	GROUP	MODEL
	Safety Recall Campaign	**2011-2012MY Sportage (SL)**
	NUMBER	DATE
	SC174	**July 2019**

SAFETY RECALL CAMPAIGN

SUBJECT: SL THETA II 2.4 MPI ENGINE OIL PAN INSPECTION AND REPLACEMENT

This bulletin provides the service procedure, on some 2011-2012 MY Sportage (SL) vehicles produced from June 11, 2010 through February 13, 2012 equipped with Theta II 2.4 MPI engines, to replace the Oil Pressure Switch ("OPS") with an improved one that will detect the early onset of oil leakage. In addition, dealers will inspect the oil pan for any oil leaks according to the procedure described in this TSB and, if an oil leak is found, the oil pan will be replaced. The oil pan may have been improperly sealed during engine production. As a result, engine oil may leak from the oil pan. If the vehicle is continued to be driven with an unrepaired oil leak, damage to the engine can occur and the vehicle could stall while in motion. An engine stall can increase the risk of a crash. There is also the possibility that a fire could occur, increasing the risk of injury.

Should a customer bring his/her vehicle to the dealer with the check engine (malfunction indicator) light and/or the oil pressure warning light illuminated and the cause is determined to be oil leaking from the oil pan, verify that the vehicle is included in this safety recall campaign.

NOTE: The updated oil pressure switch is designed to detect low oil volume and prevent potential engine damage or failure due to an engine oil leak. The engine oil should be changed if the oil pressure light comes on after the updated oil pressure switch is installed.

✶ 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.

✶ NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

File Under: <Safety Recall Campaign>

Circulate To: ☒ **General Manager** ☒ **Service Manager** ☒ **Parts Manager**

☒ **Service Advisors** ☒ **Technicians** ☒ **Body Shop Manager** ☒ **Fleet Repair**

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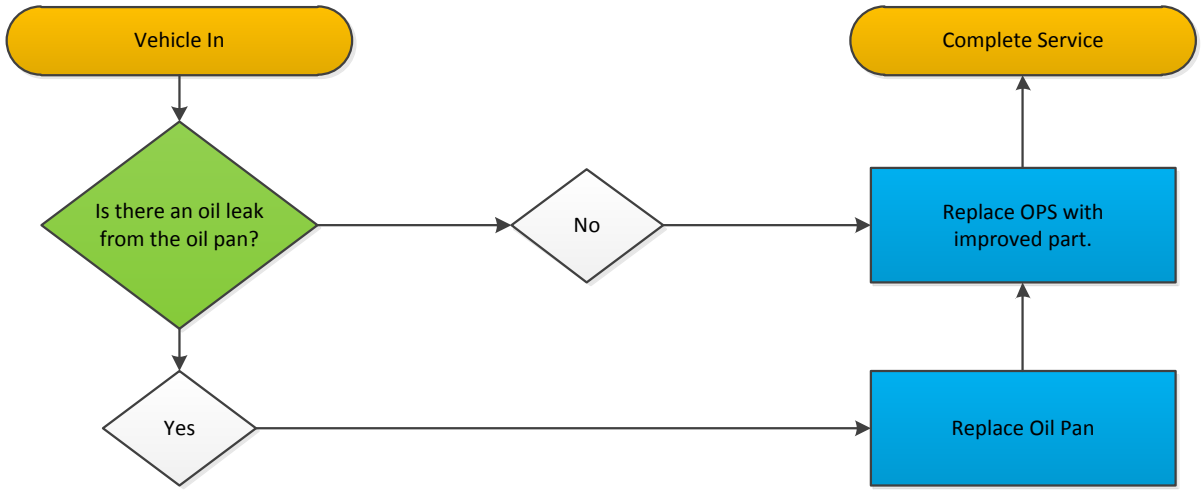
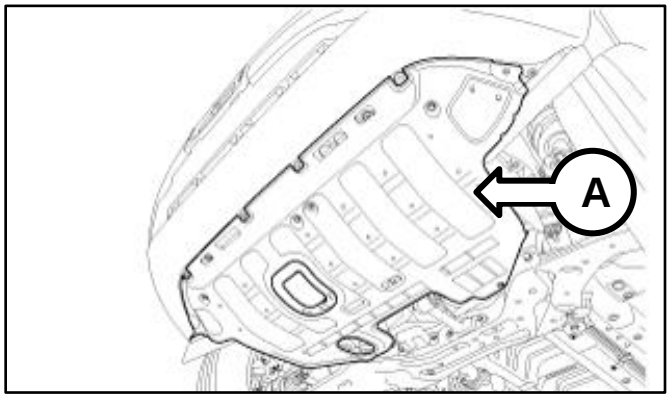
Flowchart:



Engine Oil Leak Inspection Procedure:

1. Raise vehicle on a lift and then remove the engine under cover (A).



2. Inspect the oil pan area for any oil leak. Sample photos are shown on the right.

Follow the table below for the recommended procedure:

Inspection Result	Action
No oil leaking	Replace the OPS only **(page 3)**
Oil leak visible	Replace both the OPS and Oil Pan. **(pages 3 and 4)**

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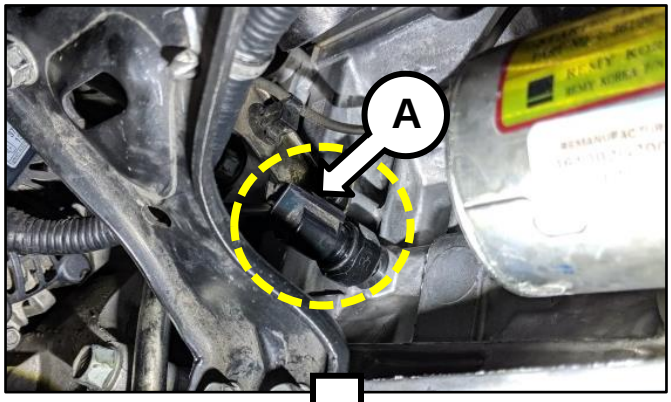
Oil Pressure Switch (OPS) Replacement Procedure:

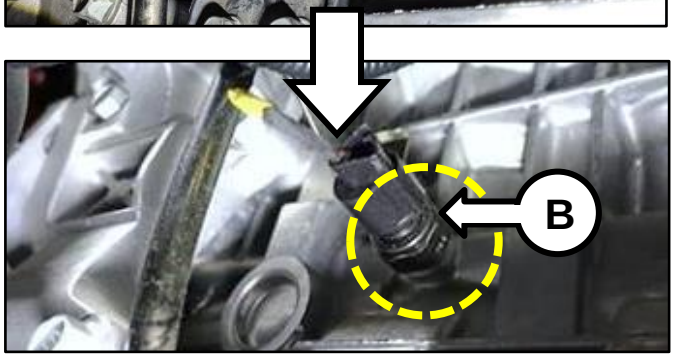
1. Disconnect the OPS connector (A).

★ IMPORTANT

Be careful not to damage the connector when disconnecting.



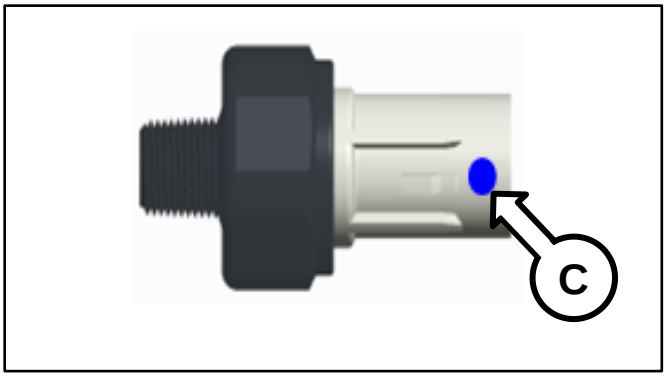
2. Using a 24mm wrench or deep socket, remove the existing OPS (B).



3. Install the new OPS and torque to specification and ensure the OPS connector is properly connected.

<u>**Note**: The improved OPS, if ordered before August 1, 2019, may have a blue marking (C).</u>

Tightening torque for OPS:
5.8 - 8.7 lb.ft (7.8 - 11.8 N.m, 0.8 - 1.2 kgf.m)



4. If the oil pan <u>does not</u> require replacement, reinstall all removed components in the reverse order of removal. Verify no leak exists and ensure engine oil is at the proper level.

If the oil pan requires replacement as a result of the Engine Oil Leak Inspection procedure on page 2, proceed to the oil pan replacement procedure on page 4.

★ NOTICE

If the oil pressure light comes on <u>after</u> the new OPS is installed, the engine oil should be changed. Open a Techline case if the oil pressure light remains on after the oil is changed.

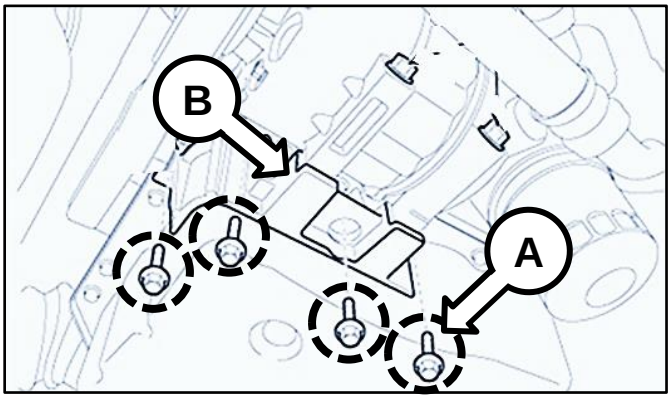
SUBJECT: SL THETA II 2.4 MPI ENGINE OIL PAN INSPECTION AND REPLACEMENT (SC174)

Oil Pan Replacement Procedure:

1. Drain the engine oil.

2. Loosen and remove the four (4) A/C compressor bracket retaining bolts (A) and then remove the A/C compressor bracket (B).

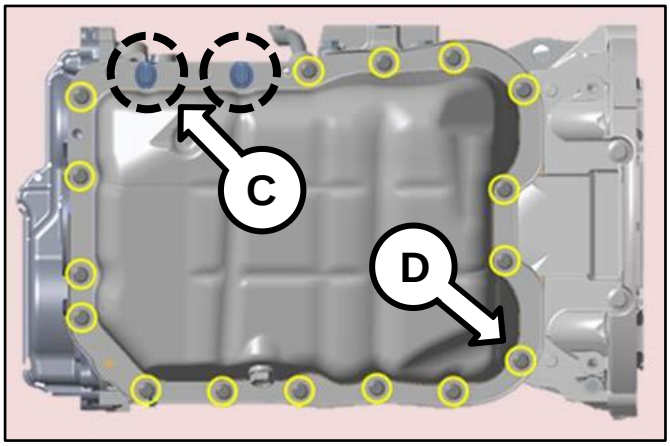
   Tightening torque for bolts (A):
   14.5 - 17.4 lb.ft (19.6 - 23.5 N.m,
   2.0 - 2.4 kgf.m)



3. Carefully loosen and remove the oil pan retaining bolts (C) and (D). Save one (1) retaining bolt (D) to be reused and discard the rest.

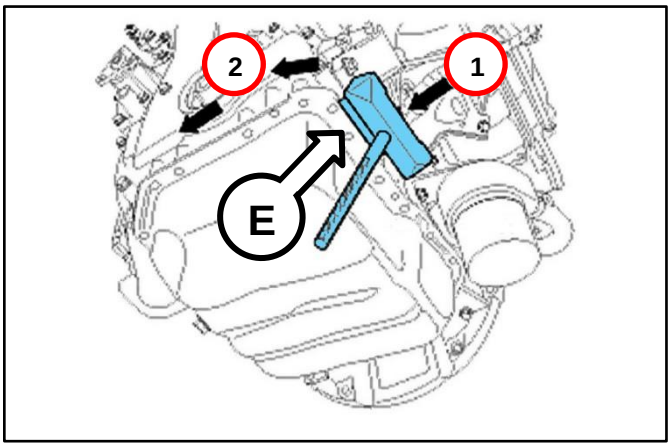
   Tightening torque for bolts (C) (x2):
   19.5 - 22.4 lb.ft (26.5 - 30.4 N.m,
   2.7 - 3.1 kgf.m)

   Tightening torque for bolts (D) (x17):
   7.2 - 8.7 lb.ft (9.8 - 11.8 N.m,
   1.0 - 1.2 kgf.m)



4. Using SST 09215 3C000 (E) and a mallet, carefully separate the oil pan from the ladder frame. Work around the oil pan along the arrow direction for more than 2/3 of the oil pan adhesive face and then remove it from the ladder frame.

   Be careful **not** to tap hard or twist the SST when removing as it may damage SST.



✶ NOTICE

Use an old oil pan retaining bolt to hold up the pan during the sealant separation to prevent the pan from falling. Be sure to work around the retaining bolt.

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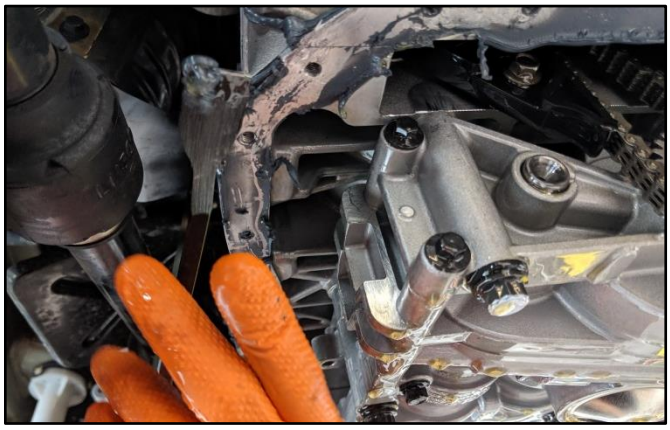
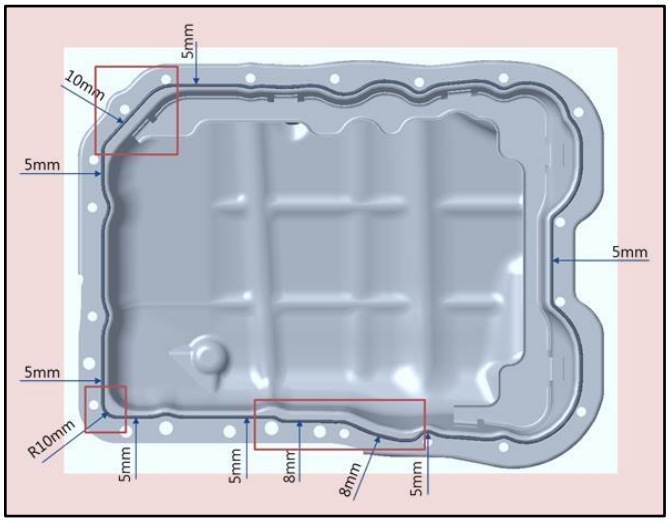
5. Remove any remaining silicone from the engine block and timing chain cover surface where the oil pan was sealed and clean up any oil residue.



✱ NOTICE

Thoroughly clean the surface using a clean shop towel and degreaser to remove any contaminants such as oil and ensure a clean surface for proper sealing of the oil pan.

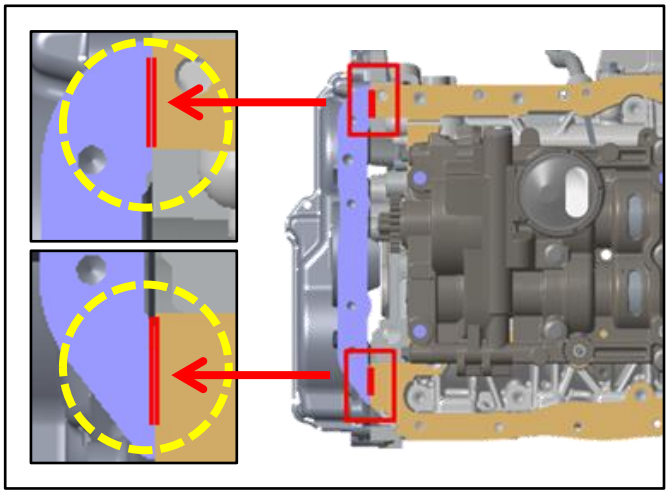
6a. Apply sealant (UM016 CH123) to the new oil pan. Sealant bead width: 0.08 - 0.12in. (2.5 - 3.0mm)



✱ NOTICE

When applying sealant, the sealant must not protrude into the inside of the oil pan. Photo shown on the right provides the recommended distance of the sealant bead placement from the inner edge of the oil pan rim.

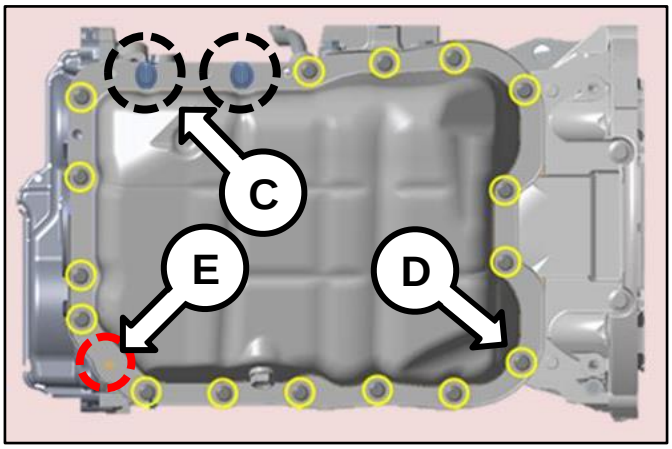
6b. Apply 2 sealant lines as wide as 0.08in (2.5mm wide) to the area where the engine block and timing cover meet as shown below. **Note**: The oil pan must be installed within five (5) minutes after application of sealant.



✱ IMPORTANT

Oil leakage may reoccur if the oil pan is not sealed properly.

7. Carefully align and install the new oil pan with sealant applied. *Sixteen (16) new retaining bolts (D) and two (2) new retaining bolts (C) are supplied with the oil pan kit and must be used. Uniformly tighten the bolts in several passes before torqueing them to specifications.



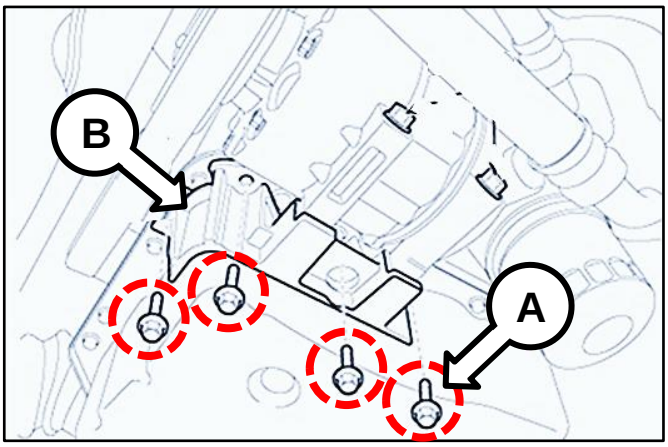
Tightening torque for bolts (C) (x2):
19.5 - 22.4 lb.ft (26.5 - 30.4 N.m,
2.7 - 3.1 kgf.m)

Tightening torque for bolts (D) (x16):
7.2 - 8.7 lb.ft (9.8 - 11.8 N.m,
1.0 - 1.2 kgf.m)

✶ NOTICE

***The oil pan kit only comes with 16 new oil pan bolts (D). Oil pan bolt hole (E) can be secured with an old retaining bolt saved in step 3 of this procedure. Note: Note: A previously replaced engine may have a 17th bolt hole. If so, reuse one of the old bolts (D) to complete the set needed to reseal the oil pan.**

8. Install the A/C bracket (B) and secure with the four (4) new A/C bracket retaining bolts (A), supplied with the oil pan kit.



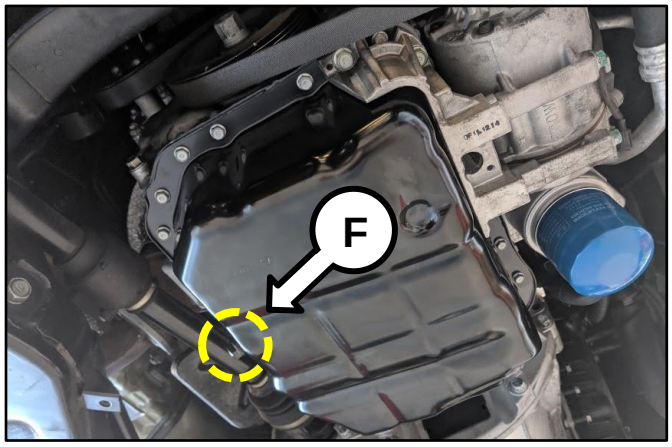
Tightening torque for bolts:
14.5 - 17.4 lb.ft (19.6 - 23.5 N.m,
2.0 - 2.4 kgf.m)

✶ NOTICE

Reuse the A/C bracket but do not reuse the A/C bracket bolts. New bolts are supplied with kit.

9. Ensure the oil drain plug (F) is torqued to specification.

   Tightening torque for plug:
   25.3 - 32.5 lb.ft (34.3 - 44.1 N.m, 3.5 - 4.5 kgf.m)



10. Reinstall all removed components in the reverse order of removal.

11. Refill the engine oil to specification and ensure proper installation of the engine oil filler cap.

    Capacity - Oil Pan:
    4.65 U.S. Qt., (1.16 U.S. Gal., 4.4 Liters, 3.87 Imp. Qt.)

12. Start the engine and allow it to warm up. After engine warm up, turn engine off and wait five (5) minutes to check the engine oil level.

★ NOTICE

Oil level should be between the "L" and "F" marks on the dipstick. If oil level is still low, add oil up to the "F" mark.

13. Verify no leaks exist at the oil pan area and ensure proper operation of the vehicle.

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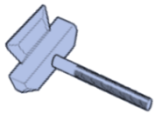
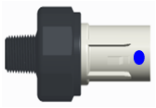
AFFECTED VEHICLE RANGE:

Model	Production Date Range
Sportage (SL)	June 11, 2010 through February 13, 2012

REQUIRED TOOL:

Tool Name	Part Number	Figure
Oil Pan Remover (SST)	09215 3C000	

REQUIRED PART:

Part Name	Part Number	Figure	Notes
Engine Oil Pan Kit	21510 2G500QQK		Kit includes: 1 Oil Pan (with drain plug) 2 Large Oil Pan Bolts 16 Small Oil Pan Bolts 4 A/C Comp. Bracket Bolts
Oil Pressure Switch (OPS)	94750 37200QQK		Will have a blue mark if ordered before August 1, 2019.
RTV Silicone Gasket Maker	UM016 CH123		Order through Kia Chemicals 1 tube covers 3 vehicles.

Note: Parts orders will be limited to a quantity above filed warranty claim quantity (variable by dealer based on impacted units). Please file warranty claims timely to ensure parts orders are not impacted.

WARRANTY INFORMATION:

N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	21510 25051	0	(SC174) Engine Oil Leak Inspection & OPS Replacement	191022R0	0.6 M/H	94750 37200QQK	1
			(SC174) Engine Oil Leak Inspection & OPS and Oil Pan Replacement	191022R1	1.3 M/H	21510 2G500QQK	1
						94750 37200QQK	1

Note: Use sublet code 'X3' for engine oil with a maximum allowed amount of $16.50 for labor op 191022R1. Use sublet code 'X1' with a maximum allowed amount of $5.33 for RTV Silicone Gasket Maker. Use sublet code 'X2' for rental expense with a maximum of 1 day for labor op 191022R0 and 2 days for labor op 191022R1.

★ NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC174 when accessing the WebDCS system.