GROUP MODEL Climate 2017MY Sportage (QL)									
	NUMBERDATE033July 2016								
TECHNICAL SERVICE BULLETIN									
SUBJECT:	SERVICE ACTION: HVAC CONTROL UNIT LOGIC IMPROVEMENT (SA 238)								

This bulletin provides information related to an HVAC controller software upgrade for 2017MY Sportage (QL) vehicles, produced from December 10, 2015 through June 22, 2016, and equipped with Auto (FATC) or Manual HVAC controls. The ECU upgrade provides an improved cooling strategy to prevent evaporator icing under specific driving and ambient temperature and/or humidity conditions. To install the upgraded logic, the ECU should be reprogrammed using the GDS/KDS download, as described in this bulletin. Kia is requesting the completion of this Service Action on all affected vehicles. For confirmation that the latest reflash has been done to a vehicle you are working on, verify ROM ID using the tables in this TSB.



Global Diagnostic System (GDS)



Kia Diagnostic System (KDS)

***** 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 <u>SA 238</u>.

File Under: <Climate>



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ECU Upgrade Procedure:

To correct this condition, the ECU should be reprogrammed using the GDS/KDS download as described in this bulletin.

UPGRADE EVENT NAME
287. QL HEATING LOGIC IMPROVEMENT (MTC)
288. QL HEATING LOGIC IMPROVEMENT (FATC)

* NOTICE

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECU mode during charging. DO NOT connect any other battery charger to the vehicle during ECU upgrade.
- All ECU upgrades must be done with the ignition key in the 'ON' position.
- Be careful not to disconnect any cables connected to the vehicle or GDS during the ECU upgrade procedure.
- DO NOT start the engine during ECU upgrade.
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- When the ECU upgrade is completed, turn the ignition 'OFF' and wait 20 seconds before starting the engine.
- ONLY use approved ECU upgrade software designated for the correct model, year.

Before attempting an ECU upgrade on any Kia model, make sure to first determine whether the particular model is equipped with an immobilizer security system. Failure to follow proper procedures may cause the ECU to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.

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ROM ID INFORMATION TABLES :

Upgrade event #287 and #288

MODEL	Event	eve		ROI	M ID
WODEL	MODEL No. SYS ECUP			PREVIOUS	NEW
	# 287	МТС	97250 D9020 97250 D9021	100.00 100.01 100.10 100.20 100.30	100.31
QL	# 288	FATC	97250 D9340 97250 D9341 97250 D9440 97250 D9441	01 02 03 04	05

To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECU ROM ID and reference the Information Table as necessary.

If performing the information.	is procedure	using	KDS,	refer	to	TSB	SST	037	for	detailed

1. Connect the power supply cable to the GDS/KDS.

*	NOTICE

If attempting to perform the ECU upgrade with the power supply cable disconnected from the GDS, be sure to check that the GDS is fully charged before ECU upgrade. If the GDS is not fully charged, failure to perform the ECU upgrade may occur. Therefore, it is strongly recommended that the power supply connector be connected to the GDS.

2. Connect the USB cable between the VCI and the GDS.



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- 3. Connect the Main 16-pin DLC cable (GHDM 241000) to the VCI.
- Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



- 5. With the ignition key ON, turn **ON** the VCI and GDS. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the **VIN AUTO DETECT** Function.
- 6. Select AIR/CON system and click OK.

GDS VIN Search To search vehicle, Please insert VIN Search Auto VIN Clear Previous Vehicle									
SPO	RTAGE(QL)	2017	G 2.0 T-GDI THETA2						
System									
	Select System	Select All	Selected System Clear All						
ENGINE ENGINE AIR/CON BSD-R AFLS	Image: Signal system Image: Signal system <td< th=""><th></th><th>Air Conditioner</th></td<>		Air Conditioner						
(Group	_	Symptom						
Fault C	Code Searching	ок	Cancel						

7. Once back at the GDS Main Screen, select **ECU Upgrade** from the bottom right-hand corner. Next, select **Auto Mode** and then **AIR/CON**. Perform the upgrade in accordance with normal GDS upgrade procedures.

	☆ Setup	Manual	TSB	Case Analysis	DTC	Current Data	Actuation Test	Flight Record	DVOM	Oscilloscope	Fault Code Searching	ECU Upgrad	Internet Update
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- 8. After the Current ROM ID is displayed, select appropriate Upgrade Event "287. QL A/C PERFORMANCE LOGIC IMPROVEMENT (MTC)" or "288. QL A/C PERFORMANCE LOGIC IMPROVEMENT (FATC)"
- 9. Click **OK** on the battery voltage check screen.
- 10. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 11. The upgrade will proceed until 100% is reached on the bar graph. Turn the ignition key **OFF** for 10 seconds, place it back in the **ON** position and click **OK** to continue according to information displayed on the screen.
- 12. Click **OK** on the final screen, which indicates upgrade is complete.
- 13. Check if any incidental diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.
- 14. Confirm proper A/C system operation.

Before attempting an ECU upgrade on any Kia model, make sure to first determine whether the particular model is equipped with an immobilizer security system. Failure to follow proper procedures may cause the ECU to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.

MANUAL MODE ECU UPGRADE PASSWORDS:

***** NOTICE

Do NOT attempt to perform a Manual Mode upgrade unless Auto Mode fails. Always follow the instructions given on the GDS in either Auto or Manual mode. See table for Manual Mode passwords. SUBJECT:

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Upgrade event #287 or #288 Sportage (QL)

Menu	Password
QL HEATING LOGIC MTC : 97250 D9020/D9021	9021
QL HEATING LOGIC FATC : 97250-D9340/341/380/381/440/441/470/471	9471

- 1. Within the ECU Upgrade screen, select Manual Mode in the left column, select AIR/CON and then select Upgrade Event 287 or 288. Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 3, and click OK.
- 2. Enter the appropriate password from the table above, and then click **OK**.
- 3. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 4. Click **OK** on the final screen. The upgrade event is now complete.
- 5. Check if any incidental diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.
- 6. Confirm proper A/C system operation.

AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Sportage (QL)	December 10, 2015 through June 22, 2016

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty
V	97250 D9020AK5	0	N99	C99	(SA 238) FATC / MTC Reflash	160066R0	0.3 M/H	N/A	0

***** NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA 238 when accessing the WebDCS system.