, gaskets (E-Gearbox)	1
27 20 8 647 465	Set, radial shaft seals	1
07 12 9 908 662	ASA- bolt	6
07 12 9 908 661	ASA- bolt	1
07 11 9 908 003	Hex bolt	2
07 14 9 382 927	Hex bolt	1
33 40 6 858 534	Collar bolt with compression spring	2
07 12 9 907 534	ASA- bolt	2
31 60 6 779 989	Lock ring	1
33 32 6 760 668	Self-locking collar nut	4
07 12 9 907 861	Hex screw with collar	2
31 10 6 859 543	Gasket bulkhead	2
33 30 6 874 176	ASA-Screw with washer	6
31 10 6 862 760	Hex bolt with washer	6
33 17 6 760 342	Nut	2
33 30 6 760 349	Self-locking collar nut	2

31 10 6 769 441	Hex bolt with washer	2
33 30 6 787 062	Combination nut	2
33 32 6 768 884	Hexagon nut with collar	2
32 30 6 778 609	Torx screw	1
07 11 9 907 137	Hexagonal screw	8
07 11 9 905 392	Hex bolt with washer	4

## Bulk Materials

Part Number	Description	Quantity
82 14 1 467 704	BMW Antifreeze (1 gallon concentrate)	Sublet as needed
83 23 2 357 146	Assembly grease (5g) (I12 - i8 Coupe only)	Sublet as needed

**Note: Other small parts such as screws, nuts and seals, which must be replaced according to the ISTA repair instructions, must be selected from the Electronic Parts Catalogue according to the respective vehicle type and invoiced under the special defect code.**

**For California centers only:** This Safety Recall involves an emissions compliant component. It is required by the California Code of Regulations that an executed orange "Vehicle Emission Recall - Proof of Correction" certificate (SD92-084, see illustration) be provided to each customer (for vehicles registered in the state of California), once this Recall on his or her vehicle has been completed.

## WARRANTY INFORMATION

During this workshop visit, the affected vehicle may show one or more other Technical Campaign repairs open that also include vehicle programming and encoding, the programming and encoding procedure may only be invoiced one time.

**If you have this situation, update the vehicle to the current available I-level by performing and submitting for one of these open Technical Campaigns. Please be sure to also perform any other additional work as required by the campaign and/or close the remaining open vehicle programming and encoding Technical Campaign repairs as outlined in the corresponding Service Information Bulletin.**

Reimbursement for this Recall will be via normal claim entry utilizing the following information:

<b>Defect Code:</b>	<b>0012110500</b>	<b>I01 I12 Replace electrical machine electronics EME</b>
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**Completion before the first vehicle delivery to a customer or the vehicle is already in the workshop-**

Work Pkg	Labor Operation	Description (Plus work)	Labor Allowance
# 1	00 68 611	Replacing the electrical machine electronics (EME), programming and encoding vehicle control units (includes connecting an approved battery charger/power supply and performing a vehicle test), checking wheel alignment (KDS without loading) and adjusting as necessary.	Refer to AIR
# 2	00 68 612	Replacing the electrical machine electronics (EME), (programming and encoding vehicle control units was performed in conjunction with another campaign or repair during the same workshop visit), checking wheel alignment (KDS without loading) and adjusting as necessary	Refer to AIR

Or:

**The vehicle arrives at your center and this Recall Campaign shows open (No other Main work will be performed/claimed during this workshop visit)-**

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
# 3	00 68 084	Replacing the electrical machine electronics (EME), programming and encoding vehicle control units (includes connecting an approved battery charger/power supply and performing a	Refer to AIR

vehicle test), checking wheel alignment (KDS without loading) and adjusting as necessary.

And, as needed:

### Sublet – Bulk Materials

<b>Sublet Code 4</b>	Up to \$40.00	Reimbursement for the repair-related bulk material (Do not use the BMW part number for claim submission)
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Sublet reimbursement calculation for claiming the applicable repair-related bulk material (BMW part numbers) is at the dealer net price amount for the quantity used plus your center's handling.

BMW Antifreeze/Coolant: Claim the corresponding dollar amount for the quantity needed to replace what was drained with a 50/50 coolant/water solution.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

### Claim Repair Comments

Only reference the SIB number and the work package (Pkg) number performed in the RO technician notes and in the claim comments (For example: B12 27 19 WP 1), unless otherwise required by State law.

### Programming and Encoding - Vehicle Control Units (RO and Claim Comments Required)

The programming procedure automatically reprograms and encodes all vehicle control modules which do not have the latest software I-level. If one or more control module failures occur during this programming procedure:

- Please claim this consequential control module-related repair work under the defect code listed in this bulletin with the applicable AIR labor operations.

Please explain this additional work (The why and what) on the repair order and in the claim comments section.

For control module failures that occurred prior to performing this programming procedure:

- When covered under an applicable limited warranty, claim this control module-related repair work using the applicable defect code and labor operations (including diagnosis) in AIR.

And, as applicable:

### Alternative Mobility Solution (AMS) for Vehicle Owners (RO and Claim Comments Required)-

This Recall repair qualifies for Alternative Mobility Solution (AMS) expense reimbursement, claim this item under the Defect Code noted above as follows:

- Sublet Code 2 - Itemize the AMS sublet amount on the repair order and in the claim comment section.

Please refer to SI B01 29 16 for additional information  
Supporting Materials

[picture as pdf B122719 Attachment \(EME-QA\).pdf](#)

[picture as pdf B122719 Attachment \(Recall Notice\).pdf](#)