



June 2015

Studio Service Instructions for:

Safety Recall R20 / NHTSA 15V-291 Reprogram Electric Vehicle Control Unit

Models

2013 - 2015 (FF) Fiat 500e

NOTE: This recall applies only to the above **Battery Electric Vehicles** (**BEV**) built through March 07, 2015 (**MDH 030715**).

IMPORTANT: Many of the vehicles within the above build period have already been inspected or repaired and, therefore, have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in studio new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Studios 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

The Electric Vehicle Control Unit (EVCU) on about 3,800 of the above vehicles may set a diagnostic trouble code (DTC) that can result in a shift to neutral condition. This could cause a loss of motor power, increasing the risk of a crash under certain driving conditions.

Repair

The EVCU software must be updated.

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 VCI Pod Kit

➤ NPN Laptop Computer

➤ NPN wiTECH Software

Service Procedure

NOTE: The wiTECH scan tool must be used to perform this recall. The wiTECH software is required to be at the latest release level before performing this procedure. If the reprogramming flash for the EVCU is aborted or interrupted, repeat the procedure.

- 1. Open the hood.
- 2. Remove and save the plastic engine cover.
- 3. Install a battery charger to the 12 volt battery 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.

NOTE: Use an accurate stand-alone voltmeter. The battery charger voltmeter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.

- 4. Connect the wiTECH micro pod II to the vehicle data link connector located under the steering column.
- 5. Place the ignition in the "**RUN**" position.
- 6. Open the wiTECH Diagnostic application.
- 7. Starting at the "Select Tool" screen, select the row/tool for the wiPOD device you are using.
- 8. Enter your "User id" and "Password", then select "OK".
- 9. Select the "Next" tab at the bottom of the screen.
- 10. From the "Vehicle View" screen, click on the "EVCU" icon.
- 11. From the "EVCU View" screen select the "Flash" tab. Compare the "Current ECU Flash Number" with the "New Part Number" listed on the "sort table". If the "Current ECU Flash Number" is the same as the "New Part Number" continue to Step 17. If the part numbers are not the same, continue with Step 12.

Service Procedure (Continued)

- 12. With the cursor over the desired flash file, click the small green arrow button on the right side of the screen.
- 13. From the "**ECU Flash**" screen follow the wiTECH screen instructions to complete the flash.
- 14. Once the flash is complete click the "**OK**" button on the "**ECU Flash**" screen.
- 15. Select the "Clear Stored DTC's" button.
- 16. From the "EVCU View" screen, select the "Flash" tab. Compare the "Current ECU Flash Number" with the "New Part Number" listed on the "sort table". If the "Current ECU Flash Number" is the same as the "New Part Number" the flash is complete. Continue with Step 17. If the part numbers are not the same, repeat Steps 10 through 15.
 - NOTE: If there are other modules that require reprogramming, refer to the appropriate Service Bulletin for reprogramming procedures, labor operation numbers, and time allowances. Do not return the vehicle to the customer until all modules are at the latest software level.
- 17. Turn the ignition to the "**OFF**" position.
- 18. Remove the wiTECH micro pod II and battery charger from the vehicle.
- 19. Install the plastic engine cover.
- 20. Close the hood.
- 21. Return the vehicle to the customer.

Complete Proof of Correction Form for California Residents

This recall is subject to the <u>State of California Registration Renewal/Emissions</u> <u>Recall Enforcement Program</u>. Complete a Vehicle Emission Recall Proof of Correction Form (<u>Form No. 81-016-1053</u>) and <u>supply it to vehicle owners residing in the state of California</u> for proof that this recall has been performed when they renew the vehicle registration.

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 submitted will be used by FCA to record recall service completions and provide studio payments.

Use <u>one</u> of the following labor operation numbers and time allowances:

	Labor Operation	Time
	Number	Allowance
Update previously performed	18-R2-01-81	0.2 hours
Reprogram EVCU with new software	18-R2-01-82	0.2 hours

Add the cost of the recall parts package plus applicable studio allowance to your claim.

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

Studio 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 studios. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

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

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

GRS provides involved studios 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 studio'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.

Studios <u>must</u> perform this repair on all unsold vehicles <u>before</u> retail delivery. Studios 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