



(Revision 3) February 2024

Distributor/Dealer Service Instructions for:

## **Safety Recall ZB7**

### **Loss of Motive Power**

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**NOTE: AHCP/HCP flash procedure revised. The AHCP must be updated first before updating the HCP. Flash order sequence is CRITICAL!**

#### **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. Dealers should complete this recall service on these vehicles before retail delivery.** Dealers should also perform this repair on vehicles in used vehicle inventory and those vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

#### **Subject**

About 15,600 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**

**IMPORTANT: Make sure the Battery Pack Control Module (BPCM) calibration software is up to date BEFORE starting the repair process.**

Repair process: Update the 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).

**IMPORTANT: Software update sequence outlined is CRITICAL!**

1. BPCM – MUST be up to date BEFORE starting the repair process.
2. **AHCP must be updated first before updating the HCP.**
3. **HCP must be updated following the AHCP.**
4. TCM

**Do NOT deviate from that order or vehicle software will not update properly.**

**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

|                          |
|--------------------------|
| <b>Service Procedure</b> |
|--------------------------|

**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 Battery Pack Control Module (BPCM), Auxiliary Hybrid Control Processor (AHCP), Hybrid Control Processor (HCP), and Transmission Control Module (TCM) must be updated to the latest available software calibration level after completing this Safety Recall. This flash sequence is CRITICAL!**

**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 “**BPCM**” and/or “**HCP**” and/or “**TCM**”.
  - If no modules have new software available, then proceed to **Step 26** and claim the inspection LOP to complete this recall.
  - If one or more modules have new software available, then continue with **Step 8** and follow the flash sequence of BPCM, AHCP, HCP, TCM.

**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. From the “**Action Items**” screen, select the “**All Flashes**” tab.
  - Select “**BPCM**” by clicking the arrow on the right side of the screen. Read the special flash instructions, then select “**OK**”. Continue with **Step 11**.
  - If “**BPCM**” is not displayed as one of the available flashes, the BPCM software is already at the current software level and does not require updating. Proceed to **Step 15**.
11. From the “**Flash ECU Agreement**” page, agree to terms by “**Checking the Box**”.
12. Select “**Flash ECU**” and then follow the wiTECH screen instructions to complete the flash.
13. Once the software is confirmed to be at the latest available calibration level, select “**View DTCs**”.
14. 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.

**NOTE: The PIM contains two processors, Auxiliary Hybrid Control Processor (AHCP) and Hybrid Control Processor (HCP). The AHCP must be updated first before updating the HCP. Flash order sequence is CRITICAL!**

**Service Procedure [Continued]****CAUTION: AHCP must be updated before updating the HCP.**

15. Select **“AHCP”** by clicking the arrow on the right side of the screen. Read the special flash instructions, then select **“OK”**. Continue with **Step 16**.
  - If **“AHCP”** is not displayed as one of the available flashes, the **AHCP** software is already at the current software level and does not require updating. Proceed to **Step 20**.
16. From the **“Flash ECU Agreement”** page, agree to terms by **“Checking the Box”**.
17. Select **“Flash ECU”** and then follow the wiTECH screen instructions to complete the flash.
18. Once the software is confirmed to be at the latest available calibration level, select **“View DTCs”**.
19. 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.
20. From the **“Action Items”** screen, select the **“All Flashes”** tab.

**CAUTION: AHCP must be updated before updating the HCP.**

21. Select **“HCP”** by clicking the arrow on the right side of the screen. Read the special flash instructions, then select **“OK”**. Continue with **Step 22**.
  - If **“HCP”** is not displayed as one of the available flashes, the **HCP** software is already at the current software level and does not require updating. Proceed to **Step 26**.
22. From the **“Flash ECU Agreement”** page, agree to terms by **“Checking the Box”**.

**Service Procedure [Continued]**

23. Select “**Flash ECU**” and then follow the wiTECH screen instructions to complete the flash.
24. Once the software is confirmed to be at the latest available calibration level, select “**View DTCs**”.
25. 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.
26. 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 27**.
  - 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 31**.
27. From the “**Flash ECU Agreement**” page, agree to terms by “**Checking the Box**”.
28. Select “**Flash ECU**” and then follow the wiTECH screen instructions to complete the flash.
29. Once the software is confirmed to be at the latest available calibration level, select “**View DTCs**”.
30. 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.
31. Create a VSR to ensure P0AA4/P0AA1 or any DTC is not active or pending.
32. Turn the ignition to the “**OFF**” position and then remove the wiTECH micro pod II device from the vehicle.
33. Remove the battery charger from the vehicle.
34. Return the vehicle to the customer or inventory.

**Completion Reporting and Reimbursement**

Claims paid will be used by FCA US LLC to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

|                                                                                                   | <b><u>Labor Operation<br/>Number</u></b> | <b><u>Time<br/>Allowance</u></b> |
|---------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------|
| Inspect BPCM, AHCP/HCP, TCM<br>Software up to Date                                                | 18-ZB-71-81                              | 0.2 hours                        |
| Inspect/Update Applicable Module Software.<br>(Use Related Operation LOPs for Applicable Updates) | 18-ZB-71-85                              | 0.2 hours                        |
| <b><u>Related Operations</u></b>                                                                  |                                          |                                  |
| Update BPCM software                                                                              | 18-ZB-71-50                              | 0.2 hours                        |
| Update AHCP/HCP software                                                                          | 18-ZB-71-51                              | 0.4 hours                        |
| Update TCM software                                                                               | 18-ZB-71-52                              | 0.2 hours                        |

**NOTE: See the FCA International Warranty Policy and Procedure Manual, Claim Entry Section – Recall Claims for claim processing instructions**

**Owner Notification and Service Scheduling**

All involved vehicle owners should be notified of the service requirement by their Dealer. Owners are requested to schedule appointments for this service. A sample copy of the owner notification letter is attached.

## **Vehicle Lists, Global Recall System, VIP and Distributor/Dealer Follow Up**

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

GRS provides involved Dealers with an updated VIN list of their incomplete vehicles. Completed vehicles are removed from GRS within several days of repair claim submission.

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

## IMPORTANT SAFETY RECALL

ZB7

This notice applies to your vehicle (VIN: xxxxxxxxxxxxxxxxx).

Dear Jeep® Owner:

FCA US LLC has decided that a defect, which relates to motor vehicle safety, exists in certain **2021 through 2023 model year Jeep® Wrangler 4xe PHEV vehicles**.

***The problem is...*** Your vehicle 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.

***What your dealer will do...*** FCA will repair your vehicle free of charge (parts and labor). To do this, your dealer will update vehicle control software on all affected vehicles. The work will take about one hour to complete. However, additional time may be necessary depending on service schedules.

***What you must do to ensure your safety...*** Simply **contact your Chrysler, Jeep®, Dodge, or RAM dealer** right away to schedule a service appointment. **Please bring this letter with you to your dealer.**

***If you need help...*** If you have trouble getting your vehicle serviced, please contact the dealer nearest your location. A representative will assist you in getting your vehicle serviced. This information can be found in the Customer Assistance section of your Owner's Manual.

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

Global Service & Parts - International  
FCA US LLC  
Notification Code ZB7