

SIM 61 02 21

2022-04-28

RECALL 20V-601: HIGH-VOLTAGE BATTERY

This Service Information Bulletin (Revision 2) replaces SI M61 02 21 dated November, 2021.

What's new:

- Procedure Section (HV work disclaimer)
- Parts Section

MODEL

E-Series	Model Description	Production Date
F60	MINI Cooper SE Countryman ALL4– PHEV Only	March 12, 2020 – August 19, 2020

AFFECTED VEHICLES

Vehicles which require this 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 AG is conducting a Voluntary Safety Recall (effective September 24, 2020) on certain Model Year 2020-2021 MINI Countryman Plug-in Hybrid Electric Vehicles (PHEV) vehicles that were produced between March 12, 2020 and August 19, 2020.

The high-voltage battery may not have been produced to specifications. When charging the battery, this could lead to a short-circuit and, in rare cases, a thermal event. The affected high-voltage battery module(s) will be replaced.

Please do not charge the vehicle's high-voltage battery until the affected HV modules have been replaced.

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

CAUSE

On PHEV models, the HV battery may not have been produced to specifications. When charging the battery to near its full state of charge, this could lead to a short-circuit, and in rare cases a thermal event.

CORRECTION

The vehicle will be inspected and, if necessary, HV module(s) will be replaced.

PROCEDURE

<u>Important Warning for Working on the High-Voltage (HV) systems on BMW Group vehicles:</u>

Only properly trained personnel, who passed all applicable HV Technical Training Courses, should perform repairs which require disconnecting, or removal of High Voltage battery components on any Hybrid or Electric Vehicle. Work performed on High Voltage systems by unqualified persons may

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

Additional Information:

Scheduled Maintenance, or Quality Certification 1 (Pre-Delivery Inspection) on Electric or Hybrid vehicles does not require HV technical training.

Prior to disconnecting, or the removal of any HV component, the HV system needs to be disabled and secured (by means of the HV Disconnect Switch) by a properly trained technician, who has a minimum HV Qualification level after completing the Technical Training Course ST146 (F60 PHEV Complete Vehicle). Once the vehicle's HV system is disabled (the "Blitz" - lightning bolt icon displayed in instrument cluster, see below), a technician without HV Certification may remove a HV component (e.g., EH Heater, EKK Compressor, EME Control Unit, et.), except for the High Voltage Battery.



High Voltage Battery removal and rework can be performed ONLY by a HV Specialist Technician with a HV Battery Certification level corresponding to a specific Electric or Hybrid vehicle (e.g., to repair SP45 PHEV HV battery, certification from Technical Training Course "ST146 F60 PHEV Complete Vehicle" is required; to repair SE14 BEV HV battery, certification from Technical Training Course "ST153 F56 BEV Complete Vehicle" is required).

NOTE:

Please return the defective modules by following the module recycling procedure depicted in Recall Part Retention section of this bulletin. These modules must be at the lowest possible SOC (State of Charge) for return.

Carry out the following service measure:

- 1. Connect the vehicle to the diagnosis and carry out a Vehicle Test.
- 2. If a cell module is affected, ISTA sets the fault S 0795.
- 3. Perform the associated test module in the test plan to determine the affected cell modules to be replaced. (High Voltage Battery Unit Cell Modules (ABL DIT AT6127_SPOXZM; available with the ISTA version 4.32.1x; released Oct. 22, 2021)
- 4. If cell modules are prompted for replacement, replace the corresponding cell modules. Follow the proper repair instructions for the specific vehicle; see **REP 61 27 621** or **REP 61 27 623**.
- 5. If a cell module exchange is not instructed, the vehicle is OK. -> No further measures required.

Note:

The replacement cell modules voltages need to be balanced prior to installation, as per the repair instructions (Preliminary work - Adjust charging voltages of the replacement module(s) to remaining modules). This operation is included in the allocated time below.

Note:

Please make sure to update your high-voltage equipment (EOS tester and Deutronics charger)

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to the latest software.

Note:

We will require the ISTA Operations Report from the test session (ISTA Protocol) to be attached to the Recall IDS ticket to verify the correct of modules are ordered.

Note:

The diagnosis of the cell modules is only available with the ISTA version 4.32.1x (released October 22, 2021).

Note:

A TC case is NOT necessary to order the replacement HV battery cell modules as per this campaign. However, in the case of a vehicle that is showing the campaign as OPEN but the test plan reveals NO defective modules, submit a TSARA for "SI M61 02 21 - no defective modules detected" case for further instruction.

Note:

The date in the serial number of the high-voltage module can be displayed in two different formats.



PARTS INFORMATION

Only use and invoice the part numbers below that apply.

Performing a part number look-up in ETK (EPC) by VIN or model in place of using/invoicing the following part numbers may result with the wrong part numbers being invoiced and installed, this could delay the payment of the claim.

Note:

Modules are designated as Positive and Negative modules (with different orientation and part numbers).

Part Number for Technical Campaign	Description	Quantity
61 27 8 843 411 Or 61 27 8 855 565	Cell module of high-voltage battery (34 Ah NEG) (2 max)	Qty as needed
61 27 8 843 412	Cell module of high-voltage battery	Qty as needed

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Or 61 27 8 855 566	(34 Ah POS) (3 max)	
07 11 9 908 596	Screw (M12x1.5x48)	4
61 27 8 606 057	Torx screw (M6 GFX85-10.9-S)	16
61 27 8 606 058	Threaded head Torx screw (M6 GFX85-10.9-S)	4
07 12 9 908 570	ISA screw (V-M6 GFX16)	16
61 27 8 677 638	Hexagon bolt with Torx socket (M6x25 mm)	4
07 11 9 909 322	Self-locking hexagon nut (M6-8- ZNNIV SI)	
61 27 7 645 627	Seal for high-voltage battery	1
61 27 8 645 446	Hexagon screw with internal Torx - rounds to 10 pcs	28
83 19 2 468 442	Ht-12 Coolant (1 gal concentrate)	Sublet as needed
Or:		
83 19 5 A32 851	9 5 A32 851 HT-12 Antifreeze RTU (Bulk 1/10 Liter) (Pre-mix)	

Additionally, other small parts that are not specified above, such as one-time use screws, nuts, O-rings and seals, which must be replaced according to the ISTA repair instructions/ETK, must be selected from the Electronic Parts Catalog according to the respective vehicle type and invoiced under the special defect code.

Recalled Parts - Retention

Recalled parts that are removed from MINI vehicles cannot be used for resale! The recalled parts are the property of MINI USA.

Your center is responsible for the proper identification, storage, and documentation of these parts. They must be held in a secure retention area until notification of claim payment is made by MINI USA through DCSnet.

There is now updated training and process information bulletins available for returning these recalled HV battery cells, please refer to:

- Bulletin #: M-2-0321-M0301 Required training information for returning defective high-voltage batteries.
- Bulletin #: M-2-0321-M0601 HV BATTERY RECALL RETURN PROCESS

For more information refer to CenterNet: "Menu>MINI>Aftersales>Business Development & Marketing Portal>Batteries>HV Training Module".

Please DO NOT return these recalled HV battery modules directly to the WPRC.

CLAIM INFORMATION

Reimbursement for this Recall will be via normal claim entry utilizing the applicable work package information below, the job/repair work time labor operation and the part numbers listed above that apply.

The vehicle arrives at your dealer and this Recall Campaign shows open (No other Main work Main work will be performed/claimed during this workshop visit) (Excluding work	Plus work	Vehicle is already in the workshop for another repair	
time labor operation 00 71 181)		Main work will be performed/claimed during this workshop visit) (Excluding work	

Defect Code: 0061160600 F60 PHEV Replacing h	high-voltage battery cell modules
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Work time labor operation code 00 71 181 is not considered a Main labor operation.

Work Pkg	Labor Operation	Description	Labor Allowance
# 1 _[H6] [A7]	00 71 695	Checking the vehicle (vehicle test) and removing and installing the high-voltage battery (Plus work)	46 FRU
Or:			
# 2	00 71 180	Checking the vehicle (vehicle test) and removing and installing the high-voltage battery (Main work)	47 FRU
And:	5-Module Configuration (3T/2B): Job/repair work time (WT) for replacing one or more modules (top and/or bottom) in addition to 00 71 695 or 00 71 180 (Includes HV battery unit final test FRU for the configuration (3T/2B): WT: 17T FRU (Final test to 1 to		WT: 17TS or 28B FRU (First module, up to maximum of 33 FRU for up to 5 modules (See below)

00 71 181 - Replacing 2 Top (T) and 1 Single (S) Module Only:

- 17 FRU for the first top module replacement; and
- Plus 3 FRU for each additional (up to 2 / 3 total) top module replacements (up to a total of 23 FRU).

Or:

00 71 181 - Replacing Bottom Modules (B/Two) in conjunction with the 2 Top (T) and 1 Single (S) Module:

A.	28 FRU for one bottom module only (Includes removing and installing or replacing the corresponding top module) (replaces the top module 17 FRU allowance above); and as applicable
В.	With (A): 3 FRU for each additional (up to 2) top module replacements without replacing the corresponding one additional bottom module (up to 3 to 4 modules total) (up to a total of 33 FRU); or
C.	With (A): 3 FRU for an additional (up to 1) bottom module replacement includes removing and installing or replacing the corresponding top module (2 to 4 modules total) (up to a

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	total of 31 FRU); or
D.	33 FRU for replacing all the modules (3 top and 2 bottom/5 modules total).

Note: Only claim labor operation 00 71 181 one-time for the total applicable FRU allowance that applies.

Claim Repair Comments

Unless otherwise required by State law, only reference the SIB number, the work package (Pkg) number performed and when applicable (For WP #1 or # 2), the number of cell modules (top and/or bottom) that were replaced in the RO technician notes and in the claim comments.

For example: M61 02 21 WP 2 with 1 bottom module replaced.

And, as needed:

Sublet – Bulk Materials (RO and Claim Comments Required)

Sublet Code	Up to	Reimbursement for the repair-related bulk material (Do not use the
4	\$15.00	MINI part numbers for claim submission)

Sublet reimbursement calculation for claiming the applicable repair-related bulk materials (MINI part number) is at the dealer net price amount for the quantity used plus your dealer's handling.

MINI Antifreeze/Coolant: Claim the corresponding sublet 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.

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.

<u>Please refer to SI M01 01 17</u> for additional information.

Reimbursement of Prior Customer-Pay Repairs (TREAD Act)

Based on when this Safety Recall Campaign was originally released, a reimbursement request for a qualifying prior customer-pay repair is not likely.

However, if you receive a reimbursement request from a customer for a prior repair that may qualify, please contact the Warranty department (include a legible copy of the invoice) through IDS by selecting Coverage, Policy, Coding Questions and Mileage Corrections. The Warranty department will review and respond to your inquiry accordingly.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries Submit feedback at the top of this bulletin		Submit feedback at the top of this bulletin
		Please contact the Warranty department by either using the Live Chat that's available in the Warranty Documentation Portal or through IDS by selecting Coverage, Policy, Coding Questions and Mileage Corrections
Parts inquiries Submit an IDS ticket to the Parts Department		Submit an IDS ticket to the Parts Department

Supporting Materials

<u>picture_as_pdf</u> M610221_2021-BMW-MINI-MY2020-2021-PHEV-F60-Gxx-HV-Battery-FAQ-(24Sep2021).pdf

picture as pdf M610221 PHEV High Voltage Battery Recall Enhanced Rental Procedure.pdf picture as pdf M610221 M-2-0321-M0601 HV Battery Recall Return Process.pdf picture as pdf M610221 Recall Notice.pdf

Safety Recall 20V-601 High-Voltage Battery Model Year 2020-2021

PHEV [BMW 3 Series, 5 Series, 7 Series, X3 SAV, X5 SAV / MINI Countryman]

Issue Date: 09/24/2021 Last Update: 09/24/2021

Q1. Which BMW Group models in the US are potentially affected by this Safety Recall? Certain Plug-In Hybrid-Electric Vehicles (PHEV), specifically Model Year 2020-2021 BMW 3 Series, 5 Series, 7 Series, X3 SAV, X5 SAV, and MINI Countryman models in the US are potentially

affected.

Q2. What is the specific issue?

On PHEV models, the high-voltage battery may not have been produced to specifications. Charging the battery could lead to a short-circuit and in rare cases, a thermal event.

Q3. Why are other models / vehicles not included in this Safety Recall?

Other models have been produced with a high-voltage battery that has been produced to specifications.

Q4. How did BMW Group become aware of the issue?

BMW Group became aware of the issue through our quality control procedures.

Q5. Can I continue to drive my vehicle?

Yes. However, please <u>DRIVE IN HYBRID MODE ONLY</u>. **DO NOT USE SPORT MODE OR THE SHIFT PADDLES (if equipped) AS THIS WILL CHARGE THE BATTERY.**

If you are not the only driver of this vehicle, please advise all other drivers of this important information.

However, if the issue occurs while driving, which may manifest itself with a displayed Check Control message for HV Battery/Drivetrain malfunction and a vehicle in a failsafe mode, carefully move away from traffic as soon as possible, pull over to a safe location, and shut off the power. **Do not continue to drive the vehicle.** All occupants should exit the vehicle and move to a safe location.

Dial 911 in the event of an emergency. If it is not an emergency, contact BMW Roadside Assistance at 1-800-332-4269 or MINI Roadside Assistance at 1-866-646-4772 to have your vehicle brought to the nearest BMW center or MINI dealer.

Q6. Can I charge my vehicle?

No, DO NOT PLUG IN OR CHARGE YOUR VEHICLE.

Q7. How can I check my battery state of charge?

The state of charge of the high-voltage battery corresponds to the displayed range in electric mode. If an electric range is near zero, the high-voltage battery is nearly discharged.

Q8. Is it recommended that I drain the high-voltage battery? If so, how do I do that?

Yes. It is recommended to drain the high-voltage battery. Specific instructions are below for models affected by this recall.

For BMW 3 Series, 5 Series, 7 Series, X3, X5:

Using iDrive, go to Settings > Driving mode > Battery Control > Set or leave the charging state
at 30%.

For MINI Countryman:

 Press the eDrive switch > Select MAX eDRIVE or AUTO eDRIVE > Confirmation will show in the Central Display.

Q9. Should I park my vehicle outside?

The possibility of a thermal event is extremely rare. Once the battery has been drained, the possibility decreases even further.

Q10. How will I be informed of this Safety Recall?

Letters will be mailed to owners in <u>November</u> via First Class mail advising them of this Safety Recall and the availability of the remedy with applicable instructions.

To ensure BMW and MINI have the most up-to-date contact and vehicle information, owners should register their vehicle at www.bmwusa.com/myBMW or https://ol.miniusa.com/. Registration is free and will give them access to other information specific for their BMW or MINI.

Q11. How and when will my vehicle be repaired?

The affected battery modules will be replaced for free.

Attachment to M61 02 21 September 2021

SAFETY RECALL NOTICE

To: All Center Operators, Sales Managers, Service Manager, Parts Manager and Warranty Processor

RE: Recall 20V-601: High-Voltage Battery - M61 02 21

BMW AG is conducting a Voluntary Safety Recall (effective September 24, 2021) on a small number of Model Year 2020-2021 MINI Countryman (PHEV) vehicles that were produced between March 12, 2020 and August 19, 2020.

Please be reminded that it is a violation of federal law (The Safety Act) for you to sell, lease or deliver any new motor vehicle covered by this notification until the recall repair has been performed. This means that centers may not legally deliver new motor vehicles to consumers until they are fixed or use/sell replacement equipment/parts subject to this recall. Note also that substantial civil penalties apply to violations of the Safety Act.

Also, you should not sell, lease or deliver any Certified Pre-Owned or used vehicles subject to a safety recall until the repair is completed.

Please follow any special instructions that we provide to you for the return or disposition of recall parts.

We appreciate all your assistance with this Recall.

Attachment to M61 02 21 October 2021

Bulletin #: M-2-0321-M0301		☐ Take Note Tal	re Action	
☐ Retail Operator	☐ Sales Pre-Owned	☐ Business Manager	☑ Parts & Accessories	
☐ General Manager	☐ Sales New Car	⊠ Service	☐ Administration	
Name: Diana Walters		Phone Number: 201-571-59	18	
Title: Chemical & Battery Program Manager		Source: Aftersales Business	Source: Aftersales Business Development, Technical Service	
Date: March 19, 2021		Supersedes:	Supersedes:	



HV BATTERY RECALL RETURN PROCESS

TAKE NOTE

- High Voltage Battery Recalls require Dealers to ship dangerous goods/hazardous materials.
- ITAP is our new logistics partner that will facilitate these recalled HV battery returns.
- Recalled parts that are removed from MINI vehicles cannot be used for resale! The recalled parts are the
 property of MINI USA. Your Center is responsible for the proper identification, storage, and documentation of
 these parts. They must be held in a secure retention area until notification of claim payment is made by MINI
 USA through DCSnet.

TAKE ACTION

- Review the instructions in the subsequent pages to prepare shipments for high voltage battery modules removed from vehicles affected by Recall 20V-601, Bulletin M61 02 21. If you have any questions regarding the preparation of the shipment, please use the ITAP contacts listed below.
- If your Dealer has not completed the required supplemental HV Battery recall training, please reference bulletin M-2-0321-M0301 prior to attempting to arrange for recalled HV battery returns. ITAP will require proof of training completion prior to setting up any module return.
- Please ensure that the Warranty Part Tag is attached to your module if it has been issued and follow the
 details on this bulletin for the correct process of disposal.
- If battery modules are listed on your scrap report, please continue to follow the details on the bulletin for the correct process of disposal.
- Please do not contact ITAP until you have 9 modules ready for return, or all recalls in your PMA have been completed.

MORE QUESTIONS?

Required training information is available in bulletin M-2-0321-0301.

ITAP Contacts:

Nikedah Little or Edward Bonilla

Email: bmwdealerproject2021@goitap.com

Phone: 323-685-4827

Aftersales Business Development Contacts:

Name	Phone	Email	Title
Diana Walters	201-571-5918	Diana.Walters@MINIUSA.com	Chemical & Battery Program Manager
Jimmy Cox	201-307-4324	James.JC.Cox@MINIUSA.com	Chemical, Battery & Oil Program Sales Manager
Joachim Pusch	201-546-4635	Joachim, Pusch(a) MINIUS A.com	Aftersales Business Development Manager – Service
	201 0 10 1000	000000000000000000000000000000000000000	and Parts



Defective, Damaged, or Recalled (DDR) Lithium-ion Battery Module Packaging, Labeling/Marking, & Palletizing Instructions

ITAP provides these recommended instructions & referenced photos for DDR lithium-ion batteries in line with DOT regulations 49 CFR 173.185 (f). Process must be performed by a hazardous material trained individual. Please read instructions in its entirety before starting.

1. The following materials will be found inside each provided 16-Gallon Steel Drum (PG I Rated = 1A2/X150) weighing approximately 36 lbs.:

- a. Loose perlite sitting at base of drum (5").
- b. Bag of Perlite sitting on top of loose perlite.
- c. Empty plastic bag for battery module.
- d. A stretch wrap roll (on or in between drums not in drum).

2. The following markings/labels & quantities will be provided per pallet inside drums:

- a. UN3480 Lithium-ion Batteries/Class 9
 - Qty. = (1) per drum & (2) per pallet.
- b. Defective/Damaged Lithium-ion Battery
 - Qty. = (1) per drum, (2) per pallet
- c. Overpack
 - Qty. = (2) per pallet.
- d. Shipper/Consignee Name & Address
 - Qty. = (1) per drum, (1) per pallet

Note: Regarding drums only; if generic adhesive markings/labels are already affixed on delivered drums, no markings/labels will need to be affixed or supplied. Contrastingly, a "Shipper/Consignee Name & Address" label will always be provided per drum.

3. The following are materials needed onsite to perform instructions:

- a. Mallet.
- b. Torque wrench/socket for 15/16" bolt head.
- c. Measuring tape or ruler.
- d. Electrically non-conductive tape for directly covering terminals or added protection in applying over existing proprietary terminal covers.
- e. Electrically non-conductive tape or plastic tie wrap/zip tie for sealing bagged module.
- f. Plastic tie wrap/zip tie for securing battery module cable lead.
- g. Tape for applying Shipper/Consignee Name & Address label on exterior of drum & stretch wrapped pallet.
- h. Permanent marker for writing on applicable labels/markings.
- i. Dust mask is not required but recommended in working with perlite as it can become dusty when pouring into drum.

4. Packaging of DDR battery module; (1) battery module per each plastic bag:

a. First inspect each individual battery module to ensure it is safe/stable to ship, having no evidence of physical damage or potential issues that could cause a short circuit, evolution of heat, or fire.



- b. Ensure terminals are thoroughly covered with proprietary cover & electrically non-conductive tape to ensure no portion of terminals are exposed. *SEE PHOTO 4b. #1 & #2.*
- c. With electrically non-conductive tape, tape any cable leads that may be extending from the battery module. Attach cable to module with tie wrap/zip tie, like new module. If the plastic cable end is intentionally "pinched", it could create a short circuit. Then cut off the excess length of tie wrap/zip tie. SEE PHOTOS 4c #1 #3.

5. Drum preparation for battery module placement:

- a. First remove stretch wrap; then inspect drums/pallet to ensure there is no sign of damage that impairs integrity. Some pallet(s) may have more wear than others not considered damaged. In the case there was damage created on delivery shipment, take photos and email to ITAP at the designated email address. ITAP team will follow up & advise next steps.
- b. When there are (7) (9) drums per pallet, there will be a non-accessible drum at the center of pallet. Select the single drum on the perimeter that when removed allows the best access to the closure mechanism of the center drum. The selected drum will need to be temporarily removed off the pallet in order to perform/complete process on center drum first. Once the center drum is processed through section 9.e, the displaced drum can be replaced on the pallet at its original position.
- c. If applicable, select center drum first; using wrench, unscrew closure mechanism & remove lid from drum.
- d. Remove labels/markings found inside drum & place in safe location for use after packaging & drum closure is completed.
- e. Remove empty plastic bag from drum & place on a platform where the battery module can safely be handled/inserted into bag.

6. Place & seal battery module into empty plastic bag:

- a. Lay the battery module vertically with cable lead side facing upward. Do not lay module where cable lead side is at the bottom bearing weight of module there shouldn't be any unnecessary weight on this component that could cause damage to cable lead as mentioned in section 4.c. SEE PHOTO 6a. (Actual module in photos is not part of this project only an example. Module in photos do not have a cable lead)
- b. Place plastic bag over the battery module & pull bag down completely to base of module where there is no excess bag room on top side of module.
- c. Then carefully lay module horizontally with its plastic cover/terminals facing upward never lay battery module on plastic/terminal side facing down bearing module weight.
- d. Then lift horizontally laying module on the open side of the bag sufficient to pull bag so module is inserted completely, providing ample bag length to close and seal bagged battery module.
- e. In its current horizontal position, proceed to closing/sealing bag. If using tape to seal bag, fold the battery bag where the there is no longer an opening, and excess air has been removed from bag. Then tape it thoroughly so that it is sealed. If using a zip tie, place the zip tie at the center point of the excess portion of the bag opening to not stretch/rip bag, remove excess air from bag, & then zip tie the bag closed. Keep battery module laying horizontally.

SEE PHOTO 6e. (Module in photo does not include a cable lead. This photo is only an example of a closed/sealed bag. THE PROCESS OF CLOSING/SEALING MODULE NEEDS TO BE PERFORMED WHILE LAYING HORIZONTALLY AS DESCRIBED ABOVE).





7. Placing (1) bagged/sealed battery module per each drum:

- a. Remove bag of perlite from selected drum & place on the floor temporarily.
- b. Then with the <u>cable lead end of the module facing upward</u>, place the bagged/sealed battery module vertically at the center of the drum on the base of loose perlite material, so that cable lead end of module is on top. With the module properly centered, the space between the module & inside wall of drum should be ~ 3.5" (no closer than 3") on one axis, & ~4.5" (no closer than 4") on the other; space measurements are based off the center of the drum and the module per axis. **SEE PHOTO 7b.** (module in photo does not have a cable lead).
- c. Open the bag of perlite & begin gently pouring the perlite material in the space around the battery module that is between the battery & the inner wall of the drum till you have reached the height of battery module. **SEE PHOTO 7c.**
- d. During this process, should there be any movement of the bagged battery where it is no longer at the center of the drum, please repeat this process till the module remains at the center as described above. Always keep a 5" base of perlite beneath module.
- e. Then pour the balance of the perlite material onto the drum, completely filling the drum. **SEE PHOTO 7e.**
- f. Then fold the empty bag & place on top of open drum for return.

8. Drum closure instructions:

- **a.** Place cover on the drum, making sure that the gasket is in place.
- **b.** Snap the closing ring over the cover & top lip of the drum. Make sure that the ring's lugs point down below the ring. Also, make sure the bottom edge of the closing ring engages under the lip of the drum.
- **c.** Insert the bolt completely through the lug without thread. Then screw the bolt into the threaded lug.
- **d.** While tightening the bolt, tap the along the entire perimeter of the ring with a mallet, starting directly across from the bolt.
- e. Tighten the bolt with a torque of 60 ft-lbs., leaving a gap of 1/8" to 5/8" on closing ring.
- **f.** The cover & ring should not spin, & the free ends of the ring should not touch.
- g. Once the drum has been properly closed, turn the drum back as it was before where bolts are facing inward on the pallet so as to protect the bolts from any potential damage while being handled logistically.

9. DRUM LEVEL – Labels/Markings placement instructions (do not apply on rings of drums):

- **a.** With drum's closure mechanism facing inward, place the below listed labels/markings on the drum, **opposite side** of the closure mechanism, facing outward. **SEE PHOTO 9.a**
- b. Place additional labels/markings safely aside for placement on pallet after it is stretch wrapped.
- **c. UN3480 Lithium-ion Battery/Class 9 -** affix (1) adhesive label/marking onto **drum**. Place as a square on point. If this label/marking is already present on drum, disregard this step.
- **d. Defective/Damaged Lithium-ion Battery** before affixing to drum, with a permanent marker, write "**ION**" on the blank space of this adhesive label/marking & allow time to dry. On the same side of drum, affix (1) adhesive label/marking onto <u>drum</u>. If this label/marking is already present on drum, disregard this step.
- e. Shipper/Consignee Name & Address label before affixing to drum, clearly write & fill in empty spaces with requested information. Using tape, securely affix onto same side of drum as other labels/markings.





10. Repeat process on remaining modules/drums:

- **a.** If applicable, replace temporarily moved drum back onto original pallet location.
- **b.** Then repeat sections <u>5.c 9.e</u> for remaining modules/drums; one module/drum at a time.
- c. Once pallet of all modules/drums are completed, move onto palletizing.

11. Palletizing instructions:

- **a.** If pallet was received with any cardboard or other material inserts in between drums, inserts should be repositioned as received.
- **b.** Inspect pallet & ensure no drums are extending beyond the perimeter of the pallet.
- **c.** Starting at any corner of the pallet, insert shrink wrap through the underside of a corner & pull out the other perpendicular side of the corner & tie a strong knot. **SEE PHOTO 11c.**
- **d.** Then start making rounds (5 rounds total) on the pallet itself at the base, wrapping only the pallet & its corners. This reinforces the stretch wrap with extra layers on the pallet corners to secure it from ripping when being pulled with relative force on the next 7 rounds for drums. **SEE PHOTO 11d.**
- e. Once 5 rounds have been completed at the base of the pallet itself, then continue to the additional (7) rounds on the drums themselves for a total (12) rounds, working your way up to where the stretch wrap overlaps over the top corner of the drums partially. SEE PHOTO 11.e #1 & #2.
- f. When stretch wrapping actual drums, pull with relative force at every turn/corner of the pallet in order to create enough tension and strength in the wrapping package. Otherwise, the stretch wrap will be loose & not strong enough for shipping.
- **g.** Once the (12) rounds are complete, cut the stretch wrap and tape the end of the stretch wrap onto the stretch wrapped pallet.

12. PALLET LEVEL – Labels/Markings placement instructions:

- a. Retrieve additional labels/markings found in drums.
- **b. UN3480 Lithium-ion Battery/Class 9** affix (2) adhesive labels/markings on opposing sides of stretch wrapped pallet.
- c. **Defective/Damaged Lithium-ion Battery** before affixing to drum, with a permanent marker, write "**ION**" on the blank space of this adhesive label/marking & allow time to dry. Then affix (2) adhesive labels/markings on opposing sides.
- **d.** Overpack affix (2) adhesive labels/markings on opposing sides.
- **e. Shipper/Consignee** before affixing to drum, clearly write & fill in empty spaces with requested information. Using tape, securely affix onto same side of drum as other labels/markings.

13. Notification to ITAP & shipping documentation:

- **a.** Once all batteries have been packaged, labeled/marked & palletized, notify ITAP via email of the number of pallets & the number of batteries/drums per pallet.
- **b.** ITAP will confirm receipt of pickup request & begin to arrange logistics.
- **c.** ITAP will send completed BOL & written emergency response information (ERG 147 or SDS) in connection with provided information.
- **d.** Review BOL to ensure it matches the number of pallets & batteries/drums/packages per pallet. If there is any discrepancy, alert ITAP immediately via email & phone call & describe the issue. ITAP will then make needed changes & return it to you.
- **e.** On the day of pick-up, please have the pallets placed at your designated loading area. If there are any weather conditions (rain, snow, high winds, etc.) where the pallet, stretch wrap, or



applied labels/markings can potentially be compromised, keep the pallets indoors (away from weather) till driver arrives. Print out & sign a copy of the BOL & written emergency response information (ERG 147 or SDS) beforehand so that documentation is ready to hand over to driver upon arrival.

14. Battery module shipment preparation checklist:

Hazmat employee handled preparation.
Markings & labels properly placed, including the additional damaged battery. label as prescribed by 49 CFR 173.185(f).
Packaged battery(s) into plastic bag & sealed.
All free space in drum is occupied by filler material (perlite).
Lid properly closed.

15. Contact information:

IT Asset Partners will be more than pleased to assist in any way necessary to successfully complete your return shipment. The points of contact listed below can assist in scheduling the pickup of batteries, suggesting proper packaging techniques, further explaining the packaging techniques described above, &/or answering any questions related to the process of returning batteries.

Contact info:

Nikedah Little or Edward Bonilla

ITAP, Inc.

bmwdealerproject2021@goitap.com

323.685.4827

DISCLAIMER:

The preceding packaging guidelines consist of recommendations only & are only recommendations for US domestic ground shipments. The offeror of transportation, remains responsible for properly storing batteries safely & properly shipping batteries in accordance with 49 CFR Part 173.185(f).

Environmental & transportation regulations are subject to change & AS A RESULT THESE RECOMMENDATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE. The offeror is ultimately responsible for staying compliant with all current laws & regulations.

IT ASSET PARTNERS IS NOT RESPONSIBLE FOR ANY INJURIES OR DAMAGES, WHETHER DIRECT OR INDIRECT, SUFFERED AS A RESULT OF THE SHIPPER FOLLOWING THE RECOMMENDATIONS CONTAINED HEREIN.



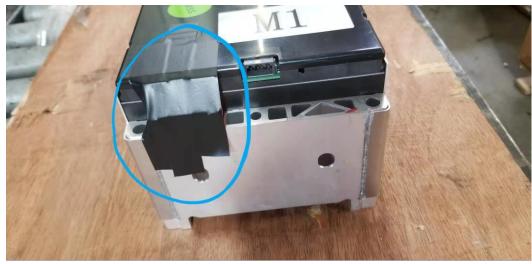


Defective, Damaged, or Recalled (DDR) Lithium-ion Battery Photos Referenced on Instructions (only photos 4c. are actual BMW modules)

Section 4:



(Photo 4b. # 1 above)



(Photo 4b. #2 above)





Section 4 continued: actual BMW module (4c. photos)



(Photo 4c. #1 above)



(Photo 4c. #2 above)





Section 4 continued:



(Photo 4c. #3 above)

Section 6: PER BAGGING/SEALING INSTRUCTIONS IN SECTION 6, WHEN POSITIONING THE MODULE VERTICALLY OR HORIZONTALLY, NEVER PLACE (1) THE CABLE LEAD SIDE OF THE MODULE, NOR (2) THE TOP SIDE (TERMINAL/PLASTIC SIDE) AT THE BOTTOM, BEARING WEIGHT OF MODULE. THIS PHOTO EXAMPLE CONTAINS A MODULE THAT DOES NOT HAVE A CABLE LEAD, SO IT WAS ABLE TO BE PLACED VERTICALLY ON BOTH SIDES. THAT IS NOT THE CASE WITH THIS PROJECT'S BATTERY MODULES.



(Photo 6a. above)





Section 6 continued:



(Photo 6e. above)

Section 7:



(Photo 7b. above)





Section 7 continued:



(Photo 7c. above)



(Photo 7e. above)







(Photo 9a. above)

Section 11:



(Photo 11c. above)





Section 11 continued: photo illustration only of stretch wrapping/palletizing instructions. Per section 9, labels/markings need to be placed on each drum before stretch wrapping drums/pallet(s).



(Photo 11d. above)



(Photo 11e. #1 above)





Section 11 continued: photo illustration of properly stretch wrapped/palletized pallet. Per section 12, additional labels and markings need to applied after this step is completed.



(Photo 11e. #2 above)



Attachment to M61 02 21 - BMW RECALL 20V-601: HIGH-VOLTAGE BATTERY (September 2021)

PHEV High Voltage Battery Recall - Enhanced Car Rentals

Note: Aftersales Area Manager (AAM) Field Authorization is required for these rental car reimbursement claim submissions and the claim comments must explain the situation and reference your center's AAM email, as noted below, and the date it was sent.

Please use the following alternate transportation measures (ATM) for those customers with PHEV High Voltage Battery Recall affected vehicles that are out of service awaiting PHEV High Voltage-related repairs to be completed.

Procedure

- 1- For customer situations, please email Customer Relations (CR) at CRNJ_Recall_20V-601_Escalation@bmwna.com
- 2- In addition to customer notification letters mailing in October, the Customer Relations team will be calling all affected customers.
- 3- If a customer requests alternate transportation, CR will contact the corresponding center to help coordinate this with customer.
- 4- Please follow these instructions if CR contacts you:
- 5- If a repair order (RO) is not already available, create one.
- 6- Ensure there is a line item or create one that clearly explains the reason why your center is providing alternate transportation.
- 7- Send a High-Voltage Battery Recall Rental Car Request titled email to your AAM that includes a signed RO copy (center generated that is signed by the customer)
- 8- The AAM will review your center's email and approve your request accordingly.
- 9- When the rental car is approved by return AAM email (see next section below) and after the rental car is delivered to the customer, forward the:
 - AAM's car rental authorization email; and the
 - Customer signed copy of the RO that was sent to the AAM; and a
 - Copy of the rental agreement to the following BMW mailbox as attachments to
 <u>Recall.rentalrequest@bmwna.com</u>. Please include the vehicle's VIN (last seven) in the subject line
 of this email.
- 10- Unless otherwise required by state law for alternate transportation vehicles, if the customer is expected be in a rental car for longer than 30 days, the customer must return to center every 30 days to have rental car inspected and/or swapped out (if the rental car is required to be returned to the third-party rental car provider).

For these AAM approved car rentals, please provide the customer with a vehicle through one of our preferred third-party rental car providers (Enterprise, Hertz if available in your area).

BMW will reimburse the following:

BMW Rental Vehicles	Up to \$64.00 a day	•	Market surcharge (if applicable); plus, the CDW* (Collision Damage Waiver) protection -
Non-BMW Rental Vehicles	Up to \$44.00 a day	•	when the rental vehicle agreement signee accepts this optional coverage; plus Taxes

Invoice these allowable rental car expenses (Excluding fuel) as a separate line item on the repair order as outlined below.

Attachment to M61 02 21 - BMW RECALL 20V-601: HIGH-VOLTAGE BATTERY (September 2021)

Note: Aftersales Area Manager (AAM) Field Authorization is required for the rental car reimbursement claim submission and the claim comments must explain the situation and reference your center's AAM email and the date it was sent.

Rental Vehicle Invoice - Required Information for Claim Submission

In addition to the Field Authorization (FAS), to be reimbursed for the above, your center must itemize the rental car invoice in the claim comments, please ensure that you always include the following information:

Rental Vehicle Invoice - Line items	Required Information to provide
Brand of rental vehicle in use	BMW or Non-BMW Vehicle - Model description
Rental period	Total number of days
Market surcharge (If applicable)	Cost per day and the total amount
CDW* (Collision Damage Waiver)	Cost per day and the total amount
Taxes	Total amount

Other Optional Protection/Insurance Coverage

BMW will only reimburse the cost of the applicable Collision Damage Waiver (CDW)* protection that the rental vehicle agreement signee accepted.

*Note: The Collision Damage Waiver (CDW), this may also be referred to as the Loss Damage Waiver (LDW) or the Physical Damage Waiver (PDW).

If your customer wants to obtain other optional protection or insurance coverage, for example:

- SLP/SLI/LIS (Supplemental Liability Protection or Insurance/Liability Insurance Supplement); and/or
- PAI (Personal Accident Insurance); and/or
- PEC (Personal Effects Coverage);

The cost of this optional coverage would be at the owner's/operator's expense.

Important Note:

If the customer believes they have access to optional protection/insurance coverage that will apply to their loaner car or rental vehicle either through their credit card company and/or personal car insurance (including other drivers and/or total loss), please encourage them to verify if and what additional coverage is available to him or her.

Refer to page 3 for the Claims Submission information.

Attachment to M61 02 21 - BMW RECALL 20V-601: HIGH-VOLTAGE BATTERY (September 2021)

PHEV High-Voltage Battery Recall - ATM Claim Submission Information

Reimbursement for this AAM authorized PHEV High-Voltage Battery Recall-related car rental expense is via DCSnet normal claim entry through the Field Authorization System (FAS), as a separate line item, utilizing the following information:

Defect Code:	11009999RV	Rental Reimbursement - Safety-Recall Parts Supply/Repair Procedure Issues

And:

Sublet Code 3		Reimbursement for qualifying alternate transportation as outlined in this procedure (PHEV High Voltage Battery Recall - Enhanced Car Rentals)
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RO/Claim Comments

See the Rental Vehicle Invoice - Required Information for Claim Submission section above.

PHEV High-Voltage Battery -related car rental expense claims submissions received without AAM Field Authorization will not be accepted for payment.

Mid to Long-Term Car Rentals

Due to the current remedy procedure, BMW NA anticipates that some customers may require alternate transportation for thirty (30) days or more. As a result, you may have to submit more than one claim for rental car reimbursements before the affected vehicle has been repaired and returned.

Unless otherwise required by state law for alternate transportation vehicles, for these cases, BMW NA requests that your center submit a claim for the rental car reimbursement at 30-day or monthly intervals (invoice after each 30 day or one month of rental car usage).

Important Warning: (1) Failure to properly follow this approval process will result in your center receiving a reduced or no reimbursement for these subsidized rental cars. (2) This program is separate from your normal loaner car program (AMP) and is specific to vehicles with the PHEV High-Voltage Battery Recall.