	GROUP Safety Recall	MODEL 2017MY Sorento (UMa) 3.3L
	NUMBER SC153 (Rev 2, 2/5/2018)	DATE November 2017
SAFETY RECALL		
SUBJECT: 3.3L LAMBDA ENGINE INSPECTION / REPLACEMENT (SC153)		

★ 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 the procedure to inspect, and if necessary, replace the engine sub-assembly on certain 2017MY Sorento (UMa) vehicles, equipped with a Lambda engine produced from March 27, 2017 through March 30, 2017. The engine's crankshaft may not have been properly heat-treated during the manufacturing process. An improperly heat-treated crankshaft may produce a cyclic knocking noise from the engine, as well as result in the illumination of the vehicle's malfunction indicator lamp (MIL). If the warnings are ignored and the vehicle continues to be driven, the crankshaft may fail, and the vehicle may stall while in motion, increasing the risk of a crash. In addition, under certain conditions, a fire may occur. If the engine replacement is not necessary, replace the lower oil pan.

NOTE: *If the inspection identifies that the engine sub-assembly must be replaced, the dealer should provide the customer with alternate transportation during the duration of the repairs. Dealers will be able to submit for reimbursement of alternate transportation expenses in the same manner as normal warranty claims in WebDCS.*

Before conducting the procedure, verify the vehicle is included in the list of affected VINs.

★ 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

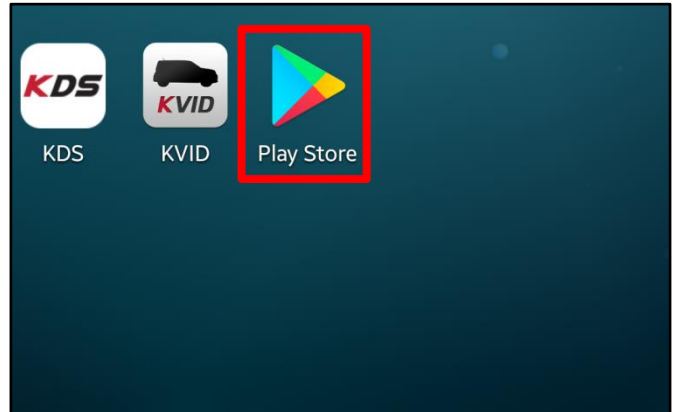
To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

File Under: <Safety Recall>

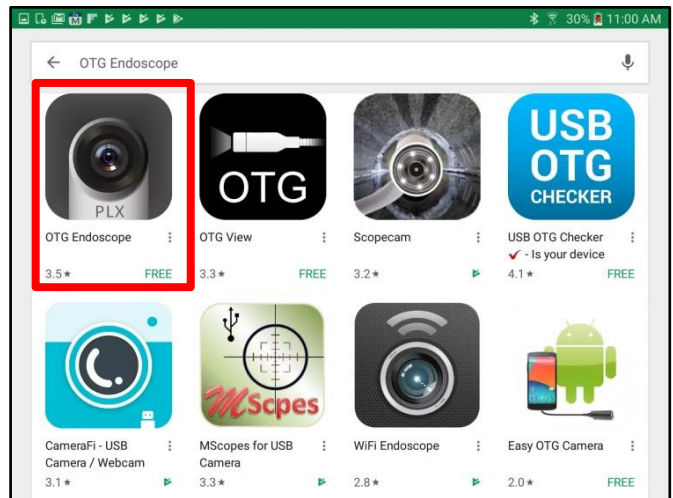
Circulate To: ☒ General Manager ☒ Service Manager ☒ Parts Manager
☒ Service Advisors ☒ Technicians ☒ Body Shop Manager ☒ Fleet Repair

Endoscope App Download Procedure:

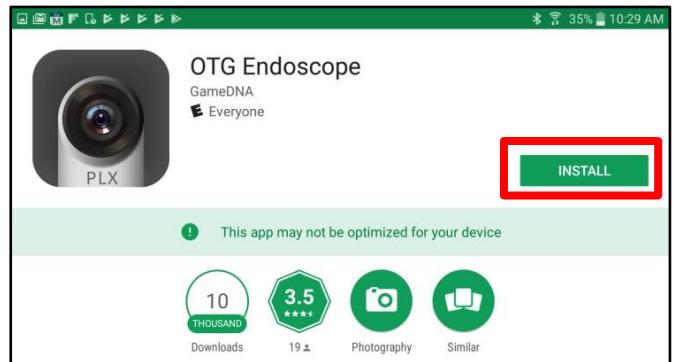
1. Select the “Play Store” app on the KDS tablet.



2. Search for “OTG Endoscope” and select the app to download.



3. Select “Install”.



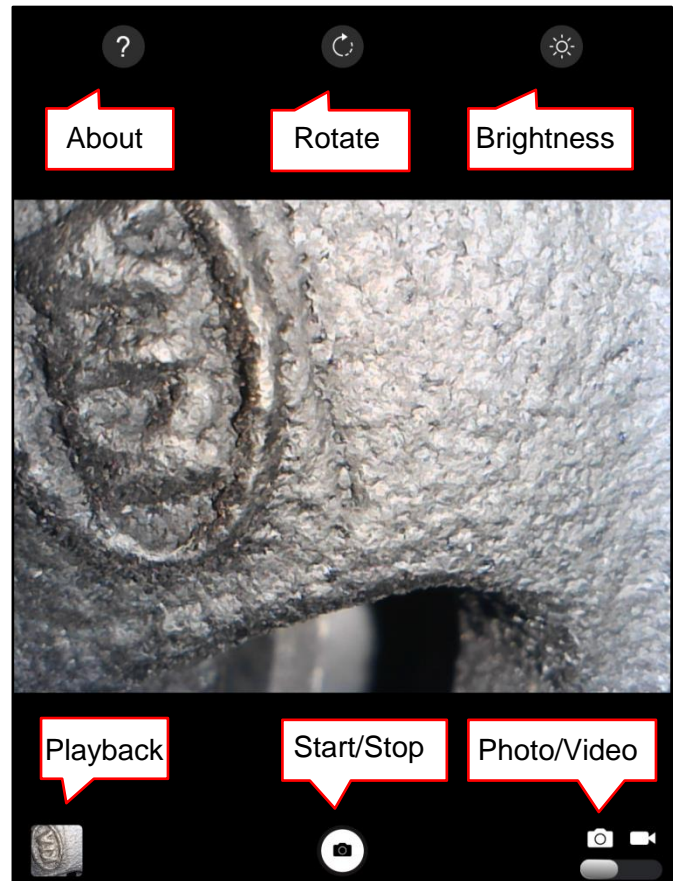
4. Connect the endoscope to the supplied OTG cable and then connect to KDS tablet. If requested to choose an app for the USB device, select “Endoscope”. Select “Allow” to any pop-ups displayed.

Note: the endoscope is specially designed for macro, up close viewing. Viewing at other distances will appear blurry. This is a normal condition.

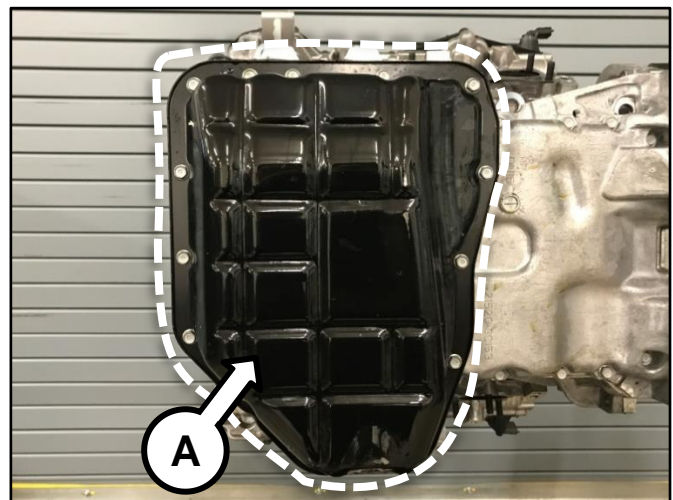


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5. Included in this information is a list of button descriptions.

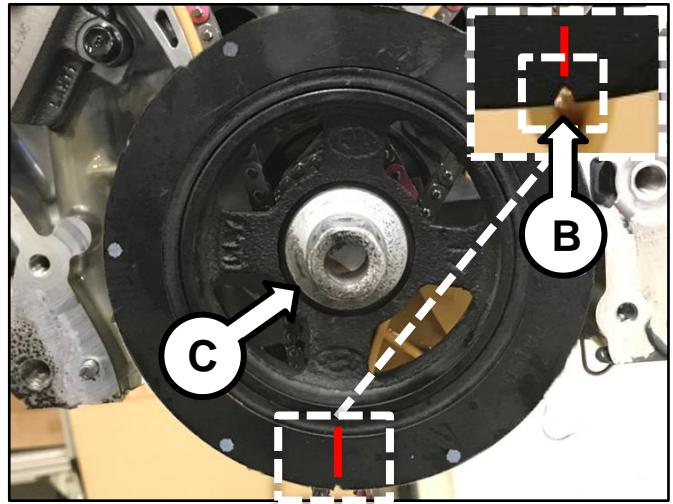

Inspection Procedure:

1. Remove the lower oil pan (A) by referring to the “Engine Mechanical System → Lubrication System → Oil Pan → Repair procedures” chapter in the applicable Shop Manual.

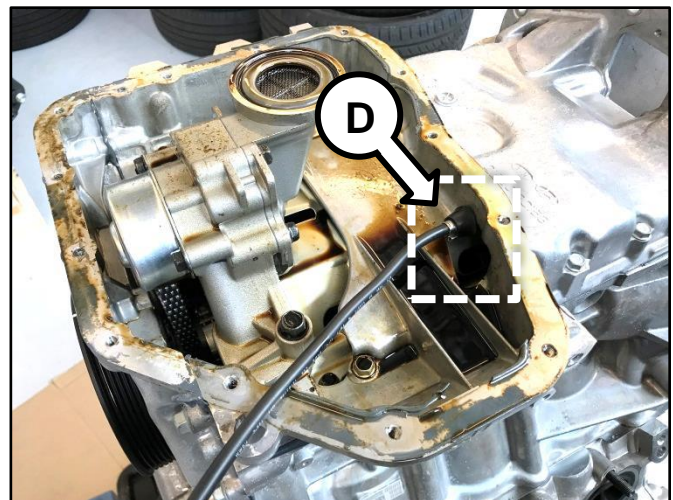


Engine assembly removed for demonstration purposes only.

2. Rotate the crankshaft and bring the timing mark (B, red mark) on the crank pulley (C) to the 6 o'clock position.



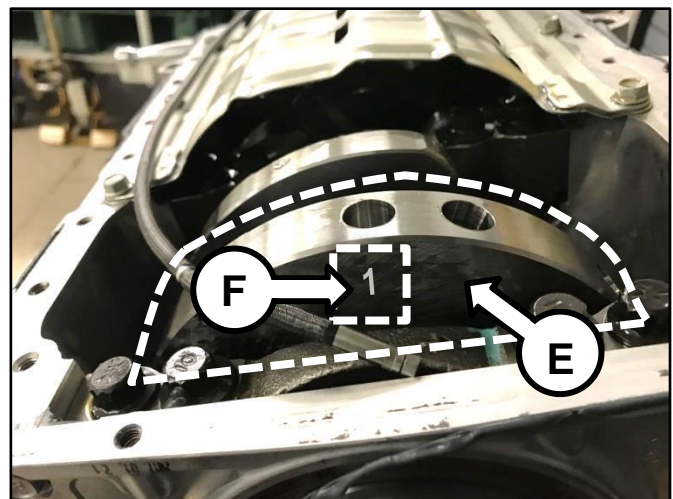
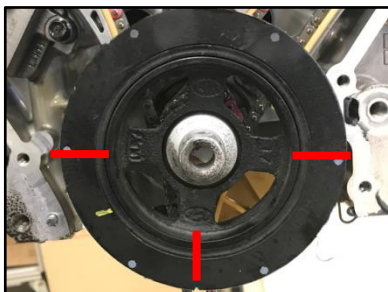
3. Insert the provided endoscope towards the rear of the engine through the oil return passage opening (D) of the upper oil pan.



4. Locate the last crankshaft counter weight (E) (furthest away from the crank pulley). Using the endoscope, locate the lot number stamped on the back side (F) of the counter weight.

★ NOTICE

If the lot number cannot be located, rotate the crankshaft 90° to the left or right from the timing mark (red mark) on the crankshaft pulley.



Upper oil pan was removed in this image for demonstration purposes only.
DO NOT remove the upper oil pan.

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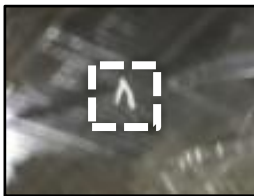
5. Take a photo of the crankshaft lot number with the endoscope and save the photo as it will be required for claim submission (attachment type “**XX: Other**” in WebDCS.)

If the lot number is 1, replace the engine (long block) by referring to the “Engine Mechanical System → Engine and Transaxle Assembly → Engine and Transaxle Assembly → Repair procedures” chapter in the applicable Shop Manual on KGIS.

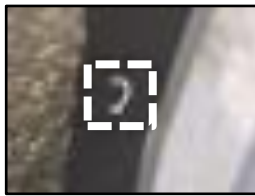
If the lot number is 2, 3 or 4, replace the lower oil pan by referring to the “Engine Mechanical System → Lubrication System → Repair procedures” chapter in the applicable Shop Manual on KGIS and refill with new engine oil.

*** NOTICE**

Lot numbers may be partially stamped. See examples below:



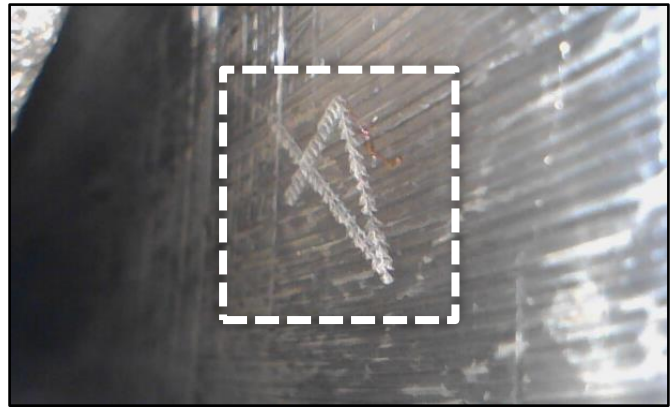
Lot #1



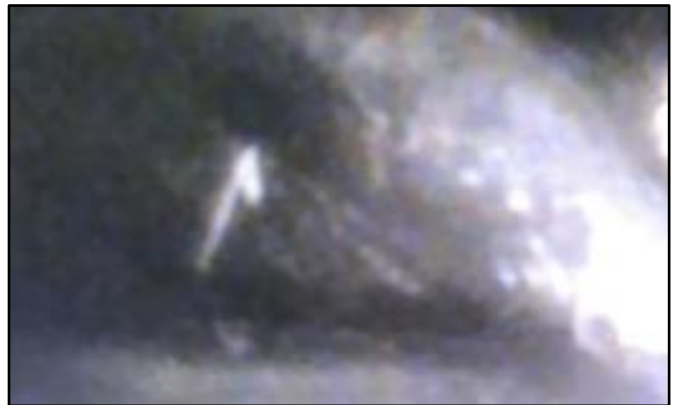
Lot #2



Lot #3



Example of lot number (4) shown on an endoscope.



Example of lot number (1) shown on an endoscope.



Example of lot number (3) shown on an endoscope.


6. Lot number 1: After replacement of the engine sub-assembly, verify proper operation of the vehicle with road test, and erase any stored DTCs (e.g., EPS, ESC, and TPMS) that may have been set by this procedure. Verify no leaks exist and ensure engine oil and coolant are at their proper level. See steps below and [Parts Bulletin 20-201 0003](#) for details regarding engine disabling and discarding.
1. Prior to discarding the removed engine, in a safe area, with proper protective equipment (PPE), disable it to prevent reuse by using a cut-off wheel to cut and remove the serialized portion of the starter ear from the engine block. See [Parts Bulletin 20-201 0003](#) for details.
 2. Provide the removed starter ear to your dealership's Parts Department for campaign engine core charge reimbursement request processing.

Lot number 2, 3, or 4: After replacement of the lower oil pan, start the engine and verify proper operation and no leaks. Ensure engine oil is at the proper level.

SUBJECT: 3.3L LAMBDA ENGINE INSPECTION / REPLACEMENT (SC153)**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
Sorento (UMa)	March 27, 2017 through March 30, 2017

REQUIRED TOOL:

Tool Name	Tool Number		Comments
Macro Endoscope	SC153 ENDO		Auto-shipped to Dealers

NOTE: Kia Consumer Assistance Center staff will be directly contacting affected customers to schedule service appointments due to the low volume of vehicles (62). They will also request shipment of the special service tool for shipment to dealers as appointments are scheduled due to limited tool supply. Therefore, not all dealers will be receiving this specialized tool.

REQUIRED PART:

Part Name	Part Number
Lower Oil Pan	21510 3C201
Sealant (for Lower Oil Pan)	UM016 CH123
Oil Filter Service Kit	26320 3CAA0
2WD Engine Sub Assembly	171R1 3CAAAQK
AWD Engine Sub Assembly	173R1 3CAAAQK

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	23110 3L100	0	(SC153) Crankshaft Inspection & Lower Oil Pan Replacement	171A48R0	1.3 M/H	21510 3C201	1
						26320 3CAA0	1
	23110 3L100	0	(SC153) Crankshaft Inspection & 2WD Engine Replacement	171A48R1	8.4 M/H	171R1 3CAAAQK	1
						26320 3CAA0	1
	23110 3L100	0	(SC153) Crankshaft Inspection & AWD Engine Replacement	171A48R2	8.7 M/H	173R1 3CAAAQK	1
						26320 3CAA0	1

Note: Use sublet code 'X1' with a maximum allowed amount of \$13.92 for lower oil pan sealant (only applies to labor op code 171A48R0).

Use sublet code 'X2' to claim possible rental expense. 1 day maximum allowed for labor op code 171A48R0, and 5 day maximum allowed for labor op codes 171A48R1 & 171A48R2. Only if applicable, please include daily additional market surcharge in accordance with the schedule per Warranty Bulletin 2017-11 Section 2 found on KDealer.com → FIXED OPS → WARRANTY → Warranty Bulletins.

Use sublet code 'X3' with a maximum allowed amount of \$19.50 for engine oil reimbursement (applies to all labor op codes). Dealer may claim max quantity of 1, for antifreeze/coolant (part#: UM040 CH012) loss (only applies to labor op codes 171A48R1 & 171A48R2).

*** NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SC153** when accessing the WebDCS system.