



Revision 1 July 2023

Dealer Service Instructions for:

Emissions Recall Y43 Particulate Matter Sensor

***NOTE: Inspect step added at A. Install Particulate Matter Sensor Procedure.
New supporting LOPs added.***

Remedy Available

**2021 - 2022 (DD) Ram 3500 Cab Chassis
(DP) Ram 4500/5500 Cab Chassis**

NOTE: This recall applies only to the above vehicles equipped with a 6.7L Cummins Diesel engine (sales codes ETN).

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

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Dealers should complete this campaign 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

The Particulate Matter (PM) Sensor on about 21,000 of the above vehicles may not have been installed during the manufacturing process which was in accordance with the Memorandum of Understanding from the California Air Resource Board.

Repair

Inspect for a missing PM sensor. Install PM Sensor and module, then reprogram the PCM with calibration Software and install an authorized modifications label.

Parts Information

<u>Part Number</u>	<u>Description</u>
CERNY431AA	Sensor, Particulate Matter
04275086AE	Authorized Modification (Label)
CERNY433AA	Nut (2 required)

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
- NPN Heat gun or equivalent
- NPN Plastic blade tool or trim stick

Service Procedure

A. Install Particulate Matter Sensor Procedure

1. Inspect for PM sensor. If present, proceed to **B. Reprogram the PCM.**
2. Disconnect the Intelligent Battery Sensor (IBS) wire harness connector.

NOTE: Failure to disconnect the IBS wire harness connector can lead to damage of the IBS wire harness connector.

3. Loosen the ground terminal nut and remove the negative battery cable(s) with IBS from the battery and isolate it.
4. Raise and support the vehicle.
5. Remove the plug from the exhaust pipe (Figure 1).

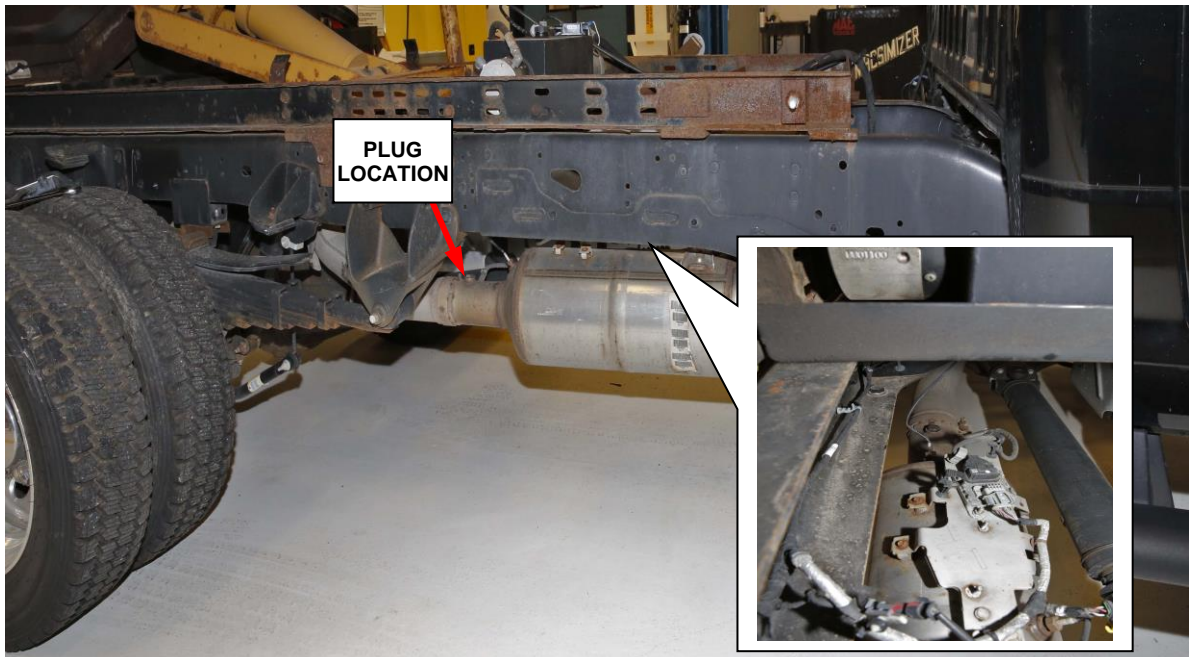


Figure 1 – Exhaust Plug

Service Procedure [Continued]

6. Install the Particulate Matter (PM) sensor module and tighten the nuts securely (Figure 2).

7. Install the Particulate Matter (PM) sensor and tighten to 50 N·m (37ft. lbs.).

8. Route the PM sensor wire through the retainers (Figure 2).

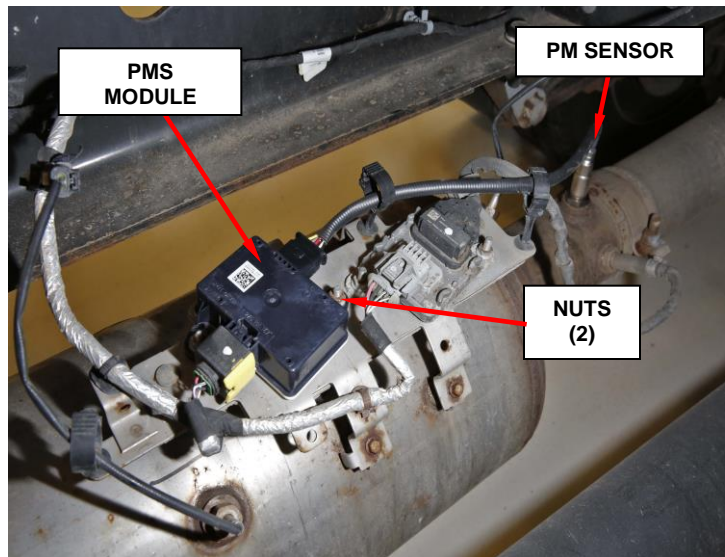


Figure 2 – PMS Module

9. Remove support and lower the vehicle.

10. Install the negative battery cable with IBS to the negative post and tighten to 7N·m (63In. lbs.).

11. Connect the IBS wire harness connector.

12. Proceed to section **B. Reprogram the PCM Procedure.**

Service Procedure [Continued]

B. Reprogramming the PCM Procedure

CAUTION: Do not interrupt the software update process in any way once it has begun. It may cause permanent damage to the PCM which will require replacement.

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.

1. Open the hood. 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.

NOTE: Use an accurate stand-alone voltmeter. The battery charger volt meter 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.

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**” and “**Password**” and your “**Dealer Code**”, then select “**Sign In**” at the bottom of the screen. Click “**Accept**”.
6. From the “**Vehicle Selection**” screen, select the vehicle to be updated.
7. Using the wiTECH tool or the cluster display record the Oil Life percentage.

Service Procedure [Continued]

8. From the “**Action Items**” screen, select the “**Topology**” tab.
9. From the “**Topology**” tab, select the “**PCM**” module icon.
10. From the “**Flash**” tab, compare the “**Current Electronic Control Unit (ECU) Part Number**” with the “**New ECU Part Number**” listed.
 - If the “**Current ECU part Number**” is the same as the “**New Part Number**”, proceed to **Step 19**.
 - If the “**Current ECU part Number**” is NOT the same as the “**New Part Number**”, continue with **Step 11**.
11. From the PCM tab, select the PCM flash part number. Read the flash special instructions page. Select “**OK**” to continue.
12. From the flash ECU agreement page, agree to terms by checking the box.
13. Select “**Flash ECU**” and then follow the wiTECH screen instructions to complete the flash.
14. Confirm the software is at the latest available calibration level.
15. Is the vehicle equipped with an 68RFE automatic transmission?
 - If **YES**, proceed to Step 16.
 - If **NO**, proceed to Step 17.
16. Perform the transmission “**Quicklearn**” procedure, Follow the detailed service procedure select “**TCM**”.
17. Click “**View DTCs**”, select “**Clear All DTCs**”.
18. Using wiTECH, perform the “Oil Life Restore” procedure located in the ECM “Misc. Functions” tab.
19. Remove the wiTECH micro pod II from the vehicle, disconnect the battery charger from the vehicle.
20. Proceed to section **C. Install the Authorized Modifications Label**.

Service Procedure [Continued]

C. Install the Authorized Modifications Label

1. Type or print (with a ballpoint pen) the necessary information shown in Figure 3 onto the Authorized Modifications Label.
2. Raise the hood and locate the VECI label (Figure 4)
3. Attach the authorized modifications label near the VECI label (Figure 4).

Chrysler Group LLC	AUTHORIZED MODIFICATIONS	THESE MODIFICATIONS HAVE BEEN APPROVED AS APPROPRIATE BY EPA AND CARB.
THE FOLLOWING MODIFICATIONS HAVE BEEN MADE:		
CHANGE AUTHORITY	DEALER CODE	DATE
RECALL	XXXXX	XX / XX / XXXX
04275086AD		

Figure 3 – Authorized Mod, Label



Figure 4 – VECI Label Location

3. For State of California Residents complete section D. **Complete Proof of Correction Form for California Residents.**

Service Procedure [Continued]

D. Complete Proof of Correction Form for California Residents:

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

Process Steps to obtain the California Proof of Correction form:

- a. Access the “**DealerCONNECT**” website.
 - b. Select the “**Service**” tab.
 - c. Under the “**Publications**” heading, select the “**ePublishing**” link.
 - d. Sign in using your **Dealer Code** and **Password**.
 - e. Select the “**Proof of Correction form**”.
4. Return the vehicle to the customer.

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
Install PM sensor and reprogram PCM Install Authorized Modifications Label (68RFT Transmission Equipped)	25-Y4-31-82	0.8 hours
Install PM sensor and reprogram PCM Install Authorized Modifications Label (Aisin Transmission Equipped)	25-Y4-31-83	0.6 hours
PM sensor present, reprogram PCM, Quicklearn Install Authorized Modifications Label (68RFT Transmission Equipped)	25-Y4-31-84	0.5 hours
PM sensor present, reprogram PCM Install Authorized Modifications Label (Aisin Transmission Equipped)	25-Y4-31-85	0.5 hours

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 updated VIN list of their incomplete 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 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.

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,

[Model Year and Model]

VIN XXXXXXXXXXXXXXXXXXXX

Y43

LOGO

VEHICLE PICTURE

YOUR SCHEDULING OPTIONS

1. RECOMMENDED OPTION

Call your authorized Chrysler / Dodge / Jeep® / RAM BusinessLink / 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 Emissions Recall
Y43

IMPORTANT EMISSIONS RECALL

Particulate Matter Sensor

Dear [Name],

We are recommending the following improvements be performed on certain [2021 – 2022 Model Year (DD) Ram 3500 Cab Chassis and (DP) Ram 4500/500 Cab Chassis] trucks equipped with a 6.7L Cummins Diesel engine.

WHY DOES MY VEHICLE NEED REPAIRS?

The Particulate Matter Sensor and Module on your vehicle ^[1] may not have been installed during the manufacturing process which was in accordance with the Memorandum of Understanding from the California Air Resource Board.

HOW DO I RESOLVE THIS IMPORTANT EMISSIONS ISSUE?

FCA will repair your vehicle free of charge (parts and labor). To do this, your dealer will inspect and if necessary, install the Particulate Matter (PM) sensor and module, reprogram the Powertrain Control Module (PCM) and attach an authorized modifications label. The Diesel Particulate Filter will be covered for a 12-month warranty period with unlimited mileage from the time of the PM sensor installation. The estimated repair time is about 1 hour. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit, which 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 FREE REPAIR,
CALL YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY**

CALIFORNIA RESIDENTS

The State of California requires the completion of this emission recall repair prior to vehicle registration renewal. Your dealer will provide you with a Vehicle Emission Recall Proof of Correction Form after the Emission Recall service is performed. Be sure to save this form since the California Department of Motor Vehicles may require that you supply it as proof that the Emission Recall has been performed.

In order to ensure your full protection under the emissions warranty provisions, it is recommended that you have your vehicle serviced as soon as possible. Failure to do so could be determined as lack of proper maintenance of your vehicle.

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. ^[2] 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 satisfaction. 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] 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.