



GROUP	MODEL
Safety Recall Campaign	2021-2023MY Soul (SK3) and Seltos (SP2) w/2.0L Nu MPI Engine
NUMBER	DATE
SC336 (Rev 2, 04/29/2025)	April 2025

## SAFETY RECALL CAMPAIGN

### ENGINE INSPECTION/REPLACEMENT AND ECM LOGIC IMPROVEMENT (SC336)

SUBJECT:

#### NOTICE

**This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.**

This bulletin provides information 1) to perform an engine vibration inspection and, if necessary, replace the engine long block, and 2) to install the Piston Ring Noise Sensing System software in the Engine Control Module (ECM) on certain 2021-2023MY Soul (SK3) produced from July 2, 2020 through April 19, 2022 and certain 2021-2023MY Seltos (SP2) produced from July 2, 2020 through July 1, 2022 vehicles equipped with 2.0L Nu MPI (Atkinson) Engine. The piston oil ring(s) in the subject vehicles may, over time, damage the surface of the engine cylinder wall. This may lead to increased oil consumption which will eventually result in abnormal noise from the engine and/or illumination of the oil pressure warning light. If the vehicle is continually operated in this condition, engine damage and/or seizure can occur, resulting in loss of motive power. In limited cases, a fire may occur from engine oil leaking onto a hot exhaust component due to a hole in the engine block. Loss of motive power and/or fire increases the risk of crash and injury.

The installation of the Piston Ring Noise Sensing System software in the ECM is a preventative measure to provide an early warning light to the driver of potential damage to the engine. To confirm that the latest reflash has been applied to a vehicle you are working on, verify the ROM ID using the table on Page 5. Before conducting the procedure, verify that the vehicle is included in the list of affected vehicles.

#### NOTICE

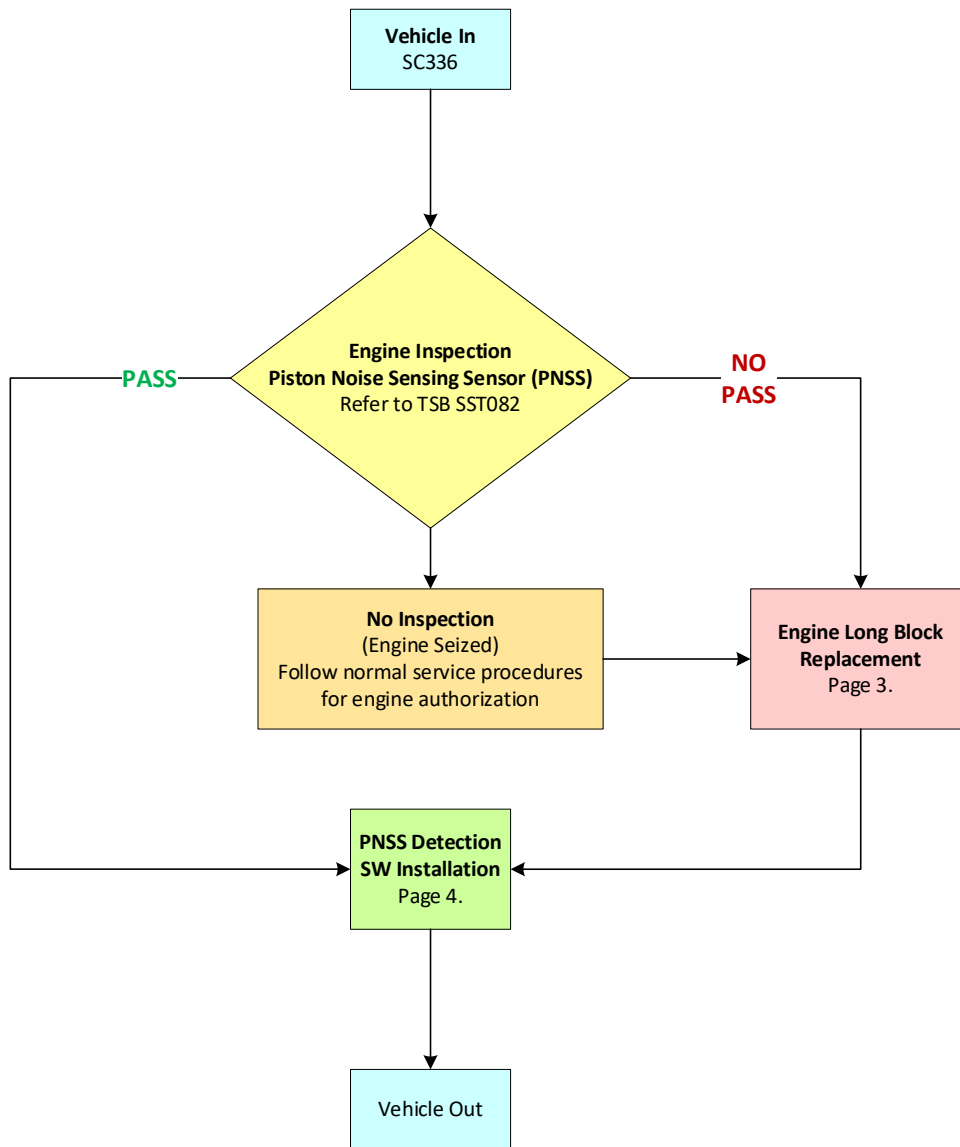
**There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.**

**Repair status for a VIN is provided on KDealer+ (Service → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on KDealer+ (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.**

A printed copy is for reference only; publication information can be updated at any time. Always refer to KGIS for the latest information. After logging in kdealer.com, the newest technical publications are listed in 'Service Releases' and has the latest service information that has been released.

Kia America, Inc.

Flowchart:



**DO NOT install the PNSS Detection Software BEFORE performing the Engine Inspection (Piston Noise Sensing Sensor)**

**NOTICE**

**PASS (Other Conditions):** If other conditions are present (ex. engine noise) and the Engine Vibration Inspection results in a PASS, then open a Techline case for further instructions.

**RETEST:** If there's an error on the measured engine vibration test, check the jack input (microphone) and knock sensor connection and perform measuring test again. If the results keep displaying 'RETEST' (more than 2 times), open a Techline case online for further instructions.



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## Inspection Procedure:

1. Refer to the Engine Vibration Inspection TSB [SST082](#).
  - Connect the PNSS testing harness to the engine and 12V battery.
  - Engine coolant temperature **MUST BE** above minimum test temperature: 185°F (85°C)

2. Perform the PNSS Inspection using KDS and Inspection Harness.

 NOTICE

Depending on the PNSS test result, an engine long block replacement may be required. [Be sure to follow the flowchart outlined on page 2.](#)

- 3a. [Pass](#): PNSS Inspection complete + Install the PNSS SW (page 4).
- 3b. [No Pass](#): PNSS Inspection complete + Engine R&R (see instructions below) + Install the PNSS SW (page 4) after engine replacement is completed.

 NOTICE

AFTER the Engine Vibration Inspection is completed, [ALL subject vehicles will require the PNSS software installation](#) (page 4).

## Replacement Procedure (for PNSS 'No Pass'):

Replace the engine long block assembly by referring to “Engine Mechanical System → Engine and Transaxle Assembly → Engine and Transaxle Assembly → Repair procedures” in the applicable Shop Manual on KGIS.

[IN SOME CASES](#): Vehicles produced from 22MY, check the engine oil viscosity printed on the existing oil filler cap. If the printed specification does not match (ex. (5w-20) the vehicle’s recommended specification (ex. 0w-20), then replace the oil filler cap with correct SAE 0w-20 viscosity printed on cap.



**22MY~** Verify the printed oil filler cap viscosity is The correct specification for the subject vehicle.

Refer to [TSB SST081](#) for instructions to upgrade the 'ECU' system:

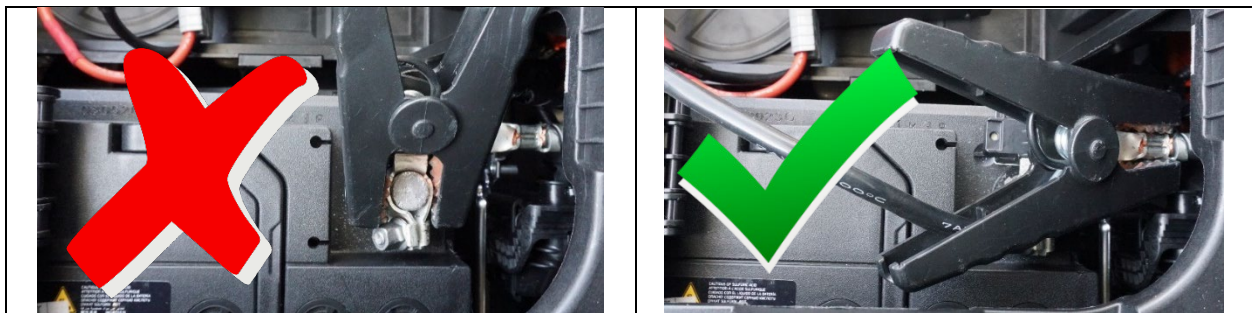
To correct this condition, the specified system module should be reprogrammed using KDS as described in this bulletin in 'Auto Mode'.

Model Year	Upgrade Event Name
21MY	576. SK3 NU 2.0ATK ENGINE ECU UPGRADE (PISTON-RING NOISE SENSING SYSTEM)
	577. SP2 NU 2.0ATK ENGINE ECU UPGRADE (PISTON-RING NOISE SENSING SYSTEM)
22-23MY	816.SK3 NU 2.0ATK ENGINE PNSS LOGIC IMPROVEMENT
	817.SP2 NU 2.0ATK ENGINE PNSS LOGIC IMPROVEMENT


**NOTICE**

- Confirm a fully charged battery (12.3 volts or higher is necessary) is used or utilize a fully charged jump starter box connected to the battery.
- **Ensure the KDS GDS is sufficiently charged at 60% or higher prior to reflash.**
- All ECU upgrades must be performed with the ignition set to the 'ON' position unless otherwise stated.
- **Damaged VCI II units should not be used and promptly replaced.**
- Be careful not to disconnect the VCI-II connected to the vehicle during the ECU upgrade procedure.
- **DO NOT start the engine during ECU upgrade.**
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- **When the ECU upgrade is completed, turn the ignition 'OFF' and wait 10 seconds before starting the engine.**
- ONLY use approved ECU upgrade software designated for the correct application.

[Connect the negative \(-\) terminal to the battery as shown below.](#)



**NOTICE**

Before attempting an ECU upgrade on any Kia model, make sure to first determine whether the applicable model is equipped with an immobilizer  security system. Failure to follow proper procedures may cause the PCM to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.




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## ROM ID Information Table:


**❗ IMPORTANT**

It is recommended to ALWAYS check the Electronic Parts Catalog (EPC) to locate the ECU Part Number respective to Auto/Manual Mode ROM IDs. DO NOT reference the parts label affixed to the ECU.


**Upgrade Event #576 for 21MY Soul (SK3):**

Model	System	IMMO 	ECU P/No.	ROM ID	
				Previous	New
SK3	ECU	Yes	39171-2ELC1	SKBSP2KS6B2A	SKBSP2KF6B9A
				SKBSP2KS6B7A	
		No	39173-2ELC1	SKBSP2JS6B2A	SKBSP2JF6B9A
				SKBSP2JS6B7A	
Yes	39171-2ELD1	SKBUP2AS6B2A	SKBUP2CF6B9A		
		SKBUP2CS6B7A			
No	39173-2ELD1	SKBUP2VS6B2A	SKBUP2VF6B9A		
		SKBUP2VS6B7A			
				SKBUP2VF6B7A	


**Upgrade Event #816 for 22-23MY Soul (SK3):**

Model	System	IMMO 	ECU P/No.	ROM ID	
				Previous	New
SK3	ECU	Yes	39171 2ELC2	SKCSP2KS6B8A	SKCSP2KS6B9A
				SKCSP2KS6B8B	
			39173 2ELC2	SKCSP2JS6B8A	SKCSP2JS6B9A
				SKCSP2JS6B8B	
39171 2ELD2	SKCUP2CS6B8A	SKCUP2CS6B9A			
39173 2ELD2	SKCUP2VS6B8A		SKCUP2VS6B9A		

**Upgrade Event #577 for 21MY Seltos (SP2):**

Model	System	IMMO 	ECU P/No.	ROM ID	
				Previous	New
SP2	ECU	Yes	39171-2EPT0 39171-2EPV0	SPCUP2KS6D2A SPAUP2KS6D2A SPAUP2KS6D5A SPAUP2KF6D5A	SPAUP2KF6D7A
		No	39173-2EPT0 39173-2EPV0	SPCUP2JS6D2A SPAUP2JS6D2A SPAUP2JS6D5A SPAUP2JF6D5A	SPAUP2JF6D7A

**Upgrade Event #817 for 22-23MY Seltos (SP2):**

Model	System	IMMO 	ECU P/No.	ROM ID	
				Previous	New
SP2	ECU	Yes	39171 2EPT2 39171 2EPV2	SPCUP2KS6D6A SPCUP2KS6D6B	SPCUP2KS6D7A
			39173-2EPT2 39173-2EPV2	SPCUP2JS6D6A SPCUP2JS6D6B	SPCUP2JS6D7A
			39171-2EPT3 39171-2EPV3	SPDUP2KS6D6A	SPDUP2KS6D7A
			39173-2EPT3 39173-2EPV3	SPDUP2JS6D6A	SPDUP2JS6D7A

*To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECM ROM ID and reference the Information Table as necessary.*

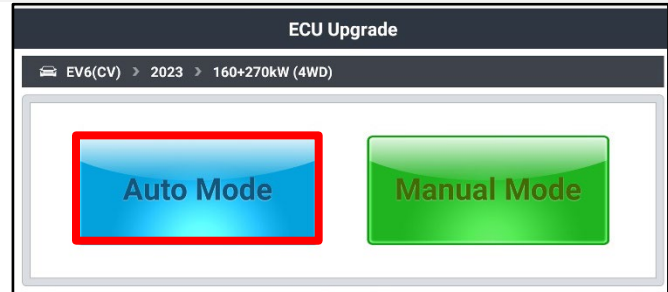


## SUBJECT: ENGINE INSPECTION/REPLACEMENT &amp; ECM LOGIC IMPROVEMENT (SC336)

**Software Information:**

The required software must be installed by selecting the **'Auto Mode'** ECU Upgrade option.

**Note:** In some case, the 'Manual Mode' installation option may be required **ONLY** if the 'Auto Mode' function fails or is otherwise noted above.

**NOTICE**

**If the automatic upgrade fails, turn the ignition 'OFF' for about 10 seconds then place it back in the 'ON' position to reset the control unit BEFORE performing the manual upgrade.**

'Manual Mode' passwords.

**Event #576 - Soul (SK3)**

Menu	Password
SK3 Nu 2.0ATK CVT +IMMO/SMK: 39171-2ELC1	5195
SK3 Nu 2.0ATK CVT -IMMO: 39173-2ELC1	5196
SK3 Nu 2.0ATK 6MT +IMMO/SMK: 39171-2ELD1	5197
SK3 Nu 2.0ATK 6MT -IMMO: 39173-2ELD1	5198

**Event #577 - Seltos (SP2)**

Menu	Password
SP2 Nu 2.0ATK CVT +IMMO/SMK: 39171-2EPT0/V0	5201
SP2 Nu 2.0ATK CVT -IMMO: 39173-2EPT0/V0	5202

**Event #816 - Soul (SK3)**

Menu	Password
SK3 2.0ATK CVT +IMMO/SMK: 39171-2ELC2	9171
SK3 2.0ATK CVT -IMMO: 39173-2ELC2	9173
SK3 2.0ATK 6MT +IMMO/SMK: 39171-2ELD2	7122
SK3 2.0ATK 6MT -IMMO: 39173-2ELD2	7322

**Event #817 - Seltos (SP2)**

Menu	Password
SP2 2.0ATK CVT +IMMO/SMK: 39171-2EPT2/V2	3917
SP2 2.0ATK -IMMO: 39173-2EPT2/V2	3719
SP2 2.0ATK CVT +IMMO/SMK: 39171-2EPT3/V3	3321
SP2 2.0ATK -IMMO: 39173-2EPT3/V3	3323

**UPGRADE EVENT:**

Select the applicable 'ECU' system module and the Event Group.

**Soul (SK3) 21MY**

- 576. SK3 NU 2.0ATK ENGINE ECU UPGRADE (PISTON-RING NOISE SENSING SYSTEM)

**or**

**Soul (SK3) 22-23MY**

- 816. SK3 NU 2.0ATK ENGINE PNSS LOGIC IMPROVEMENT

**or**

**Seltos (SP2) 21MY**

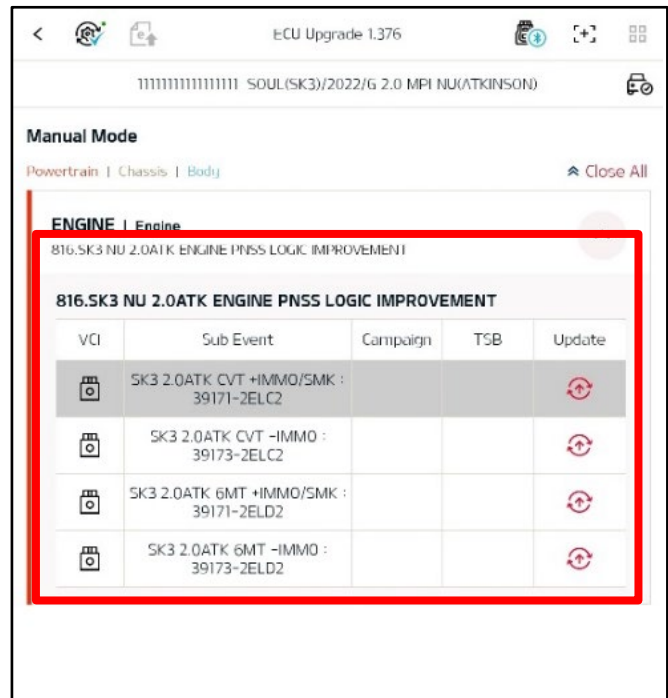
- 577. SP2 NU 2.0ATK ENGINE ECU UPGRADE (PISTON-RING NOISE SENSING SYSTEM)

**or**

**Seltos (SP2) 22-23MY**

- 817. SP2 NU 2.0ATK ENGINE PNSS LOGIC IMPROVEMENT




Verify the affected vehicle Calibration Identification of the applicable ECU ROM ID and reference the Information Table on page 5 as necessary.



**SUBJECT: ENGINE INSPECTION/REPLACEMENT & ECM LOGIC IMPROVEMENT (SC336)**
**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
Soul (SK3)	July 2, 2020 through April 19, 2022
Seltos (SP2)	July 2, 2020 through July 1, 2022




**REQUIRED TOOL: (REFER TO TSB [SST082](#))**

Tool Name	Part Number	Figure	Comments
Kia Diagnostic System (KDS)	N/A		KDS + VCI
Engine Vibration Inspection Harness	G1XTD CP200QQK		Located Toolbox 1, Drawer #12
USB C to 3.5mm Headphone Jack Adapter	(Samsung) EE-UC10JUWEGUS		Locally Sourced Must be Samsung brand for S6 Tablet

**REQUIRED PART:**

**(ALL ORDERS PLACED BEFORE REV. 2 OF THIS PUBLICATION WILL BE CANCELLED)**

**FOR ENGINE R&R: Please place orders according to the newest test results for Re-Inspections**

Model	Type	Part Name	Part Number	Figure	Qty.
SK3	CVT	Engine Long Block	21101 123ZRQQKR*		1
	MT		21101 122ZRQQKR*		
SP2	CVT		21101 126ZRQQKR*		
ALL	N/A	Service Kit	21102 N20AKQQK		1
	N/A	Coolant Concentrate	UM022 CH271	N/A	1 Gal.
	0W-20	Full Synthetic Engine Oil	NPNENGOW20 or UM050 CH033	N/A	Up to 5qts.
	5W-20		NPNENG5W20 or UM050 CH034		
ALL 22MY~	0W-20	Oil Filler Cap	26510 26640QQK***		1

**Note:** The replacement QQK part numbers will require a VIN entry for parts ordering. **DO NOT** order these parts for stocking purposes, related to this Campaign. Supply is very limited. Until the supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing. **\*If the Reman part (QQKR) is not available, you may be allocated a part ending in QQK. If allocated a QQK part, this may be used in the repair and for the related warranty claim submission. \*\*Some engines may not require all kit components. \*\*Oil Filler Cap PN 26510 26640QQK may be added to the claim only if needed for 22MY~ models only.**



**WARRANTY INFORMATION:**

**N Code: N99 C Code: C99**

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
All	R	23040 2E850	0	(SC336) Engine Vibration <u>Inspection Pass</u> +PNSS SW Installation	251032R0	0.6 M/H	26510 26640QQK*	1
SK3		23040 2E850	0	(SC336) <u>Unable to perform</u> <u>Engine Vibration</u> <u>Inspection</u>	251032R1	0.4 M/H	26510 26640QQK*	1
SP2		23040 2E850		Engine Replaced under Normal Warranty +PNSS SW Installation	251032R2			

**Note:** Refer to [Warranty Bulletin 2025-13](#) for claim submission procedures. If substitute transportation is necessary, manually enter sublet code 'X2' for rental expense reimbursement or one roundtrip rideshare expense. Please contact your DPSM if extended rental assistance is needed. A copy of the rental/loaner invoice is required to be attached to the claim. A copy of the RO, Parts Order Invoice Information may necessary upon request. Part order can be used for expedited rental review as outlined in [Warranty Bulletin 2018-08](#). \*Oil Filler Cap PN 26510 26640QQK may be added to the claim only if needed for 22MY~ models only. Take a Photo of the Engine Noise Inspection Test Results (Pass, No Pass screen images) and attach to the claim.

*Continued on page 9.*

**NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SC336** when accessing the KDealer+ system.



SUBJECT: ENGINE INSPECTION/REPLACEMENT & ECM LOGIC IMPROVEMENT (SC336)

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
SK3 (A/T)		23040 2E850	0	(SC336) Engine Vibration <u>Inspection No Pass</u> + Engine Replacement + PNSS SW Installation	251032R4	7.5 M/H	21101 123ZRQQKR	1
							21102 N20AKQQK	1
							UM022 CH271	1
							UM050 CH033 or UM050 CH034 or NPNENGOW20 or NPNENG5W20	5
							26510 26640QQK*	1
SK3 (M/T)		23040 2E101	0	(SC336) Engine Vibration <u>Inspection No Pass</u> + Engine Replacement + PNSS SW Installation	251032R9	7.5 M/H	21101 122ZRQQKR	1
							21102 N20AKQQK	1
							UM022 CH271	1
							UM050 CH033 or UM050 CH034 or NPNENGOW20 or NPNENG5W20	5
							26510 26640QQK*	1
							26510 26640QQK*	1

**Note:** Refer to [Warranty Bulletin 2025-13](#) for claim submission procedures. If substitute transportation is necessary, manually enter sublet code 'X2' for rental expense reimbursement or one roundtrip rideshare expense. Please contact your DPSM if extended rental assistance is needed. A copy of the rental/loaner invoice is required to be attached to the claim. A copy of the RO, Parts Order Invoice Information may necessary upon request. Part order can be used for expedited rental review as outlined in [Warranty Bulletin 2018-08](#). **Oil Filler Cap PN 26510 26640QQK may be added to the claim only if needed for 22MY~ models only.** Take a Photo of the Engine Noise Inspection Test Results (Pass, No Pass screen images) and attach to the claim.

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SUBJECT: **ENGINE INSPECTION/REPLACEMENT & ECM LOGIC IMPROVEMENT (SC336)**

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
SP2 (FWD)		23040 2E850	0	(SC336) Engine Vibration <u>Inspection No Pass</u> + Engine Replacement + PNSS SW Installation	251032R5	6.8 M/H	21101 126ZRQQKR	1
							21102 N20AKQQK	1
							UM022 CH271	1
							UM050 CH033 or UM050 CH034 or NPNENGOW20 or NPNENG5W20	5
							26510 26640QQK*	1
SP2 (AWD)		23040 2E850	0	(SC336) Engine Vibration <u>Inspection No Pass</u> + Engine Replacement + PNSS SW Installation	251032R6	7.1 M/H	21101 126ZRQQKR	1
							21102 N20AKQQK	1
							UM022 CH271	1
							UM050 CH033 or UM050 CH034 or NPNENGOW20 or NPNENG5W20	5
							26510 26640QQK*	1

**Note:** Refer to [Warranty Bulletin 2025-13](#) for claim submission procedures. If substitute transportation is necessary, manually enter sublet code 'X2' for rental expense reimbursement or one roundtrip rideshare expense. Please contact your DPSM if extended rental assistance is needed. A copy of the rental/loaner invoice is required to be attached to the claim. A copy of the RO, Parts Order Invoice Information may necessary upon request. Part order can be used for expedited rental review as outlined in [Warranty Bulletin 2018-08](#). \*Oil Filler Cap PN 26510 26640QQK may be added to the claim only if needed for 22MY~ models only. Take a Photo of the Engine Noise Inspection Test Results (Pass, No Pass screen images) and attach to the claim.

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