



Revision (1) December 2022

Dealer Service Instructions for:

Safety Recall ZB7 / NHTSA 22V-865 Loss of Motive Power

NOTE: Service Procedure Step 11 revised. To prevent Diagnostic Trouble Code (DTC) P0AA4 from setting, wait 5 minutes after high voltage battery contactors are disabled before proceeding with software update.

Remedy Available

2021-2023 (JL) Jeep® Wrangler 4xe

NOTE: This recall applies only to the above vehicles equipped with a 2.0L Plug-in Hybrid Electric Vehicle ("PHEV") engine.

NOTE: Some vehicles above may have been identified as not involved in this recall and therefore have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

About 62,900 of the above vehicles may experience an engine shut down condition caused by diagnostic reactions to faults caused by loss of communication. An engine shut down condition may result in an unexpected loss of motive power while driving, which can cause a vehicle crash without prior warning.

Repair

Update calibration software in the Power Inverter Module (PIM), comprised of the Hybrid Control Processor (HCP) and Auxiliary Hybrid Control Processor (AHCP), then update the calibration software in the Transmission Control Module (TCM).

Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if the vehicle must be held overnight.

Parts Information

No parts are required to perform this service procedure.

Parts Return

No parts return required for this campaign.

Special Tools

The following special tools are required to perform this repair:

➤ NPN wiTECH MicroPod II

> NPN Laptop Computer

➤ NPN wiTECH Software

Service Procedure

NOTE: The wiTECH scan tool must be used to perform this Safety Recall. The wiTECH software is required to be at the latest release level before performing this procedure.

NOTE: The Hybrid Control Processor (HCP), Auxiliary Hybrid Control Processor (AHCP) and Transmission Control Module (TCM) must be updated to the latest available software calibration level after completing this Safety Recall.

NOTE: If this software update flash process is interrupted/aborted, the flash should be restarted.

NOTE: It is normal for the high voltage charging lamp on the dash to flash like there is a charging system failure while performing software updates.

- 1. Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.
- 2. Connect the wiTECH micro pod II to the vehicle data link connector
- 3. Place the ignition in the "RUN" position.
- 4. Open the wiTECH 2.0 website.
- 5. Enter your "User id" your "Password" and your "Dealer Code", then select "Finish" at the bottom of the screen.
- 6. Starting at the "Vehicle Selection" screen, select the vehicle to be updated.
- 7. From the "Action Items" screen, select the "All Flashes" tab. Inspect if new software flashes are available for the "HCP" and/or "TCM".
 - ➤ If neither module has new software available, then proceed to **Step 26** and claim the inspection LOP to complete this recall.
 - ➤ If one or both modules have new software available, then continue with **Step 8**.

Service Procedure [Continued]

- 8. Create a Vehicle Scan Report (VSR) before proceeding with software updates.
- 9. Ensure there are no current DTCs that could cause concern with modules being flashed. If any questions, please share the VSR with the STAR center.
- 10. Using wiTECH, from the topology screen select the Battery Pack Control Module (BPCM) icon. Under the "Misc Functions" tab select "Disable HV Battery Contactors" and follow screen prompts.
- 11. Confirm contactors open using wiTECH. (If contactors do not open key on and key off the vehicle). Once successful a note will appear on the wiTECH screen indicating that contactors are now open.

IMPORTANT: To prevent Diagnostic Trouble Code (DTC) P0AA4 from setting, wait 5 minutes after verifying BPCM high voltage battery contactors are disabled before proceeding with software update.

NOTE: The PIM contains two processors, Hybrid Control Processor (HCP) and Auxiliary Hybrid Control Processor (AHCP). The HCP and AHCP are combined into one PIM software update. The software update must begin with updating the HCP. The AHCP will update immediately following the HCP.

- 12. From the "Action Items" screen, select the "All Flashes" tab.
 - > Select "HCP" by clicking the arrow on the right side of the screen. Read the special flash instructions, then select "OK". Continue with Step 13.
 - ➤ If "HCP" is not displayed as one of the available flashes, the PIM software is already at the current software level and does not require updating. Proceed to Step 17.
- 13. From the "Flash ECU Agreement" page, agree to terms by "Checking the Box".
- 14. Select "Flash ECU" and then follow the wiTECH screen instructions to complete the flash.

Service Procedure [Continued]

- 15. Once the software is confirmed to be at the latest available calibration level, select "**View DTCs**".
- 16. Select the "Clear All DTCs" tab, then click "Clear All DTCs" and then select "Close". It may be necessary to cycle the ignition OFF to RUN to clear the codes.
- 17. From the "Action Items" screen, select the "All Flashes" tab.
 - ➤ Select "TCM" by clicking the arrow on the right side of the screen. Read the special flash instructions, then select "OK". Continue with Step 18.
 - ➤ If "TCM" is not displayed as one of the available flashes, the TCM software is already at the current software level and does not require updating. Proceed to Step 22.
- 18. From the "Flash ECU Agreement" page, agree to terms by "Checking the Box".
- 19. Select "Flash ECU" and then follow the wiTECH screen instructions to complete the flash.
- 20. Once the software is confirmed to be at the latest available calibration level, select "**View DTCs**".
- 21. Select the "Clear All DTCs" tab, then click "Clear All DTCs" and then select "Close". It may be necessary to cycle the ignition OFF to RUN to clear the codes.
- 22. Using wiTECH, from the topology screen select the Battery Pack Control Module (BPCM) icon. Under the "Misc Functions" tab select "Enable HV Battery Contactors" and follow screen prompts. Once successful a message will appear on the wiTECH screen indicating that contactors are now closed.
- 23. Select the "Clear All DTCs" tab, then click "Clear All DTCs" and then select "Close". It may be necessary to cycle the ignition OFF to RUN to clear the codes.

Service Procedure [Continued]

- 24. Verify the contactors are working listen for a clicking noise when contactors open and close when the vehicle ignition is cycled on and off.
- 25. Generate a VSR to ensure P0AA4/P0AA1 or any DTC is not active or pending.
- 26. Turn the ignition to the "**OFF**" position and then remove the wiTECH micro pod II device from the vehicle.
- 27. Remove the battery charger from the vehicle.
- 28. Return the vehicle to the customer or inventory.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Inspect PIM, TCM software up to date	18-ZB-71-81	0.2 hours
Inspect/Update PIM software only	18-ZB-71-82	0.7 hours
Inspect/Update TCM software only	18-ZB-71-83	0.4 hours
Inspect/Update PIM and TCM software	18-ZB-71-84	0.8 hours
Floor Plan Reimbursement	95-95-95-97	Calculate See Below

Floor Plan Reimbursement represents the vehicle's average daily allowance (see table below) multiplied by the number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop sale to the date that the remedy was made available. Note: If the vehicle was received by your dealership (KZX date) AFTER the stop sale date, you will use the KZX date instead of the stop sale date. For this Recall, the stop sale was initiated on 12/01/2022 and the remedy was made available on 12/15/2022, therefore, the number of days cannot exceed 14 days.

Vehicle	Average Daily Allowance
2021-2023 (JL) Jeep Wrangler 4xe	

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an <u>updated</u> VIN list of <u>their incomplete</u> vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers <u>must</u> perform this repair on all unsold vehicles <u>before</u> retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations FCA US LLC

This notice applies to your vehicle,

ZB7/NHTSA 22V-865

LOGO

VEHICLE PICTURE

YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION
 Call your authorized Chrysler /
 Dodge / Jeep_® / RAM Dealership
- 2. Call the FCA Recall Assistance Center at 1-800-853-1403. An agent can confirm part availability and help schedule an appointment
- 3. Visit recalls.mopar.com, scan the QR code below, or download the Mopar Owner's Companion App.

QR Code

Get access to recall notifications, locate your nearest dealer, and more through this website or Mopar Owner's Companion App. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

DEALERSHIP INSTRUCTIONS

Please reference Safety Recall ZB7.

IMPORTANT SAFETY RECALL

Loss of Motive Power

Dear [Name],

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

FCA US LLC has decided that a defect, which relates to motor vehicle safety, exists in certain [2021 through 2023 Model Year (JL) Jeep® Wrangler 4xe PHEV] vehicles.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

WHY DOES MY VEHICLE NEED REPAIRS?

Your vehicle [1] may experience an engine shut down condition caused by diagnostic reactions to faults caused by loss of communication. An engine shut down condition may result in an unexpected loss of motive power while driving, which can cause a vehicle crash without prior warning.

HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA US will repair your vehicle [2] free of charge (parts and labor). To do this, your dealer will update vehicle control software on all affected vehicles. The estimated repair time is one hour. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit, which may require more time. Your time is important to us, so we recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

TO SCHEDULE YOUR <u>FREE</u> REPAIR, CALL YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY

WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

If you have already experienced this specific condition and have paid to have it repaired, you may visit www.fcarecallreimbursement.com to submit your reimbursement request online. [3] Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

We apologize for any inconvenience, but are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Assistance/Field Operations FCA US LLC



Mr. Mrs. Customer 1234 Main Street Hometown, MI 48371

^[1] If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

^[2] If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to safercar.gov.

^[3] You can also mail in your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement.