



Technical Service Bulletin

GROUP RECALL	NUMBER 24-01-039H-1
DATE JUNE 2024	MODEL(S) PALISADE (LX2)

SUBJECT: LAMBDA 3.8L ENGINE SUB-ASSEMBLY REPLACEMENT
(RECALL 255)

This TSB supersedes TSB# 24-01-039H to include the re-use of the oil galley plug located on Bank 1 Cylinder Head.

★ IMPORTANT

Vehicle repairs related to safety recalls are critically important and must be performed properly in accordance with TSB procedures. Review this bulletin in its entirety prior to beginning any repair work.

As required by federal law, dealers must not deliver new vehicles for sale or for lease to customers until all open recalls have been performed. Dealers must also perform all open recalls on used vehicles, demo, and rental vehicles prior to placing them into customer use and whenever an affected vehicle is in the shop for any maintenance or repair.

Access the “Vehicle Information” screen via WebDCS to identify open recalls.

Description: Certain 2024MY Palisade (LX2) vehicles contain engine valve springs that may fracture while driving due to fatigue cracking as a result of damage to the springs during manufacturing by the supplier. A fractured valve spring may result in a sudden loss of motive power. In rare cases, a hole in the engine block may occur due to a broken valve entering the combustion chamber.



Follow the Service Procedure outlined in this bulletin to replace the Engine Sub-Assembly.

APPLICABLE VEHICLES (Certain):

- 2024MY Palisade (LX2) vehicles produced between 08/21/2023 -10/12/2023



SUBJECT: LAMBDA 3.8L ENGINE SUB-ASSEMBLY REPLACEMENT (RECALL 255)**SST Information:**


Tool Name	SST Tool #	Figure
Outer Tie-Rod Ball Joint Remover (or commercially available equivalent)	09568-2J100	
OTC Propulsion System Lift (or commercially available equivalent)	HMA52200-A	

NOTE 1: 09568-2J100 previously shipped to all dealers as an essential tool.

NOTE 2: Additional SST Tools can be ordered through Bosch at 1-866-539-4248 or hyundai.service-solutions.com.

NOTE 3: If further assistance is required, please contact hyundaitools@hmausa.com.

Parts Information:

Model	Part Description	Part Number	Remarks	
24MY Palisade (LX2)	Engine Sub-Assembly	167G1-3LA0BQQH QTY:1	For vehicles equipped with 2WD	
	Engine Service Kit	21111-3LG12QQH QTY:1		
	Engine Sub-Assembly	168G1-3LA0BQQH QTY:1	For vehicles equipped with 4WD	
	Engine Service Kit	21111-3LG14QQH QTY:1		
	Pink Coolant	00232-19098	QTY: 2 Gallons	
	Engine Oil	Not Applicable	Use 5W-30 Synthetic Engine Oil QTY: 8 Quarts	
	Permatex High-Temperature Thread Sealant (50 mL) (Used for the Oil Galley Plug) #59235	QTY:1		Commercially Available 1 container can treat about 5 vehicles
	Fuel Injector (O-Ring)	35312-2E610 QTY: 6	Parts NOT included in Service Kit Please order separately when placing an order for the Engine Sub Assembly	
	Fuel Injector Back-up (O-Ring)	35312-2E611 QTY:6		
	A/C Discharge Hose (O-Ring)	97690-34630 QTY:1		
	Fuel Injector Combustion Seal Ring	35312-2E613 QTY:6		
	A/C Suction and Liquid Tube (O-Ring)	97690-34640 QTY:1		
	High Pressure Fuel Pipe	35305-3L100 QTY:1		
Cotter Pin	57799-4D200 QTY:2			
Water Vent Gasket	28215-3CFB0 QTY:1			
Cross-Over Fuel Pipe	35307-3L000 QTY:1			

NOTE 1: Please ensure the engine's core is returned under the current Engine Core Return process and entered within the Core Return Portal. There will be no exceptions granted for failure to return a core.

NOTE 2: Do not damage the engine in any manner prior to shipping the core.

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PART NAME	PART NUMBER		NOTE
Engine Service Kit	21111-3LG12QQH 2WD	21111-3LG14QQH 4WD	(For use with Engine Sub-Assembly)
*** Includes Contents Below ***			
Front Muffler Exhaust Pipe Gasket	28751-2B550	Not Applicable	QTY: 2
Universal Steering Joint Bolt	56415-L1000	56415-L1000	QTY:1
Roll Rod Bracket Assy Bolt	11435-12006-KA	11435-12006-KA	QTY:1
Exhaust Pipe Gasket	28751-3S100	28751-3S100	QTY:1
Outer Tie-Rod End Nut	55259-2M000	55259-2M000	QTY:2
Castle Nut (Front Axle Assy)	49551-4T000	49551-4T000	QTY:2
Fuel Injector Clip	35309-3L000	35309-3L000	QTY:6
Fuel Injector Bracket Washer	35313-3L000	35313-3L000	QTY:6
High Pressure Fuel Pump O-Ring	35322-3L000	35322-3L000	QTY:1
HPFP Mounting Bolt	11235-06226-K	11235-06226-K	QTY:2
Fuel Injector Rail Mounting Bolt	11403-08506-K	11403-08506-K	QTY:6
Engine Oil Level Gauge O-Ring	26614-2B000	26614-2B000	QTY:1
Throttle Body Gasket	35101-3C000	35101-3C000	QTY:1
LH Exhaust Manifold Gasket	28521-3C702	28521-3C702	QTY:1
RH Exhaust Manifold Gasket	28521-3C712	28521-3C712	QTY:1
Surge Tank Gasket	29215-3CFA1	29215-3CFA1	QTY:1
Inlet Manifold Gasket	28215-3CFA0	28215-3CFA0	QTY:6
Engine Bracket Support Nut	51759-F6000	51759-F6000	QTY:3
Thermostat Case Gasket	25614-3L100	25614-3L100	QTY:1
Thermostat Case Gasket	25614-3L150	25614-3L150	QTY:1
Cross-Over Coolant Pipe O-Ring	25462-35504	25462-35504	QTY:2
Drive Plate Bolt	23311-35050	23311-35050	QTY:8
Front Propeller Shaft Mounting Bolt	Not Applicable	11647-10256-K	QTY:4
Rear Propeller Shaft Mounting Bolt	Not Applicable	49129-C5200	QTY:3
Front Muffler Exhaust Pipe Gasket	Not Applicable	28751-C5100	QTY:2

Warranty Information:

Model	Op. Code	Operation	Op. Time	Casual Part	Nature Code	Cause Code
24MY Palisade (LX2)	41D024R0	ENGINE SUB-ASSEMBLY REPLACEMENT (2WD) (Wheel Alignment Adjustment Included)	9.5 M/H	22221-3L310	D93	ZZ4
	41D024R1	ENGINE SUB-ASSEMBLY REPLACEMENT (4WD) (Wheel Alignment Adjustment Included)	9.8 M/H	22221-3L310		

NOTE 1: Submit claim on Claim Entry Screen as "Campaign" type.

NOTE 2: If a part is found in need of replacement while performing this recall and the affected part is still under warranty, submit a separate claim using the same repair order. If the affected part is out of warranty, submit a Prior Approval request for goodwill consideration prior to performing the work.

NOTE 3: This TSB includes Repair validation photos. Op times include VIN, Mileage, and Repair validation photo(s) as outlined in the Digital Documentation Policy.

NOTE 4: The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

NOTE 5: Both OP Codes reimburse 2 Gallons of Pink Coolant and 8 Quarts of Synthetic Engine Oil.

NOTE 6: Both OP codes will reimburse \$5.00 in sublet for use of sealant when re-using the oil galley plug.

Service Procedure:

STUI



This TSB includes Repair validation photos. Refer to the latest Warranty Digital Documentation Policy for requirements.

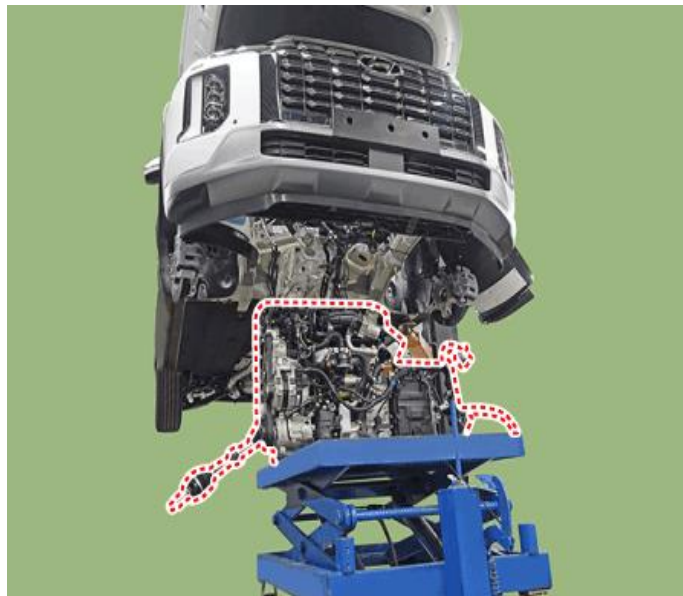
1. Follow the published Service Information from the applicable Shop Manual to remove the Engine Sub-Assembly.

Refer to Shop Manual:

- **Engine Mechanical System > Engine and Transaxle Assembly > Engine and Transaxle Assembly > Repair Procedures**

NOTICE

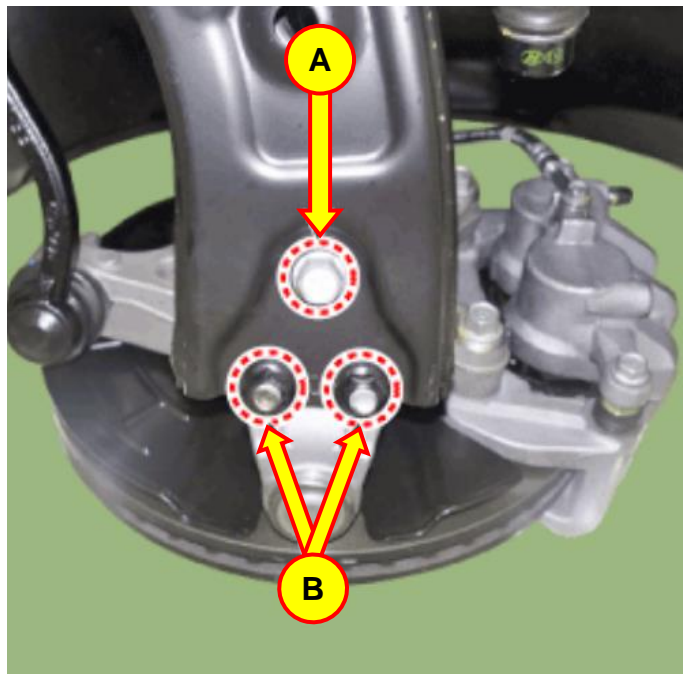
Be sure to record the audio station presets (XM, AM, FM, etc.) prior to disconnecting the battery.



2. During the removal of the front subframe from the vehicle, loosen and unbolt the LH and RH lower control arm ball joint assemblies (A & B).

NOTICE

The lower control arm ball joints do **not** need to be removed from the steering knuckle as shown in the Shop Manual.



Tightening Torque:

lb-ft	86.8
N.m	117.7

3. Refer to the Applicable Shop Manual to transfer the existing parts on the right to the New Engine Sub-Assembly.

NOTICE

Take special care of the original engine parts that will be required for reinstallation onto the replacement engine.

- Intake and Exhaust Manifolds
 - Follow **TSB 23-EM-002H** (or latest version) if vehicle arrives with a seized or damaged internal rotating components.
- Surge Tank
- Starter Assembly
- Drive Plate
- Full Drive Belt Kit (Idler, Belt Tensioner, Water Pump Pulley, Serpentine Belt)
- Water Temperature Control Assembly
- Cross-Over Coolant Pipe
- Fuel Rail and Injectors
- Oil Level Rod and Guide Assembly
- A/C Compressor Assembly
- Front Transfer Case Assembly (If applicable)
- Engine Front Wiring Harness
- Knock Sensors
- Roller Tappet for the High-Pressure Fuel Pump
- Oil Galley Plug (Bank 1 Cylinder Head)

NOTES:

- During engine R&R, install the applicable Engine Sub-Assembly and Service Kit part numbers.
- Reuse other parts not listed under the Engine Service Kit parts list.

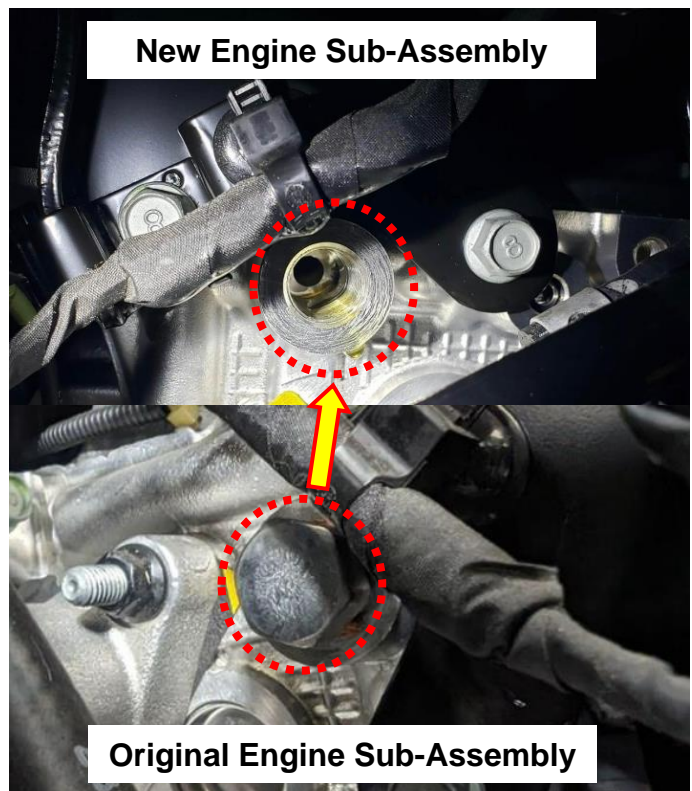
4. Remove the engine oil galley plug located behind the right rear cylinder head (Bank 1) from the original Engine Sub-Assembly and re-install onto the New Engine Sub-Assembly with the recommended thread sealant.

NOTICE

Clean the old thread sealant off the oil galley plug before applying new thread sealant and installing onto the New Engine Sub-Assembly.

Tightening Torque:

lb-ft	28.9
N.m	39.2

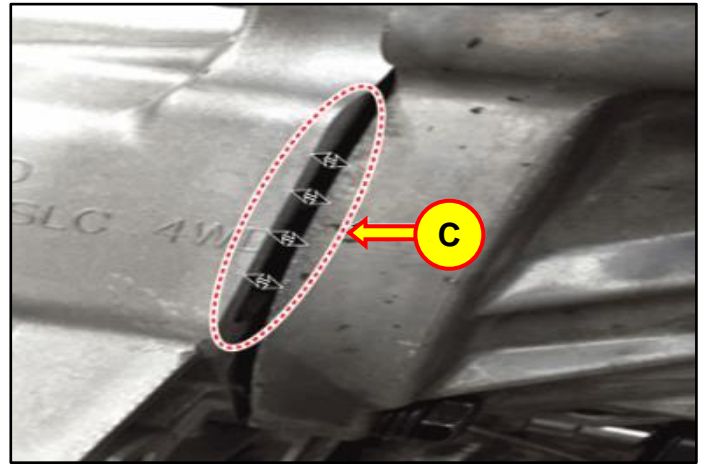


5. Install all remaining parts in reverse order of removal.

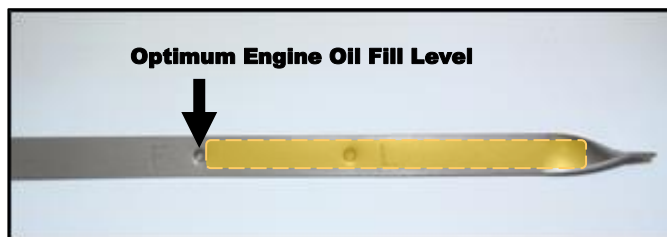
6.

NOTICE

- Do not torque the fasteners that join the engine block to the automatic transmission if a gap exists (C) and proper seating cannot be achieved by hand.
- Check the depth of the torque converter to confirm it's fully installed in the transmission otherwise the oil pump may be damaged resulting in transmission failure.



7. Reinstall and connect the cooling system components.
- Fill the cooling system with 35~50% Anti-Freeze, diluted with distilled water.
8. Fill the engine crankcase:
- a) Follow the specified engine oil capacity for the initial dry fill of the engine.
 - b) With the fuel system disabled temporarily (**remove the 20A 'Fuel Pump' fuse located in the engine fuse box cover**), crank the engine for several seconds to prime the lubrication system prior to starting the engine.
- **Recommended Oil Specifications:**
 - 5W-30 Full Synthetic type with API SN/SN+/SP, ILSAC GF4/GF5 or higher service grade.
 - (Engine Oil Fill Capacity: 7.08 Quarts)
9. Start the engine to warm it up and begin the cooling system air bleeding process.
- Refer to Shop Manual:
 - **Engine Mechanical System > Cooling System > Coolant > Repair Procedures**
 - Check for any leaks during this time.
 - After the engine has warmed up to normal operating temperature, turn the engine off, wait a few minutes, and then **adjust the engine oil level to near the "F" mark as shown.**



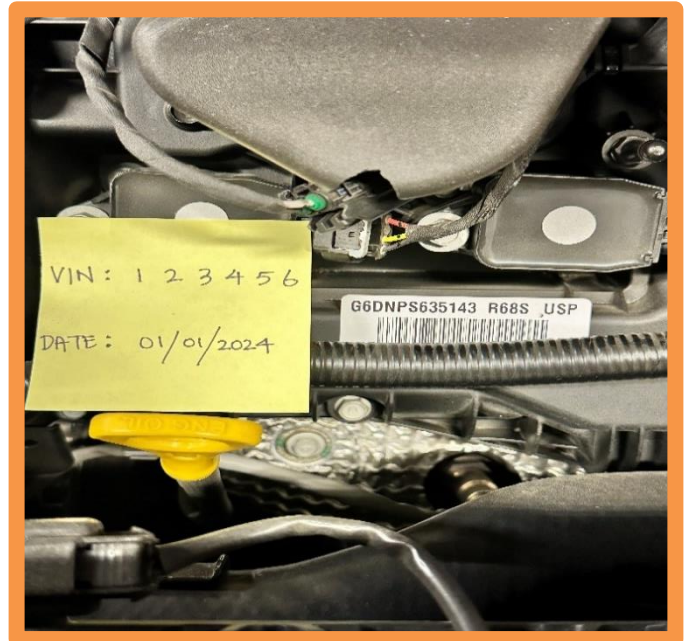
10.

STUI



Using STUI, take a photo of the New Engine Sub-Assembly Serial Number located on the Bank 2 Cylinder Head Cover (nearest to the front of the vehicle) with the last 6 digits of the VIN and the date of repair on a piece of paper.

Upload the photo to STUI.



11. Follow the published Service Information from the applicable Shop Manual to check and perform a Wheel Alignment.

Refer to Shop Manual:

➤ **Suspension System > Tires/Wheels > Alignment > Repair Procedures**

12. Verify all fluids have been filled fully and all work quality checks are completed:

- Set the customer's audio station presets.
- Erase all DTC's that have incidentally occurred during the Engine Sub-Assembly replacement.
- Reset the engine adaptive values using the GDS.
- Perform a short road test to confirm normal vehicle drivability.

13. Service Procedure is now completed.