### NORTH AMERICA

#### Serpentine Belt Squeal



#### Reference: 47A

Contractory			
	2022 - 2023 (R	U) Chrysler Pacifica/Voyager	
	•		Template Version 1.8
Revision	Edition	Detail	
0	August 2023	Initial Version.	

#### **SYMPTOM DESCRIPTION**

The serpentine belt on about 8,342 of the above vehicles may squeal due to insufficient belt to pully contact.

#### SCOPE

This campaign applies only to the above vehicles equipped with a 3.6L Hybrid Engine.

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

#### **REPAIR TO BE PERFORMED**

Install the idler pulleys, tensioner, and a new serpentine belt.

#### **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.

#### **DEALER NOTIFICATION**

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification. Use the following labor operation numbers and time allowances:

Labor Description	Number	Hrs
Inspect for serpentine belt configuration	07-47-A1-81	0.2hrs
Install idler pulleys, tensioner and serpentine belt	07-47-A1-82	1.5hrs

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

#### **PARTS INFORMATION**

CCZP47A1AA Part Package

Each package contains the following components:

<u>Quantity</u>	Description
1	Tensioner
2	Idler Pulley
2	Idler Pulley Fastener
2	Bracket Idler Fastener
1	Bracket Idler
1	Bracket Idler Stud Fastener
1	Serpentine Belt
1	Clip, Fir Tree
1	Clip, Stud Mount

#### SPECIAL TOOLS

The following special tools are required to perform this service procedure.

NPN	wiTECH MicroPod II
NPN	Laptop Computer
NPN	wiTECH Software
10084	Cover, Protective
2035100082	Covers, HEV Battery terminal

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#### Reference: 47A Service Procedure

1. Perform Low Voltage Power Down Procedure below.

NOTE: Because the high-voltage battery is used to charge the 12-volt battery via the Auxiliary Power Module (APM), disconnecting the 12-volt battery negative cable may not power down the 12-volt system. The following procedure must be performed before any repairs, disassembly, or testing requiring 12-volt power down are carried out.

NOTE: Even though the high-voltage battery manual service disconnect is removed during the 12-volt Power Down procedure, the 12-volt Power Down procedure will NOT safely and reliably power down the high-voltage system. If any high-voltage components are to be accessed, disconnected or tested, the High-Voltage Power Down procedure must first be carried out.

- a) Using the scan tool, verify there are no stuck contactors DTCs active or stored. If DTCs are present, the High voltage system may not power down properly. Address the DTCs before continuing power down procedure.
- b) Turn the ignition to the OFF position and wait five minutes to allow the high-voltage system to shut down without setting a fault code.
- c) Disconnect the B (+) battery cable from the 12volt Power Distribution Center (PDC) (Figure 1).
- d) Isolate the cable terminal with Cover, Protective 10084 (Figure 1).



Figure 1 – 12-Volt Battery Cable



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#### Reference: 47A Service Procedure [Continued]

- e) Lift the carpet away from the high-voltage MSD floor access cover (Figure 2).
- f) Remove the four screws and remove the high-voltage MSD access cover (Figure 3).
- g) Depress the lever release latch (2) firmly on the MDS.
  With the latch fully depressed, rotate the lever (1) upward.
  The lever will stop at the 45° position (Figure 4).

# NOTE: At this stage, the High Voltage Inter-Lock (HVIL) connection has been broken and the circuit is de-energized.

- Again, depress the locking tab (2) on the MSD and continue to rotate the lever to the end of travel (90° position) (Figure 4).
- i) Pull straight back on the MSD plug lever (1) to disengage and remove the MSD from the receptacle (Figure 4).



Figure 2 – MSD Location

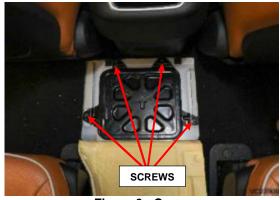


Figure 3 - Cover

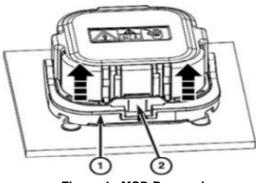


Figure 4 - MSD Removal



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#### Reference: 47A Service Procedure [Continued]

j. Cap the receptacle on the high-voltage battery with the Covers, HEV Battery Terminal 2035100082 to prevent foreign objects from entering (Figure 5).

NOTE: Make sure the location of the highvoltage MSD is always known; after removal, it is best practice to place the high-voltage MSD in a highly visible location.

- 2. Raise and support the vehicle.
- 3. Remove the right front tire and wheel assembly.
- 4. Remove the right wheelhouse splash shield.
- 5. Remove the under-body belly pan.
- 6. Rotate the belt tensioner (1) until it contacts its stop (Figure 6).
- 7. Remove the serpentine belt, then slowly rotate the tensioner into the free position.
- 8. Remove the serpentine belt and DISCARD.
- Install the left idler pully onto the front center of the engine and tighten the bolt to 24N·m (18Ft. Lbs.) (Figure 7).
- Install the right idler pully bracket onto the right side of the engine and tighten the bolt to 24N·m (18Ft. Lbs.) (Figure 7).
- 11. Install the right-side idler pully and tighten the bolt to 24N·m (18Ft. Lbs.) (Figure 7).
- 12. Install the **NEW** belt tensioner and tighten the bolt to 55N·m (41Ft. Lbs.).
- 13. Route the **NEW** serpentine belt around all the pulleys except the idler pulley (Figure 7).

NOTE: When installing the serpentine accessory drive belt, the belt MUST be routed correctly. If not, the engine may overheat due to the water pump rotating in the wrong direction.



Figure 5 – MSD Cover

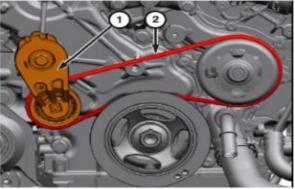


Figure 6 – Belt Tensioner

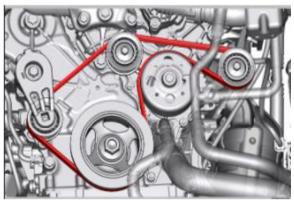


Figure 7 – Serpentine Belt Routing

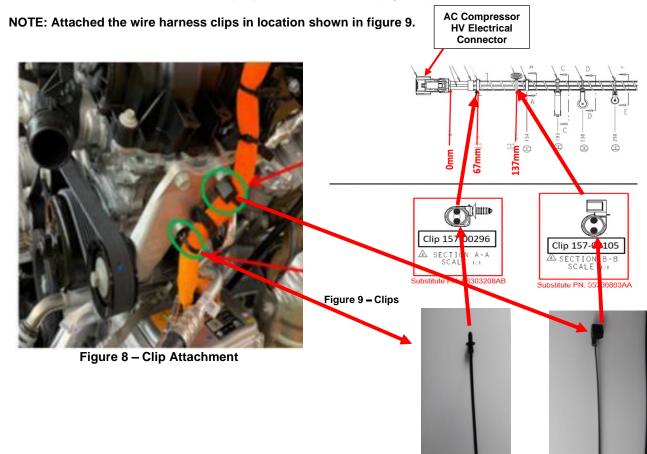
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### Reference: 47A Service Procedure [Continued]

- 14. Rotate the belt tensioner until it contacts its stop position. Route the serpentine belt around the idler and slowly let the tensioner relax. Make sure the belt is properly seated onto all pulleys (Figure 7).
- 15. Measuring from the AC compressor electrical connector install the High Voltage (HV) wire harness clips on to the harness and attach them to the idler pully bracket as shown in (Figure 8).





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#### Reference: 47A Service Procedure [Continued]

- 16. Install the wheelhouse splash shield.
- 17. Install the underbody belly pan.
- 18. Install the tire and wheel assembly tighten the lug nuts to 135N·m (100 ft. lbs.).
- 19. Remove the support and lower the vehicle.
- 20. Perform the Low Voltage 12-Volt Power Up Procedure below.
  - a) Position the white sleeve in the full upright position for installation of the MSD to verify proper engagement as shown (Figure 10).
  - b) Ensure that the mounting interface surface of the high-voltage MSD and the receptacle wall is clean, and that there are no surface contaminants or foreign objects within the receptacle.
  - c) Align the polarization feature (1) of the high-voltage MSD with the receptacle on the high-voltage battery (Figure 11).
  - d) Push the high-voltage MSD evenly into the receptacle with the lever (1) in the 90° position.



Figure 10 – MSD Sleeve

NOTE: With the high-voltage MSD properly aligned with the receptacle, the lever (1) will be released and allowed to rotate to the lock position.

e) Rotate the lever (1) while maintaining a slight force on the high-voltage MSD. The lever will engage the receptacle and draw the high-voltage MSD down onto the receptacle as the lever is rotated.

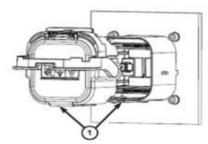


Figure 11 – MSD Installation

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#### Reference: 47A Service Procedure [Continued]

- f) Rotate the lever (1) downward until it is fully engaged and locked by the lever release latch (2). An audible "click" will be heard as the lever latches into position. Gently pull the high-voltage MSD upward to ensure that it is fully seated in the receptacle and locked. If the MSD is still able to be removed, repeat steps a f (Figure 11).
- 21. Install the high-voltage MSD floor access cover and tighten the four screws to 2.5Nm (22In. Lbs.) (Figure 3).
- 22. Install the rear carpet.
- Connect the B (+) battery cable to the 12-volt Power Distribution Center (PDC) and tighten the nut to 16N·m (12ft. lbs.) (Figure 1).
- 24. Start the engine and verify the serpentine belt is rotating correctly on all the pulleys.
- 25. Return the vehicle to the customer.

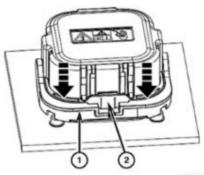


Figure 11 – MSD Installed

This notice applies to your vehicle,

47A

# LOGO

# VEHICLE PICTURE

#### YOUR SCHEDULING OPTIONS

1. RECOMMENDED OPTION Call your authorized Chrysler / Dodge / Jeep<sub>®</sub> / RAM 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.



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.

#### **DEALERSHIP INSTRUCTIONS**

Please reference CSN 47A.

# CUSTOMER SATISFACTION NOTIFICATION

#### **Serpentine Belt Squeal**

#### Dear [Name],

At FCA US LLC, we recognize that the success of our business depends on the satisfaction of our customers. We are constantly monitoring the quality of our products and looking for opportunities to improve our vehicles even after they are sold. Because your long-term satisfaction is important to us, we are contacting you on important improvements we would like to make to your vehicle <sup>[1]</sup>. This will be done at no charge to you.

We are recommending the following improvements be performed on certain [2022 – 2023 Model Year (RU) Chrysler Pacifica/Voyager] vehicles equipped with a 3.6 PHEV engine.

#### WHY DOES MY VEHICLE NEED REPAIRS?

The serpentine belt on your vehicle may cause a squealing noise coming from the engine compartment due to insufficient belt to pully contact.

#### HOW DO I RESOLVE THIS CUSTOMER SATISFACTION NOTIFICATION?

FCA US will repair your vehicle free of charge (parts and labor). To do this, your dealer will install 2 idler pulleys, belt tensioner and a serpentine belt. The estimated repair time is about 2 hours. 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 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.<sup>[2]</sup> 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 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.