



GROUP

MODEL

ENG

2014-2017MY
Multiple Models

NUMBER

DATE

254 (Rev 4, 10/07/2025)

June 2024

TECHNICAL SERVICE BULLETIN

ENGINE SUB ASSEMBLY

SUBJECT:

INSPECTION/REPLACEMENT (WTY039)

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 associated with the 'Warranty Extension Program' (WTY039) to diagnose a coolant leak from the cylinder head gasket area and, if necessary, replace the engine sub assembly on vehicles listed below.

Model	Production Date Range
2014 - 2015MY Sorento (XMa) 3.3L GDI Lambda II	December 17, 2012 to December 11, 2014
2014 - 2017MY Cadenza (VG & YG) 3.3L GDI Lambda II	February 1, 2013 to July 12, 2017
2015 - 2016MY Sedona (YP) 3.3L GDI Lambda II	July 21, 2014 to March 17, 2016

Under certain severe operating conditions and over time, the engine in the subject vehicles may develop a coolant leak from the cylinder head gasket area. If the vehicle continues to be driven in the unrepaired condition, the engine may overheat and become further damaged. The customer may experience an engine concern including, but not limited to, a coolant leak, coolant smell, and/or engine temperature indicator near the "H" mark on the instrument cluster. The warranty coverage for repairs related to the cylinder head gasket will be extended from 5 years / 60,000 miles to 15 years / 180,000 miles, whichever comes first, starting from the date the vehicle was first put into service. Follow the procedure outlined in this publication to diagnose a coolant leak from the cylinder head gasket area, and, if necessary, replace the engine sub assembly on the applicable vehicle.

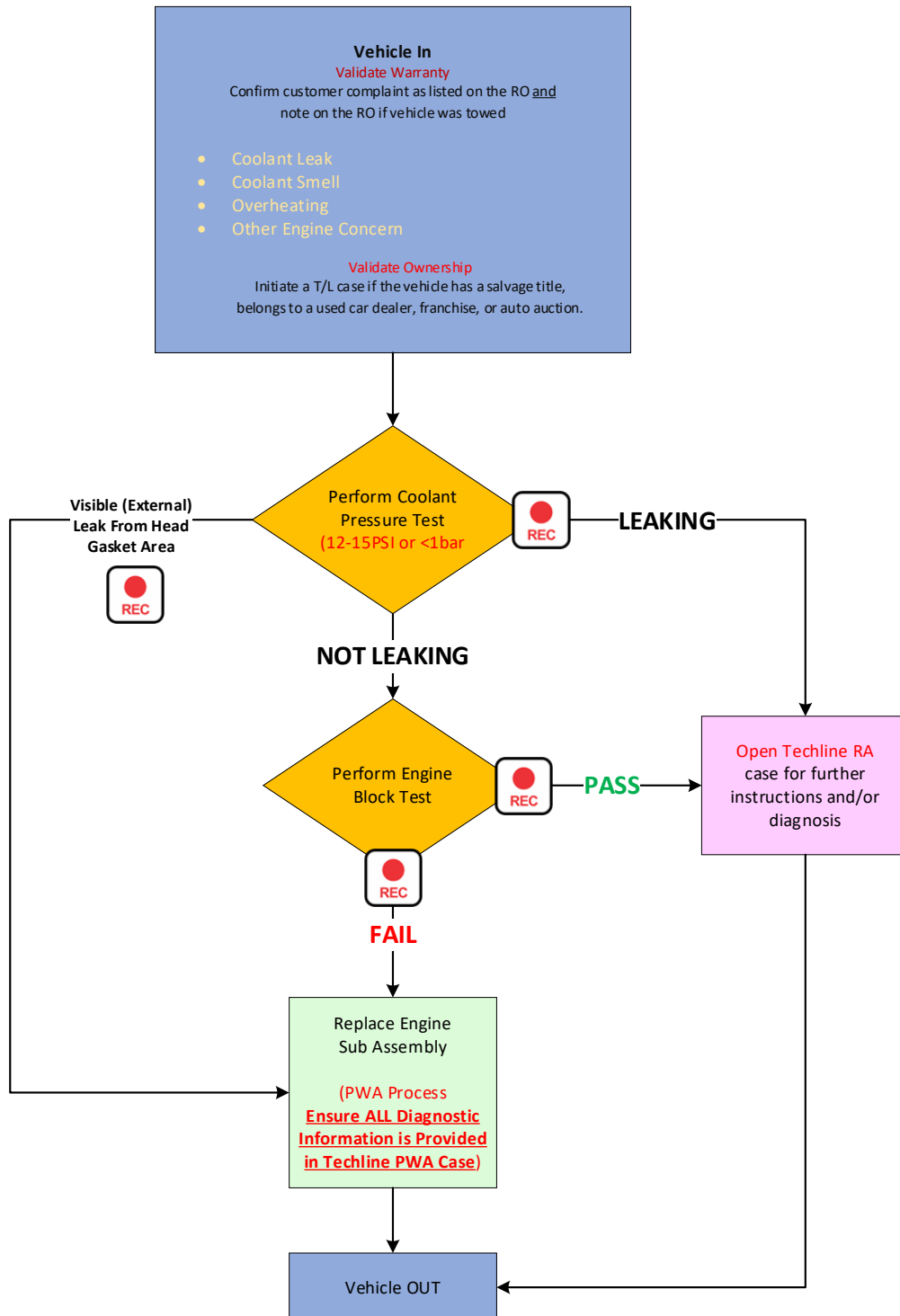
NOTICE

A Technical Service Bulletin is a field fix repair program without customer notification that may be performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

Flowchart:

❗ IMPORTANT

Certain limitations may apply to this Warranty Extension coverage. Refer to **Warranty Bulletin 2404** for more details. Before starting inspection/repairs related to this publication, vehicle ownership needs to be verified by completing the [Ownership Validation Form](#).



SUBJECT:

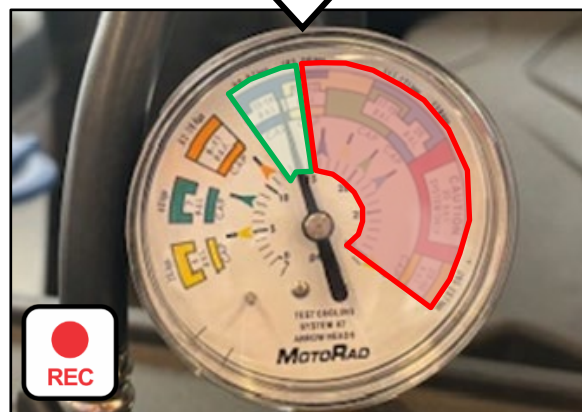
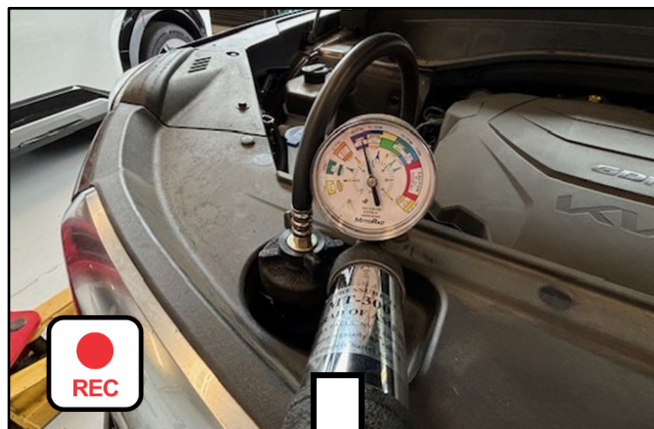
ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTY039)**Inspection Procedure:**

1. Confirm the vehicle is exhibiting one (1) or more of the following symptoms/concerns:

- Coolant leak
- Coolant smell
- Overheating
- Other engine concern

2. Perform Coolant Pressure Test.

- If coolant pressure is lost (leak confirmed), record a video starting from the VIN label and open a Techline RA case for further diagnosis and instructions or replace the engine (page 4) for a visible head gasket leak.
- If NO coolant pressure is lost (NOT leaking), proceed to step 3.

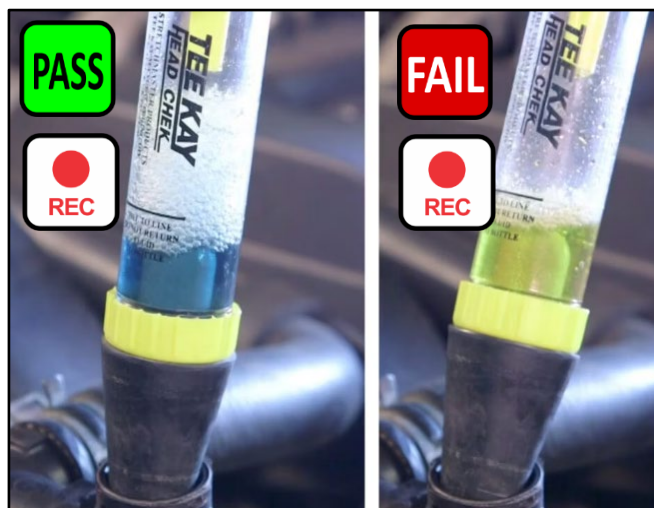
**CAUTION**

Coolant system must be pressurized between 12-15PSI (less than 1bar).

DO NOT exceed 15PSI or 1bar. Excessive pressure in the coolant system can cause damage.

3. Perform Engine Block Test.

- If engine **fails** block test, record a video starting from the VIN label and proceed to 'Replacement Procedure' on page 4.
- If engine **passes** block test, record a video starting from the VIN label and open a Techline RA case for further diagnosis and instructions.



Replacement Procedure:

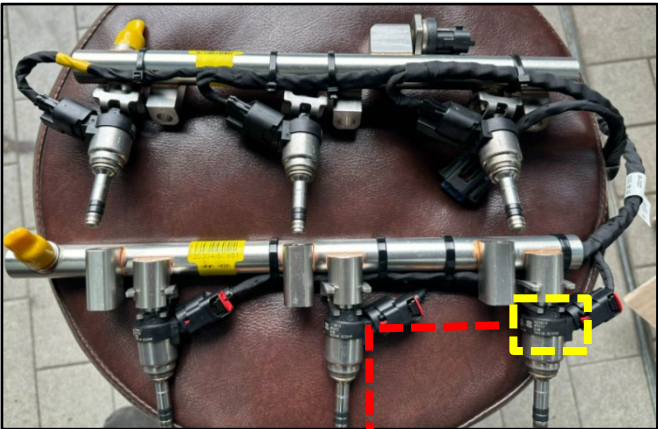
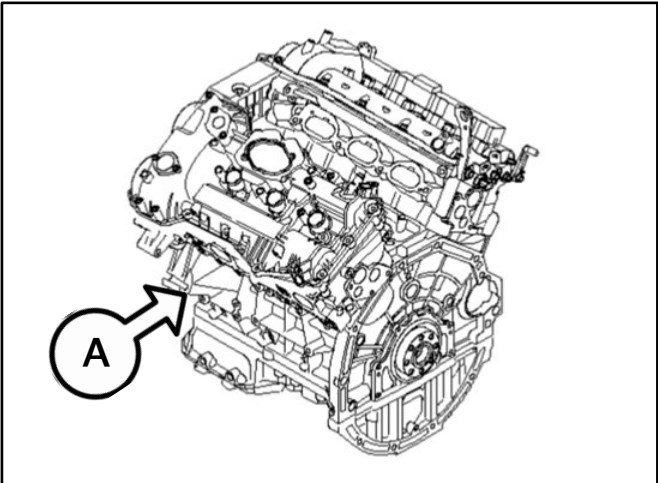
- 1. Replace the engine sub assembly (A) by referring to “Engine and Transaxle Assembly → Engine And Transaxle Assembly → Repair procedures” in the applicable Shop Manual on KGIS.

NOTICE

During engine disassembly, **DO NOT separate the injectors from the fuel delivery pipe components during removal.** Transfer the assembled fuel system components from the old engine to the new engine sub-assembly.

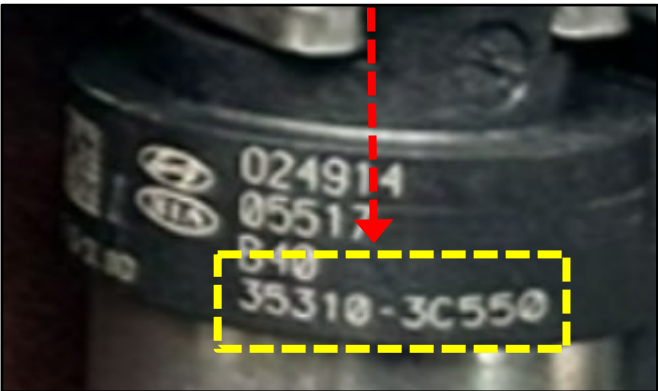
IMPORTANT

When replacing the injector seals, refer to the table below to match the correct injector tip seal to the applicable part number (PN) printed on the injector outer case area show.



Two (2) Types of Seals:

OE Injector PN	Required Injector Tip Seal PN
35310 3C550 35310 3C570	35312 3C720
35310 3C560 35310 3C580	35312 3C730



Note: Only order the Injector Seal PN needed for the applicable vehicle.

- 2. Reinstall all removed parts in reverse order of removal.
- 3. Confirm normal vehicle operation.

SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTY039)**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
Sorento (XMa)	December 17, 2012 to December 11, 2014
Cadenza (VG & YG)	February 1, 2013 to July 12, 2017
Sedona (YP)	July 21, 2014 to March 17, 2016

REQUIRED TOOL:

Tool Name	Part Number	Figure	Comments
Coolant Pressure Test Kit	N/A		Locally Sourced
Head Gasket Combustion Leak Test Kit	N/A		

REQUIRED PART:

Model	Part Name	Part Number	Figure	Qty.	Comments
XMa	Engine Sub Assembly	125S1 3CS00QQK or 115R1 3CS00QQK*		1	FWD
		127S1 3CS00QQK or 116R1 3CS00QQK*		1	4WD
	Service Kit	21111 3CK11QQK	N/A	1	
	• Exhaust Manifold Gasket	28521 3C702		1	
	• Exhaust Manifold Gasket	28521 3C712		1	
	• Exhaust Pipe Gasket	28751 2B550		2	
	• Exhaust Pipe Gasket	28751 3S100		1	
	• Inlet Manifold Gasket	28215 3CFA0		6	
	• Surge Tank Gasket	29215 3CFA1		1	
	• HPFP Pipe Assy	35305 3C104		1	
	• Injector Tip Seal	35312 3C720**		6	
	• Injector Tip Seal	35312 3C730**		6	
	• Injector Washer Bracket	35313 3C200		6	
	• Steering Shaft Bolt	56415 1M000		1	
	• Drive Plate Bolts	23311 35050		8	
	• Torque Converter Bolts	42121 21720		6	
	• FRT Drive Shaft Nuts	49551 3X000		2	
	• Roll Rod Bolt	21920 2T000		1	
	• Tie Rod End Nut	13134 10007K		2	
	• Snap Pin	57799 4D200		2	
	• HPFP Bolts	11405 06206K		2	
	• Flange Nut	13387 12007K		3	
	• Coolant O-Ring	25462 35504		2	
	• Thermostat Gasket	25652 3CAA0		1	
	• Thermostat Gasket	25651 3CAA0		1	
	• Oil level gauge O-ring	26614 2B000		1	
	Propeller Shaft Bolt (FRT)	11647 10256K		4	AWD <u>Only</u>
	Propeller Shaft Bolt (RR)	49129 C5200		3	
	OPS Extension Harness	94755 3C700*		1	If Needed
	Engine Oil	NPNENG5W30		6	Quart
	Coolant	UM020 CH271		1	Gallon

Note: The replacement QQQ part numbers will require a VIN entry for parts ordering. DO NOT order these parts for stocking purposes, related to this TSB. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

***OPS extension harness is Not included. Reuse the harness that have been removed from the previous engine. Order an OPS extension harness (94755 3C700) in case the removed OPS harness is not suitable for reuse.**

****Only order/use the applicable Injector Tip Seal by referring to the table on page 4.**

SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTYO39)

Model	Part Name	Part Number	Figure	Qty.	Comments
VG	Engine Sub Assembly	123S1 3CS00QQK or 112R1 3CS00QQK*		1	
	Service Kit	21111 3CK12QQK		1	
	• Exhaust Manifold Gasket	28521 3C702	N/A	1	
	• Exhaust Manifold Gasket	28521 3C712		1	
	• Exhaust Pipe Gasket	28751 2B100		2	
	• Exhaust Pipe Gasket	28751 2T100		1	
	• Inlet Manifold Gasket	28215 3CFA0		6	
	• Surge Tank Gasket	29215 3CFA1		1	
	• HPFP Pipe Assy	35305 3C104		1	
	• Injector Tip Seal	35312 3C720**		6	
	• Injector Tip Seal	35312 3C730**		6	
	• Injector Washer Bracket	35313 3C200		6	
	• Steering Shaft bolt	25415 3Q000		8	
	• Drive Plate Bolts	23311 35050		6	
	• Torque Converter Bolts	42121 21720		2	
	OPS Extension Harness	94755 3C700*		1	If Needed
	Engine Oil	NPNENG5W30		6	Quart
	Coolant	UM020 CH271		1 gal	Concentrate

Note: The replacement QKK part numbers will require a VIN entry for parts ordering. DO NOT order these parts for stocking purposes, related to this TSB. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

***OPS extension harness is not included. Reuse the harness that have been removed from the previous engine. Order an OPS extension harness (94755 3C700) in case the removed OPS harness is not suitable for reuse.**

****Only order/use the applicable Injector Tip Seal by referring to the table on page 4.**

SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTY039)

Model	Part Name	Part Number	Figure	Qty.	Comments
YG	Engine Sub Assembly	147S1 3LS00QQK		1	
	Service Kit	21111 3CK13QQK	N/A	1	
	• Exhaust Manifold Gasket	28521 3C702		1	
	• Exhaust Manifold Gasket	28521 3C712		1	
	• Exhaust Pipe Gasket	28751 C5100		2	
	• Exhaust Pipe Gasket	28751 2T100		1	
	• Inlet Manifold Gasket	28215 3CFA0		6	
	• Surge Tank Gasket	29215 3CFA1		1	
	• HPFP Pipe Assy	35305 3L110		1	
	• HP Fuel Pipe Assy-Cross	35307 3L000		1	
	• Injector Tip Seal	35312 2E613	N/A	6	
	• Injector Washer Bracket	35313 3L000		6	
	• Drive Plate Bolts	23311 35050		8	
	• Torque Converter Bolts	42121 21720		6	
	• FRT Drive Shaft Nuts	51768 3X000		2	
	• Roll Rod Bolt	21991 3R000		1	
	• Tie Rod End Nut	51798 3M000		2	
	• Snap Pin	57799 4D200		2	
	• Steering Shaft Bolt	56415 1M000		1	
	• HPFP Bolts	11405 06206K		2	
	• Flange Nut	51759 F6000	N/A	3	
	• Cross-over Coolant O-Ring	25462 35504		2	
	• Thermostat Gasket	25651 3L100		1	
	• Thermostat Gasket	25652 3L150		1	
	• Oil level gauge O-ring	26614 35020		1	
	Engine Oil	NPNENG5W30		6	Quart
	Coolant	UM020 CH271		1 gal	Concentrate

Note: The replacement QKK part numbers will require a VIN entry for parts ordering. DO NOT order these parts for stocking purposes, related to this TSB. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTYO39)

Model	Part Name	Part Number	Figure	Qty.	Comments
YP	Engine Sub Assembly	128S1 3CS00QQK or 113R1 3CS00QQK		1	
	Service Kit	21111 3CK14QQK	N/A	1	
	• Exhaust Manifold Gasket	28521 3C702		1	
	• Exhaust Manifold Gasket	28521 3C712		1	
	• Exhaust Pipe Gasket	28751 3S100		3	
	• Inlet Manifold Gasket	28215 3CFA0		6	
	• Surge Tank Gasket	29215 3CFA1		1	
	• HPFP Pipe Assy	35305 3C104		1	
	• Injector Tip Seal	35312 3C720**		6	
	• Injector Tip Seal	35312 3C730**		6	
	• Injector Washer Bracket	35313 3C200		6	
	• Steering Shaft Bolt	56415 1M000		1	
	• Drive Plate Bolt	23311 35050		8	
	• Torque Converter Bolt	42121 21720		6	
	• FRT Drive Shaft Bolt	49551 4T000		2	
	• Roll Rod Bolt	21920 2T000		1	
	• Tie Rod End Nut	13146 12007K		2	
	• Snap Pin	57799 4D200		2	
	• HPFP Bolt	11405 06206K		2	
	• Flange Nut	13387 12007K		3	
	• Cross-over Coolant O-Ring	25462 35504		2	
	• Thermostat Gasket	25652 3CAA0		1	
	• Thermostat Gasket	25651 3CAA0		1	
	• Oil level gauge O-ring	26614 2B200		1	
	OPS Extension Harness	94755 3C700*		1	If Needed
	Engine Oil	NPNENG5W30		6	Quart
	Coolant	UM020 CH271		1 gal	Concentrate

Note: The replacement QQQ part numbers will require a VIN entry for parts ordering. DO NOT order these parts for stocking purposes, related to this TSB. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

***OPS extension harness is Not included. Reuse the harness that have been removed from the previous engine. Order an OPS extension harness (94755 3C700) in case the removed OPS harness is not suitable for reuse.**

****Only order/use the applicable Injector Tip Seal by referring to the table on page 4.**

SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTY039)

WARRANTY INFORMATION:

N Code: L31 C Code: ZZ1

CLAIMS SUBMITTED ON OR BEFORE: 10/06/2025

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
XMa	W	22311 3CGAO	0	Engine Inspection (Pass)	242A16I1	0.7 M/H	N/A	0
				Engine Inspection (Fail) + Engine Sub-Assembly Replacement (FWD)	242A16R2	8.7 M/H	115R1 3CS00QQK	1
							NPNENG5W30	6
							UM022 CH271	1
				Engine Inspection (Fail) + Engine Sub-Assembly Replacement (AWD)	242A16R3	8.9 M/H	116R1 3CS00QQK	1
							11647 10256K	4
							49129 C5200	3
							NPNENG5W30	6
							UM022 CH271	1
YP		22311 3CGAO	0	Engine Inspection (Pass)	242090R0	0.7 M/H	N/A	0
				Engine Inspection (Fail) + Engine Sub-Assembly Replacement	242090R2	9.9 M/H	113R1 3CS00QQK	1
							NPNENG5W30	6
							UM022 CH271	1

Note: Use sublet code 'X1' with a maximum allowed amount of \$1.30 per vehicle for locally sourced Block-Tester Combustion Leak Detector Fluid. For Substitute Transportation policy, please refer to [Service Policy and Procedures Manual \(SPPM\) 6.11 "Kia Substitute Transportation"](#).

Refer to Warranty Bulletin [Warranty Bulletin 2022-07](#) for Full Synthetic Engine Oil NPN.

SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTY039)**WARRANTY INFORMATION:****N Code: L31 C Code: ZZ1****CLAIMS SUBMITTED ON OR BEFORE: 10/06/2025**

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
VG	W	22311 3CGA0	0	Engine Inspection (Pass)	242090R0	0.7 M/H	N/A	0
				Engine Inspection (Fail) + Engine Sub-Assembly Replacement	242090R3	8.7 M/H	112R1 3CS00QQK	1
							NPNENG5W30	6
							UM022 CH271	1
YG		22110 3L210	0	Engine Inspection (Pass)	242090R1	0.7 M/H	N/A	0
				Engine Inspection (Fail) + Engine Sub-Assembly Replacement	242090R4	9.1 M/H	147S1 3LS00QQK	1
							NPNENG5W30	6
							UM022 CH271	1

Note: Use sublet code 'X1' with a maximum allowed amount of \$1.30 per vehicle for locally sourced Block-Tester Combustion Leak Detector Fluid. For Substitute Transportation policy, please refer to [Service Policy and Procedures Manual \(SPPM\) 6.11 "Kia Substitute Transportation"](#).

Refer to Warranty Bulletin [Warranty Bulletin 2022-07](#) for Full Synthetic Engine Oil NPN.



SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTY039)

WARRANTY INFORMATION:

N Code: L31 C Code: ZZ1

CLAIMS SUBMITTED ON OR AFTER: 10/07/2025

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
XMa	W	125S1 3CS00	0	Inspection Only (Pass)	242A16I1	0.7 M/H	N/A	0
				Inspection (Fail) + Engine Sub Assembly Replacement (FWD)	242A16R6	8.7 M/H	125S1 3CS00QQK or 115R1 3CS00QQ	1
							94755 3C700	1
							NRKIT XMA00	1
							NPNENG5W30	6
							UM020 CH271	1
				Inspection (Fail) + Engine Sub Assembly Replacement (AWD)	242A16R7	9.1 M/H	127S1 3CS00QQK or 116R1 3CS00QQK	1
							94755 3C700	1
							NRKIT XMA00	1
							NPNENG5W30	6
							UM020 CH271	1
YP		128S1 3CS00	0	Inspection Only	242090R0	0.7 M/H	N/A	0
				Inspection (Fail) + Engine Sub Assembly Replacement	242090R2	9.9 M/H	128S1 3CS00QQK or 113R1 3CS00QQK	1
							94755 3C700	1
							NRKIT YP000	1
							NPNENG5W30	6
							UM020 CH271	1

Note: Use sublet code 'X1' with a maximum allowed amount of \$1.30 per vehicle for locally sourced Block-Tester Combustion Leak Detector Fluid. For Substitute Transportation policy, please refer to [Service Policy and Procedures Manual \(SPPM\) 6.11 "Kia Substitute Transportation"](#).

Refer to Warranty Bulletin [Warranty Bulletin 2022-07](#) for Full Synthetic Engine Oil NPN.

***If needed (OPS extension harness)**

Printed TSB copy is for reference only; information may be updated at any time. Always refer to KGIS for the latest information.

TSB: ENG254 (Rev 4) Multiple Models June 2024



SUBJECT:

ENGINE SUB ASSEMBLY INSPECTION/REPLACEMENT (WTY039)**WARRANTY INFORMATION:****N Code: L31 C Code: ZZ1****CLAIMS SUBMITTED ON OR AFTER: 10/07/2025**

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
VG	W	123S1 3CS00	0	Inspection Only (Pass)	242A1611	0.7 M/H	N/A	0
				Inspection (Fail) + Engine Sub Assembly Replacement (FWD)	242A16R2	8.7 M/H	123S1 3CS00QQK or 112R1 3CS00QQK	1
							94755 3C700	1
							NRKIT VG000	1
							NPNENG5W30	6
							UM020 CH271	1
YG		125P1 3LS00	0	Inspection Only	242090R0	0.7 M/H	N/A	0
				Inspection (Fail) + Engine Sub Assembly Replacement	242090R2	8.9 M/H	147S1 3LS00QQK	1
							NRKIT YG000	1
							NPNENG5W30	6
							UM020 CH271	1

Note: Use sublet code 'X1' with a maximum allowed amount of \$1.30 per vehicle for locally sourced Block-Tester Combustion Leak Detector Fluid. For Substitute Transportation policy, please refer to [Service Policy and Procedures Manual \(SPPM\) 6.11 "Kia Substitute Transportation"](#).

Refer to Warranty Bulletin [Warranty Bulletin 2022-07](#) for Full Synthetic Engine Oil NPN.

If needed (OPS extension harness)