

# SAFETY RECALL

NORTH AMERICA

## Front Wheel Bearing Encoder Ring



Reference: 97B / NHTSA 24V-794

FCA US LLC



**RAM**

Inspection available for

2025 (DT) RAM 1500 Pickup – Unsold Vehicles

Remedy not available for

2025 (DT) RAM 1500 Pickup

Template Version 1.0

Revision	Edition	Detail
0	October 2024	Initial Version.

### SYMPTOM DESCRIPTION

The front wheel bearing on about 38,140 of the above vehicles may have been built with damaged encoder rings causing a loss of wheel speed signal (WSS) which may disable Electronic Stability Control (ESC). Failure of the ESC system can, in certain driving conditions, cause a vehicle crash without prior warning.

The condition described above does not comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 571.126 S5.1.2 ESC Functionality requires that the ESC system "Is operational during all phases of driving including acceleration, coasting, and deceleration (including braking) [ ... ]." Suspect vehicles may experience the ESC system being disabled.

### SCOPE

This recall applies only to the above vehicles.

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. Violation of this requirement by a dealer could result in a civil penalty of up to \$27,168 per vehicle.
- Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this recall service on these vehicles before retail delivery.
- Dealers should also perform this recall on vehicles in for service.

Involved vehicles can be determined by using the VIP inquiry process.

### REPAIR TO BE PERFORMED

Inspect and, if necessary, replace the front wheel bearing hub assembly.

**Only the inspection is available at this time. The remedy is not currently available. Once available, this document will be updated and dealers will be notified of the launch of the remedy by way of established communication methods. The remedy is estimated to be available in 4th Quarter of 2024.**

### COMPLETION REPORTING / 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 Description	Number	Hrs
Inspect for DTCs and Road Test – Failed, hold vehicle for repair, recall remains open	05-97-BL-80	0.5
Inspect for DTCs and Road Test – Passed, release vehicle for sale and close recall	05-97-B1-81	0.5

### PARTS INFORMATION

**The parts for this recall are not yet available. If the vehicle fails the test procedures below, it is to be held back from sale until recall parts are released.**

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### SPECIAL TOOLS

Number	Description
NPN	wiTECH MicroPod II / MDP
NPN	Laptop Computer
NPN	wiTECH Software

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.

### 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 / SERVICE SCHEDULING

Once the remedy is available, all involved vehicle owners known to FCA will be notified of the service requirement by first class mail.

### 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.** Once the remedy is available, 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

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## Service Procedure

### A. Wheel Speed Sensor Test

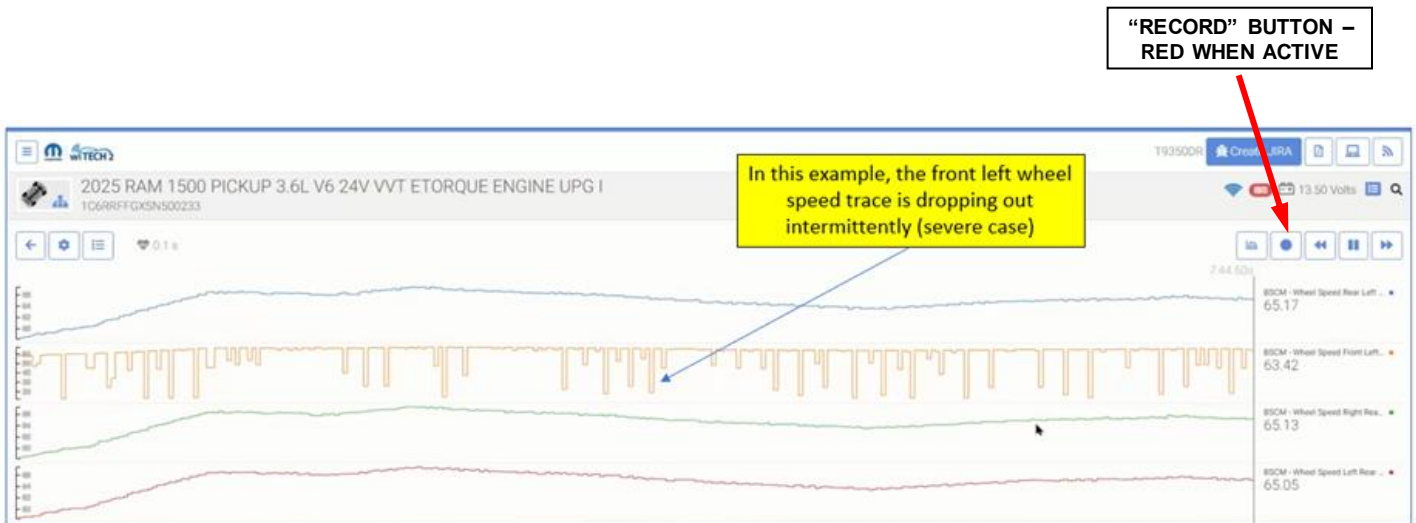
1. Connect the wiTECH MDP to the vehicle data link connector.
  2. Place the ignition in the "RUN" position.
  3. Open the wiTECH 2.0 website.
  4. Enter your "User id" and "Password" and your "Dealer Code", then select "Sign In" at the bottom of the screen. Click "Accept".
  5. From the "Vehicle Selection" screen, select the vehicle you are working on.
  6. Check for DTCs **C0504 Left Front Wheel Speed Sensor A Intermittent/Erratic** or **C050A Right Front Wheel Speed Sensor A Intermittent/Erratic**.
    - No DTCs set: Continue diagnosis with a road test. **Go to Step 8.**
    - One DTC set: Record the DTC. Continue diagnosis with a road test. **Go to Step 8.**
    - Both DTCs set: No further diagnosis required. Replace both front Hub and Bearing assemblies. Hold the vehicle until a remedy is available.
  7. Clear any set DTCs.
  8. Using wiTECH, set up a graph with each wheel speed sensor reading.
    - Using wiTECH, select the "BSCM" from the topology tab.
    - Once selected, click on the "Data" display tab.
    - Use the search box to search for "Wheel Speed".
    - Check the box for each wheel speed sensor (not bussed).
    - Select "Record" button (Figure 1) then immediately click the space bar on the keyboard. The space bar now controls stop/start for recording.
- NOTE: wiTECH will record data for approximately 1 minute. The data is automatically saved in recording viewer and can be viewed as a graph after the test drive.**
9. Perform a short test drive with speeds up to and including highway speeds. Record data at three different speeds including one at highway speeds, up to 70mph if possible.
  10. After the test drive, review the graph for signs of a wheel speed signal that is dropping out. See Figure 1.

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**Figure 1 – Wheel Speed Sensor Graph**

11. If you notice any front wheel speed trace exhibiting an erratic signal or one that drops intermittently at any time, that specific front wheel hub and bearing must be replaced. Hold the vehicle until a remedy is available.
12. Check for DTCs **C0504 Left Front Wheel Speed Sensor A Intermittent/Erratic** or **C050A Right Front Wheel Speed Sensor A Intermittent/Erratic**.
  - No DTCs set: Vehicle has passed inspection.
  - One DTC set: Replace the wheel bearing for which the DTC is set. Hold the vehicle until a remedy is available.
  - Both DTCs set: Replace both front hub and bearing assemblies. Hold the vehicle until a remedy is available.
13. If all wheel speed sensors are operating and visually smooth, no further action is required.
14. Clear DTCs. Place the ignition in the **“OFF”** position and then remove the wiTECH MDP device from the vehicle.