



Revision (1) June 2021

Dealer Service Instructions for:

Safety Recall Y21 / NHTSA 21V-439 Powertrain Control Module Software

NOTE: The last bullet point on page 9 of this document was revised for clarity.

Remedy Available

2019 - 2020 (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 Turbo Diesel Engine (sales code ETN, ETK, ETL, ETM).

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

The Powertrain Control Module (PCM) on about 34,000 of the above vehicles may have an oil life monitor strategy that does not provide adequate warning of oil consumption which may allow engine oil volume to fall below an acceptable level. Low oil volume in the engine can cause a lack of oil film on the main bearings, deteriorating the bearing which can result in engine damage, which may puncture the engine block and may lead to a vehicle fire which increases the risk of injury to occupants and persons outside the vehicle, as well as property damage.

Repair

Reprogram the Powertrain Control Module (PCM) follow section **A. Inspection Procedure** below before reprogramming the PCM.

NOTE: You may be presented with two calibration choices when reprogramming the PCM. Please follow the inspection steps closely to avoid choosing the incorrect calibration. Choosing the incorrect calibration will result in an undesirable noise from the High Pressure Fuel Pump, requiring the PCM to be reprogrammed again with the correct calibration.

NOTE: All known FCA customers involved in this recall have been mailed information regarding the Oil Change Indicator System. Please print the last page of this document and provide it to the customer. This document is intended to explain the remedy and potential effects it may have on the vehicle that the customer may notice after the recall has been completed.

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

Inspection Procedure

A. Inspection Procedure

The <u>fuel injection pump must be inspected</u> to determine which design pump is installed on the vehicle. Older design pumps have an Asymmetrical design internal cam. The newer design pumps have a Symmetrical design internal cam. The design of the pump will determine which calibration will need to be programmed into the PCM. From outward appearance both pumps look identical, with the exception of specific identification marks machined into the body of the pump.

- 1. Inspect the fuel injection pump to see which pump the vehicle has.
- ➤ Vehicles with the new style **Symmetrical** pump will have one large single dot embossed in the pump housing (Figure 1).



Figure 1 – Symmetrical Fuel Pump

Inspection Procedure [Continued]

- For vehicles equipped with a **Symmetrical** pump, choose the calibration labeled **Symmetric**, or **Sym Pump** (Figure 1).
- ➤ Vehicles with the old style **Asymmetrical** pump will have multiple dots embossed in the pump housing (Figure 2).
- For vehicles with an **Asymmetrical** pump, choose the calibration labeled **Asymmetric** or **Asym Pump** (Figure 2).

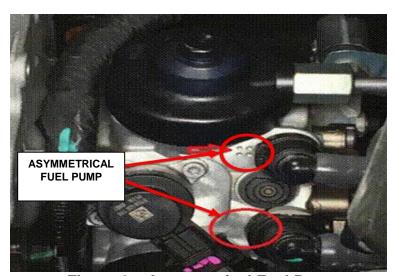


Figure 2 – Asymmetrical Fuel Pump

2. Proceed to section **B. Reprogramming the PCM Procedure**

Service Procedure

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. It is highly recommended to have a new generic PCM unit available at the workshop before starting the Repair 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.

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 15.
 - ➤ 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.

Service Procedure [Continued]

- 19. Remove the wiTECH from the vehicle, disconnect the battery charger from the vehicle.
- 20. 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 one of the following labor operation numbers and time allowances:

	Labor Operation	Time
	<u>Number</u>	Allowance
Inspect PCM Software Level	18-Y2-11-81	0.2 hours
Inspect and Reprogram PCM with Sym Pump	18-Y2-11-82	0.4 hours
Inspect and Reprogram PCM with Asym Pump	18-Y2-11-83	0.4 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.

Dealers are encouraged to consider alternative scheduling and servicing approaches for this recall. This repair does not require hoists or other full service facility special equipment and is a Chrysler Mobile Service approved repair.

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.



IMPORTANT SAFETY RECALL Vehicle information

Dear FCA vehicle owner:

FCA would like to provide the following information relating to enhancements in how your vehicle's system will decide oil change intervals to help increase the life of your engine. Please read and follow this important information which is critical to maintain your vehicle's engine life.

The information below applies to your vehicle once the safety recall **Y21**, has been completed.

OIL CHANGE INDICATOR SYSTEM — CUMMINS® DIESEL Your vehicle is equipped with an engine oil change indicator system. This system will alert you when it is time to change your engine oil by displaying the words "Oil Change Due" in your instrument cluster display. The new engine oil change indicator system adds duty cycle tracking, which means the engine oil change interval may fluctuate depending on your personal driving style or workload of your truck. Failure to change the engine oil per the maintenance schedule or the oil change indicator system's prompt can result in internal engine damage. An authorized dealer will reset the oil change indicator message after completing the scheduled oil change. If a scheduled oil change is performed by someone other than an authorized dealer, please reference the owner's manual for instructions.

Replace the engine oil and oil filter every 15,000 miles (24,000 km) or 12 months, or sooner if prompted by the oil change indicator system. Under no circumstances should oil change intervals exceed 15,000 miles (24,000 km) or 12 months, whichever comes first. NOTE:

- Under no circumstances should oil change intervals exceed 15,000 miles (24,000 km) or 12 months or 500 hours, whichever comes first.
- It is recommended that every 3,000 miles (4, 800 km), check the engine oil level at least 30 minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.
- Severe service (high ambient temperature, short trips, heavy loading, trailer towing, off-road, or law enforcement use) may reduce the miles between oil changes.

This notice applies to your vehicle,

Y21/NHTSA 21V-439

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 Safety Recall Y21.

IMPORTANT SAFETY RECALL

Powertrain Control Module Software

Dear [Name],

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

FCA US has decided that a defect, which relates to motor vehicle safety, exists in certain [2019 – 2020 Model Year (DD) Ram 3500 Cab Chassis and (DP) Ram 4500/5500 Cab Chassis] trucks.

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?

The Powertrain Control Module in your vehicle [1] may have an oil life monitor strategy that does not provide adequate warning of oil consumption which may allow engine oil volume to fall below an acceptable level. Low oil volume in the engine can cause a lack of oil film on the main bearings, deteriorating the bearing which can result in engine damage, which may puncture the engine block and may lead to a vehicle fire which increases the risk of injury to occupants and persons outside the vehicle, as well as property damage.

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 reprogram the powertrain control module. The estimated repair time is about half an 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, RAM OR BUSINESSLINK 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.



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Customer Assistance/Field Operations FCA US LLC