



GROUP  
Engine

MODEL  
2013 MY Rio (UB)  
1.6L GDI

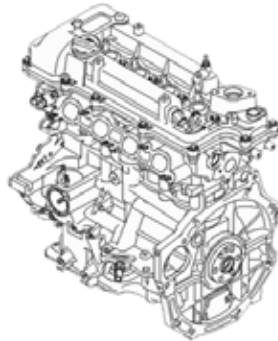
NUMBER  
127

DATE  
December 2012

## TECHNICAL SERVICE BULLETIN

**SUBJECT:** SERVICE ACTION: INSPECTION FOR NOISE FROM ENGINE  
UNDER SPECIFIC CONDITIONS (SA 141)

This bulletin provides information relating to certain 2013MY Rio (UB) vehicles which may exhibit abnormal engine noises, including "rattling" and "chattering", under specific conditions. Only a very small number of vehicles within the identified Production Date range will actually be affected; make sure to follow the detailed instructions and recently updated inspection procedure in this bulletin to prevent unnecessary engine replacements. This procedure applies to vehicles produced from August 09, 2012 to October 09, 2012. Kia is requesting the completion of this Service Action on all affected vehicles in dealer stock prior to delivery. Before conducting the procedure, verify the vehicle is included in the list of affected VINs.



### \*NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

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





This issue number is SA141.

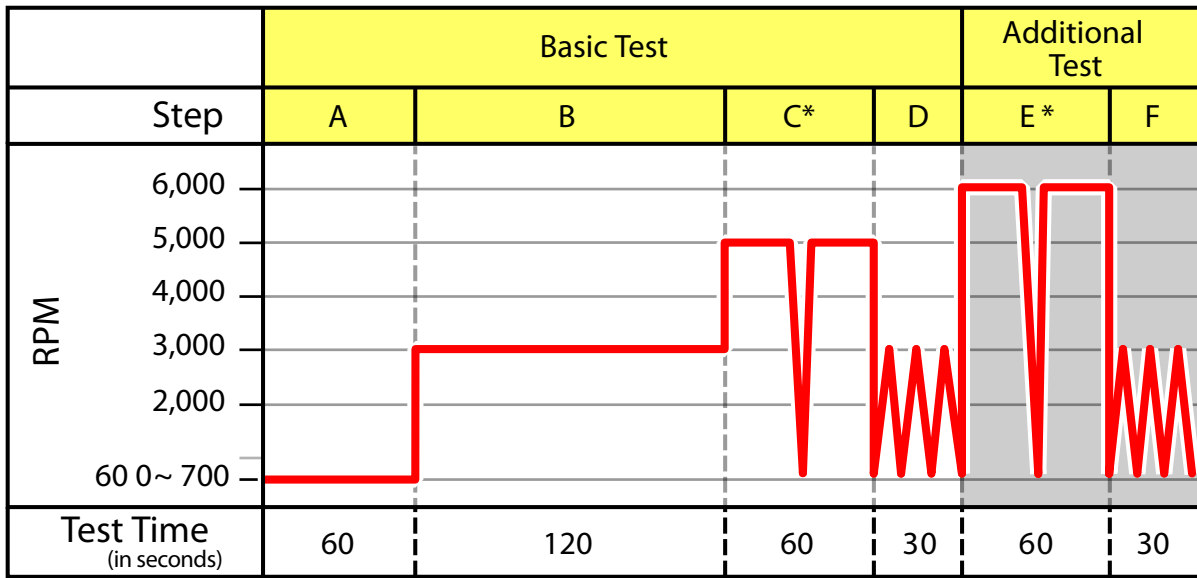
File Under: <Engine>

Circulate To:  General Manager  Service Manager  Parts Manager  
 Service Advisor(s)  Technician(s)  Body Shop Manager  Fleet Repair

**SUBJECT: SERVICE ACTION: INSPECTION FOR NOISE FROM ENGINE UNDER SPECIFIC CONDITIONS (SA 141)**

**Diagnosis Procedure:**

1. Familiarize yourself with the specific noise by reviewing the sound files below:  
 [Normal Sound](#)
 [Abnormal Sound \(HIGH\)](#)
 [Abnormal Sound \(Mid\)](#)
 [Abnormal Sound \(Low\)](#)
2. Open the hood.
3. Start the engine.
4. Turn off all accessories (air conditioning, radio etc.).
5. Close all doors and windows.
6. For vehicles with **AUTOMATIC TRANSMISSIONS**: Place shift lever in Park while conducting diagnosis test.  
 For vehicles with **MANUAL TRANSMISSIONS**: Place shift lever in Neutral and apply parking brake to prevent vehicle movement during diagnosis test.
7. Perform diagnosis procedure below two times, carefully adhering to the specific speed and time parameters of each step.



Test	Step	Engine Speed (static)	Test Time
Basic Test	A	600 ~ 700 RPM (Idle)	60 sec
	B	3,000 RPM	120 sec
	C*	5,000 RPM	60 sec
	D	Idle ~ 3,000 RPM	30 sec
Additional Test	E*	5,500 ~ 6,000 RPM	60 sec
	F	Idle ~ 3,000 RPM	30 sec

**\*ECU will lower engine RPM to idle at step C and E after 20 seconds. Perform steps C and E three times to meet the specified test time requirement.**

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**\* NOTICE**

**Perform the test parameters of the entire test (Basic Test, Steps A~D & Additional Test, Steps E~F) two separate times.**

**NOTES FOR BASIC TEST**

- Increase engine RPM in a gradual manner, according to the test times shown in the table above.
  - After performing Step C of the test for 20 seconds (at 5,000 RPM), ECU logic will protect the engine by decreasing RPM. When this occurs, increase engine speed to 5,000 RPM again to meet the specified test time requirement.
  - While performing Step D, allow engine RPM to decrease gradually and check for any chattering noise coming from the engine. Abnormal engine noise may occur in all sections, but it will be heard most prominently during Step D (idle~3000 RPM).
8. If after completing all the test parameters of the basic test section (Steps A~D), no abnormal noises have been detected, perform the additional test section (Steps E~F) to reconfirm that no abnormal noises are present. If no abnormal engine noises are detected, no further action is required. If chattering noises are detected, follow the instructions provided in the service procedure below.

**NOTES FOR ADDITIONAL TEST**

- After performing Step E of the test for 20 seconds (at 5,500 ~ 6,000 RPM), ECU logic will protect the engine by decreasing RPM. When this occurs, increase engine speed to 6,000 RPM again to meet the specified test time requirement.
- While performing Step F, allow engine RPM to decrease gradually and check for any chattering noise coming from the engine. Abnormal engine noise may occur in all sections, but it will be heard most prominently during Step F (idle~3000 RPM).

**Service Procedure:**

1. If abnormal noises consistent with the sound files above are confirmed, replace the engine (sub-assembly/long block) per applicable service procedure on KGIS.
2. Retain the engine coolant for reuse.

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## \* NOTICE

Kia is requesting that all retailed vehicles, diagnosed with this condition, be repaired prior to release back to the owner (See warranty section for details on rental car expense reimbursement).

### AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production VIN Range
Rio (UB) 2013MY 1.6L GDI	From Aug. 09, 2012 to Oct. 09, 2012

### REQUIRED PART:

Part Name	Part Number	QTY	Remark
Engine Sub-Assembly (Long Block)	119W1 2BS00QQK	1	Non-ISG (Idle Stop Go)
	120W1 2BS00QQK		ISG (Idle Stop Go)
Intake Manifold Gasket	28411 2B600	1	All Models
Exhaust Manifold Gasket	28521 2B400	1	
Engine Oil Filter	26300 35503	1	

**Note: This part is included in the KMA Reman Core Program and a core return pre-claim must be generated to create this claim.**

### WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty	N Code	C Code	Repair Description	Labor Op Code	Time	Replacement P/N	Qty
V	21020 2B911	0	N92	C32	Engine Noise Inspection (Pass)	120110R0	0.3 M/H	N/A	0
	21020 2B911	0	N92	C32	Engine Noise Inspection (NG)	120110R2	0.3 M/H	N/A	0

V	21020 2B911	0	N92	C32	Sub-Engine Replacement	120110R1	6.1 M/H	(NON ISG)	
	119W1 2BS00QQK							1	
								28521 2B400	1
								28411 2B600	1
								26300 35503	1
								NPNENG4OIL	1
								(ISG)	
								120W1 2BS00QQK	1
								28521 2B400	1
								28411 2B600	1
								26300 35503	1
								NPNENG4OIL	1

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**\*NOTICE**

**Rental reimbursement:**

Use sublet code X1 for reimbursement of any RENTAL expenses (up to \$45.00/day) associated with this Service Action repair. Details of the rental expense (e.g., reason, # of days, rental company name & rental vehicle) must be stated in the claim comment area and all supporting documents must be kept with the RO.

**Engine oil:** Maximum allowance of up to \$16.50 (NPNENG4OIL)

**Coolant:** Reuse original coolant and top off if necessary. Maximum allowance is \$4.80.

**\*NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA141 when accessing the WebDCS system.