Reference: 27B / NHTSA 24V-196



FCA US LLC

Jee	Remedy avail	able for	
	2016 (JK) Jee	ep® Wrangler	
Revision	Edition	Detail	Template Version 1.0
0	March 2024	Initial Version.	

SYMPTOM DESCRIPTION

The airbag clockspring on about 1,831 of the above vehicles may have been built with a steering column clockspring that may ingest dust if the vehicle is subjected to dusty environments. Dust inside the clockspring could compromise airbag circuit(s), cause illumination of the airbag warning light and/or a non-deployment of the driver airbag during a crash.

SCOPE

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

The steering column clockspring, steering wheel back cover, and steering column shrouds must be replaced.

ALTERNATE TRANSPORTATION

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if the vehicle must be held overnight.

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
Replace clockspring, steering wheel back cover, and steering column shrouds	19-27-B1-82	0.8

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

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

PARTS INFORMATION

Part No.	Qty.	Part Name
CBAES402AB	1	Clockspring Installation
		Package
Each package contains the following components:		
	1	Shroud, Upper
	1	Shroud, Lower
	1	Cover, Steering Wheel Back
	1	Screw, Hex Flange

Part No.	Qty.	Part Name
CBAES404AB	1	Clockspring Assembly

PARTS RETURN

No parts return required for this campaign.

Render the recalled clockspring unusable and discard.

Strictly respect STELLANTIS Group safety, cleanliness, and environmental instructions for any vehicle service.	
Document exclusively reserved for dealer information. Internal distribution to be ensured by dealer.	
Reproduction forbidden without the written agreement of STELLANTIS Group. (C) 2024 STELLANTIS Group. All Rights Reserved	(tdb)

Reference: 27B / NHTSA 24V-196



FCA US LLC

SPECIAL TOOLS

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

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.

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.

(tdb)

Reference: 27B / NHTSA 24V-196



FCA US LLC

SERVICE PROCEDURE

Disconnect WARNING: TO AVOID SERIOUS OR FATAL INJURY, DISABLE THE SUPPLEMENTAL RESTRAINT SYSTEM (SRS) BEFORE ATTEMPTING THIS SERVICE PROCEDURE. DISCONNECT AND ISOLATE THE BATTERY NEGATIVE (GROUND) CABLE, THEN WAIT TWO MINUTES FOR THE SYSTEM CAPACITOR TO DISCHARGE BEFORE PERFORMING FURTHER SERVICE. THIS IS THE ONLY SURE WAY TO DISABLE THE SRS. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT.

NOTE: A service replacement clockspring is shipped with the clockspring pre centered and with a molded plastic locking pin installed. This locking pin should not be removed until the steering wheel has been installed on the steering column. If the locking pin is removed before the steering wheel is installed, the clockspring centering procedure must be performed.

NOTE: When a clockspring is installed into a vehicle without properly centering and locking the entire steering system, the Steering Angle Sensor (SAS) data does not agree with the true position of the steering system and causes the Electronic Stability Program (ESP) system to shut down. This may also damage the clockspring without any immediate malfunction. The SAS does not require calibration.

NOTE: Determining if the clockspring/SAS is centered is also possible electrically using the diagnostic scan tool. Steering wheel position is displayed as ANGLE with a range of up to 900 degrees. Refer to the appropriate menu item on the diagnostic scan tool.

NOTE: Before starting this procedure, be certain to turn the steering wheel until the front wheels are in the straight-ahead position and that the entire steering system is locked or inhibited from rotation.

(tdb)

Reference: 27B / NHTSA 24V-196



A. Airbag Clockspring Replacement

- 1. Place the front wheels in the straight ahead position and inhibit the steering column shaft from rotation.
- 2. Disconnect and isolate the battery negative cable.

WARNING: WAIT TWO MINUTES FOR THE SYSTEM CAPACITOR TO DISCHARGE BEFORE PERFORMING FURTHER DIAGNOSIS OR SERVICE.

- 3. Remove and save the driver airbag module retaining screws.
- 4. Separate the driver airbag module from the steering wheel and disconnect the two airbag electrical connectors (Figure 1) and the one horn electrical connector. Then set the driver airbag module aside.
- 5. Remove and discard the steering wheel retaining bolt from the steering shaft (Figure 2).
- 6. Remove and save the steering wheel assembly.
- 7. Move the steering column to the fully lowered position and leave the tilt release lever in the released (down) position.



Figure 1 – Airbag Module Electrical Connectors



Figure 2 – Steering Wheel Retaining Bolt

Reference: 27B / NHTSA 24V-196





8. Remove and discard the upper and lower steering column shrouds from the steering column (Figure 3).



9. Remove and save the right and left multi-function switches (Figure 4).

Figure 3 – Upper and Lower Steering Column Shrouds



Figure 4 – Right and Left Multi-Function Switches

 Strictly respect STELLANTIS Group safety, cleanliness, and environmental instructions for any vehicle service.

 Document exclusively reserved for dealer information. Internal distribution to be ensured by dealer.

 Reproduction forbidden without the written agreement of STELLANTIS Group. (C) 2024 STELLANTIS Group. All Rights Reserved

 (tdb)

Reference: 27B / NHTSA 24V-196



FCA US LLC

- 10. Remove the three screws that secure the clockspring to the steering column lock housing.
- 11. Pull the clockspring away from the steering column lock housing enough to access and disconnect the three instrument panel wire harness electrical connectors from the receptacles on the back of the clockspring (Figure 5).
- 12. Remove the clockspring from the steering column.



- Figure 5 Clockspring Electrical Connections
- 13. Carefully slide the new clockspring down over the steering column upper shaft far enough to reconnect the three instrument panel wire harness connectors to the receptacles on the back of the clockspring case.
- 14. Connect the three instrument panel wire harness electrical connectors to the receptacles on the back of the clockspring (Figure 5).
- 15. Position the clockspring onto the steering column lock housing.

(tdb)

Reference: 27B / NHTSA 24V-196



- 16. Install and tighten the three screws that secure the clockspring to the steering column lock housing in the following sequence:
 - ➢ Lower Right
 - > Upper Left
 - > Upper Right

Tighten the screws to 27 in. lbs. (3 N·m).

CAUTION: Improper sequence when tightening the clockspring mounting screws may result in an audible ticking noise as the steering wheel is rotated.

- 17. Place both multi-function switches onto the new clockspring as an assembly and connect the electrical connector.
- Install the left multi-function switch retaining screw. Tighten the screw to 10 in. lbs. (1 N·m) (Figure 6).
- 19. Install the right multi-function switch retaining screw. Tighten the screw to 10 in. lbs. (1 N⋅m).



Figure 6 – Multi-Function Switch Retaining Screw (left side switch shown)

Reference: 27B / NHTSA 24V-196



FCA US LLC

20. Install the new upper and lower steering column shrouds onto the steering column (Figure 7).

21. Move the steering column back to the fully raised position and move the tilt release lever back to the locked (up) position.



Figure 7 – Install Steering Column Shrouds

22. Remove and discard the original steering wheel back cover (Figure 8).



Figure 8 – Steering Wheel Back Cover

Reference: 27B / NHTSA 24V-196



FCA US LLC

23. Remove any burs from the new steering wheel back cover (Figures 9 and 10).

24. Install the new steering wheel back cover to the

original steering wheel (Figure 10).



Figure 9 – Remove any Burs from Opening



Figure 10 – Steering Wheel Back Cover

Strictly respect STELLANTIS Group safety, cleanliness, and environmental instructions for any vehicle service. Document exclusively reserved for dealer information. Internal distribution to be ensured by dealer. Reproduction forbidden without the written agreement of STELLANTIS Group. (C) 2024 STELLANTIS Group. All Rights Reserved (tdb)



Reference: 27B / NHTSA 24V-196

FCA US LLC



Figure 11 – Install New Steering Wheel Retaining Bolt

- 25. Install the steering wheel assembly onto the steering column.
- 26. Install a new steering wheel retaining bolt finger tight (Figure 11).
- 27. Remove and discard the plastic locking pin that secures the clockspring rotor (Figure 11 and 12).



Figure 12 – Remove Clockspring Locking Pin

Strictly respect STELLANTIS Group safety, cleanliness, and environmental instructions for any vehicle service. Document exclusively reserved for dealer information. Internal distribution to be ensured by dealer. Reproduction forbidden without the written agreement of STELLANTIS Group. (C) 2024 STELLANTIS Group. All Rights Reserved

Reference: 27B / NHTSA 24V-196



FCA US LLC

Tighten the new steering wheel retaining bolt to 40 ft. lbs. (54 N⋅m) (Figure 13).

29. Connect the two airbag electrical connectors and the one horn electrical connector to the driver airbag module.

- 30. Install the driver airbag module onto the steering wheel.
- 31. Install the two steering wheel driver airbag module retaining screws. Tighten the screws to 120 in. lbs. (13 N·m).

32. Do not connect the negative battery cable at this time. Continue with Section B. Supplemental Restraint System (SRS) Verification Test.



Figure 13 – Tighten Steering Wheel Retaining Bolt to 40 ft. lbs. (54 N·m)



Reference: 27B / NHTSA 24V-196

B. Supplemental Restraint System (SRS) Verification Test

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. Connect the wiTECH scan tool to the vehicle.
- 2. Turn the ignition switch to the "**ON**" position, exit the vehicle and close the doors.
- 3. <u>If equipped with an Intelligent Battery Sensor (IBS)</u>, connect the IBS connector and connect the battery negative cable.
- 4. Open the wiTECH Diagnostic application.
- 5. Starting at the "Select Tool" screen, select the row/tool for the MicroPod II device you are using, then select "Next".
- 6. Enter your "User id" and "Password", then select "Finish".
- 7. Clear all DTCs in all modules using the wiTECH scan tool.

NOTE: Any active Diagnostic Trouble Codes (DTCs) may require an additional key cycle from "ON" to "OFF" to change DTC status from "active" to "stored".

- 8. Turn the ignition switch to the "**OFF**" position for about 15 seconds, and then back to the "**ON**" position. Observe the airbag indicator in the instrument cluster.
 - The airbag indicator in the instrument cluster should illuminate for six to eight seconds, and then go out. This indicates that the SRS is functioning normally and that the repairs are complete. Turn the ignition to the "OFF" position, remove the MicroPod II and return the vehicle to the customer.
 - If the airbag indicator fails to light or the light and stays ON, there is still an active SRS fault or malfunction. Refer to the appropriate diagnostic information to diagnose the problem.
- 9. Close the hood and remove the wiTECH scan tool from the vehicle.
- 10. Return the vehicle to the customer.