**NORTH AMERICA** 

## **Gear Position Sensor**

Reference: 93A / NHTSA 23E-069 FCA US LLC



Remedy available for:

Certain Mopar Gear Position Sensors part number 68331278AB also Mopar Transmission Assemblies 05106257AG and 05106257AF intended for use on 2018-2024 model year (JL) Jeep® Wrangler and 2020-2023 model year (JT) Jeep® Gladiator vehicles equipped with a manual transmission.

Revision	Edition	Detail	Template Version 1.0
0	November 2023	Initial Version.	

#### SYMPTOM DESCRIPTION

Some Gear Position Sensors / All Gear Sensors (AGSs) may have been improperly manufactured and some manual transmission assemblies may have been built with an improperly manufactured Gear Position Sensor / AGS which may cause the reverse lights and back-up camera to be disabled. When installed in a vehicle, suspect Gear Position Sensors / AGSs may not display the rearview image or activate the backup lamps during a backing event. The vehicle operator will notice that the rearview image is not displayed if attempting to reference the image while backing. If this warning is not heeded, backing without verifying it is safe to do so could lead to an increased risk of injury to people outside the vehicle. Failure to illuminate the backup lamps may not adequately illuminate the roadway behind the vehicle or indicate to other drivers or pedestrians the intention to backup, which can cause a crash without prior warning.

The condition described above does not comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 571.111 S6.2.6 requires that "The rear visibility system default to the rearview image being visible and meet the requirements of FMVSS No. 571.111 S6.2.1 (field of view) and S6.2.2 (image size) at the beginning of each backing event, regardless of any modifications to the field of view that the driver had previously selected...". FMVSS No. 571.108 requires that backup lamps "Must be activated when the ignition switch is energized and reverse gear is engaged."

#### REPAIR TO BE PERFORMED

If the Gear Position Sensor / AGS is not installed, inspect the Lot number. If the sensor is suspect, repurchase the sensor and manual transmission assemblies equipped with suspect Gear Position Sensors / AGSs.

or

If the Gear Position Sensor / AGS is installed, inspect the Lot number. Then replace suspect Gear Position Sensors / AGSs installed in the vehicle.

#### PARTS INFORMATION

For on vehicle sensor replacement ONLY:

Part No.	Qty.	Part Name
CSAP92A1AA	1	Gear Position Sensor Kit
Kit Includes	1	Gear Position Sensor
	2	Screws - Sensor

For on vehicle reinstallation of a good sensor:

Part No.	Qty.	Part Name
68331277AB	2	Screws - Sensor

## **PARTS RETURN**

No parts return required for this campaign.

Render the suspect gear position sensor unusable and discard.

## SPECIAL TOOLS

For on vehicle replacement ONLY:

Number	Description
NPN	wiTECH MicroPod II / MDP
NPN	Laptop Computer
NPN	wiTECH Software
NPN	Small torque wrench capable of 3 N⋅m (24 In. Lbs.)

NORTH AMERICA

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Reference: 93A / NHTSA 23E-069



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## **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
Off Vehicle - Repurchase Gear Position Sensor	21-93-A1-81	0.0
On Vehicle – Remove Inspect and Install Gear Position Sensor	21-93-A1-82	0.5

Related Operation	Number	\$
Dealership Handling Fee for	95-21-97-50	
Sensor Repurchase		

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 / 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.

## **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.

2/6



Reference: 93A / NHTSA 23E-069 FCA US LLC

## INSPECTION PROCEDURE - GEAR POSITION SENSOR LOT NUMBER

- 1. If the gear position sensor is installed on a vehicle it must first be removed from the vehicle to view the Lot number, follow the Service Procedure removal steps in Section A. Gear Position Sensor Remove and Install.
- 2. Read the 5-digit Lot number on lower left (Figure 1).
- 3. If the Lot number is one of the following the sensor is suspect and must be repurchased or if installed on a vehicle sensor must be replaced:
  - 22042
  - 22043
  - 22076
  - 22077
  - 22187
  - 22207

## Render unusable and DISCARD any suspect sensors.

4. If the Lot number is different than those listed, the sensor is not suspect and may be returned to the customer or reinstalled on the vehicle.

NOTE: If sensor is NOT suspect and is to be reinstalled on a vehicle, NEW screws MUST be used. Old screws are NOT to be reinstalled.



Figure 1 – Gear Position Sensor Inspect Lot Number



Reference: 93A / NHTSA 23E-069 FCA US LLC

# SERVICE PROCEDURE – FOR ON VEHICLE GEAR POSITION SENSORS ONLY A. Gear Position Sensor Remove and Install

- 1. Ensure the ignition switch is in the OFF position.
- 2. Raise and support the vehicle.
- 3. Clean the area surrounding the gear position sensor removing any dirt or debris.
- 4. Disconnect the gear position sensor wire harness connector (Figure 2).
- 5. Remove and **DISCARD** the two bolts securing the gear position sensor to the transmission then remove the gear position sensor from the transmission (Figure 2).
- Inspect the gear position sensor lot number as described on the previous page of this recall document.
  - If the gear position sensor lot number is NOT suspect, it may be reinstalled.
  - If the gear position sensor lot number is suspect, render it unusable and DISCARD.

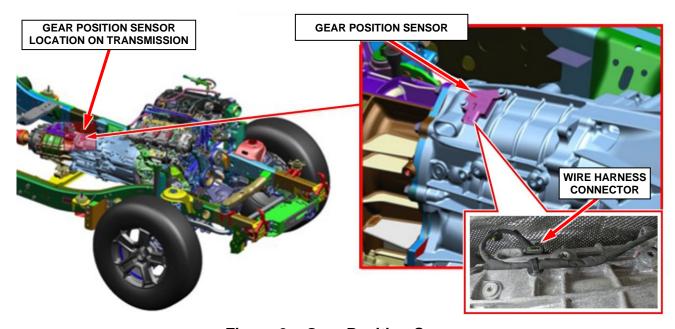


Figure 2 – Gear Position Sensor

7. Position the **NEW** or **Not-Suspect** gear position sensor to the transmission, then install the gear position sensor using **NEW** bolts and tighten to 3 N·m (24 In. Lbs.) (Figure 2).

CAUTION: Do not overtighten the gear position sensor bolts.

8. Connect the gear position sensor wire harness connector (Figure 2).

NORTH AMERICA

## **Gear Position Sensor**



Reference: 93A / NHTSA 23E-069 FCA US LLC

- 9. Lower the vehicle.
- 10. Was the gear position sensor reinstalled or replaced?
  - Replaced: Using wiTECH, perform the Learn Gear Shift Sensor Routine steps in Section B of this service procedure.
  - **Reinstalled**: Verify Reverse lamp operation then return the vehicle to the customer or inventory.

5/6

NORTH AMERICA

**Gear Position Sensor** 



**FCA US LLC** 

## **B.** Learn Gear Shift Sensor Routine

Reference: 93A / NHTSA 23E-069

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 IPC or PCM is aborted or interrupted, repeat the procedure. The IPC and PCM software must be at the latest software calibration level after completing this recall.

 Open the hood and install a battery charger. 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 wiTECH operation. 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 appropriate vehicle.

NOTE: Technician must be seated in the vehicle driver seat in order to run the following routine.

- 7. From the "PCM" menu select "Misc Functions", then select the "Learn Gear Shift Sensor" routine, then follow the screen prompts.
- 8. Once the routine had completed, 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.
- 9. Place the ignition in the "OFF" position and then remove the wiTECH micro pod II device from the vehicle.
- 10. Remove the battery charger from the vehicle.
- 11. Verify Reverse lamp operation.
- 12. Returning the vehicle to the customer or inventory.

## 93A/NHTSA 23E-069

#### YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION Call your authorized Chrysler / Dodge / Jeep® / RAM Dealership
- 2. Call the FCA Recall Assistance Center at 1-800-853-1403. agent can confirm part availability and help schedule an appointment

## DEALERSHIP INSTRUCTIONS

Please reference Safety Recall 93A.

## IMPORTANT SAFETY RECALL

#### **Gear Position Sensor**

Dear [Name],

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

FCA US LLC, has decided that certain Mopar Gear Position Sensors part number 68331278AB also Mopar Transmission Assemblies 05106257AG and 05106257AF intended for use on [2018 - 2024 model year (JL) Jeep® Wrangler and 2020 - 2023 model year (JT) Jeep® Gladiator vehicles equipped with a manual transmission fail to conform to Federal Motor Vehicle Safety Standard (FMVSS) No. 111 - Rear visibility and 108 - Lamps, reflective devices, and associated equipment.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

#### WHY DOES MY ITEM OF EOUIPMENT NEED REPAIRS?

FCA US LLC, records indicate that you may have purchased a MOPAR Gear Position Sensor or transmission assembly for your vehicle [1]. Some Gear Position Sensors / All Gear Sensors (AGSs) may have been improperly manufactured and some manual transmission assemblies may have been built with an improperly manufactured Gear Position Sensor / AGS which may cause the reverse lights and back-up camera to be disabled. When installed in a vehicle, suspect Gear Position Sensors / AGSs may not display the rearview image or activate the backup lamps during a backing event. The vehicle operator will notice that the rearview image is not displayed if attempting to reference the image while backing. If this warning is not heeded, backing without verifying it is safe to do so could lead to an increased risk of injury to people outside the vehicle. Failure to illuminate the backup lamps may not adequately illuminate the roadway behind the vehicle or indicate to other drivers or pedestrians the intention to backup, which can cause a crash without prior warning.

The condition described above does not comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 571.111 S6.2.6 requires that "The rear visibility system default to the rearview image being visible and meet the requirements of FMVSS No. 571.111 S6.2.1 (field of view) and S6.2.2 (image size) at the beginning of each backing event, regardless of any modifications to the field of view that the driver had previously selected...". FMVSS No. 571.108 requires that backup lamps "Must be activated when the ignition switch is energized and reverse gear is engaged."

#### HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA US will repurchase your suspect Gear Position Sensors / AGSs and manual transmission assemblies equipped with suspect Gear Position Sensors / AGSs [2] free of charge (parts and labor). To do this, your dealer will repurchase the component or replace the gear position sensor if installed in a vehicle. We recommend that you schedule a service appointment to minimize your inconvenience. Please bring your gear position sensor or manual transmission assembly and this letter with you to your dealership.

## TO SCHEDULE YOUR FREE REPAIR, CALL YOUR CHRYSLER, DODGE, JEEP OR RAM 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 Fiat Chrysler Automobiles US LLC



# Mr. Mrs. Customer 1234 Main Street Hometown, MI 48371

<sup>[1]</sup> 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.

<sup>[2]</sup> 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.

<sup>[3]</sup> 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.