	TSB Local	**Model** — RIO(UB) (2012, 2013, 2014)
		Group — Heating,Ventilation, Air Condioning (71)
		TSB No. — KCE13-71-E040-UB
Subject — Rio (UB) A/CON Control Unit (FATC) Logic Upgrade		**TSB Type** — Service Action
		Published

Description

This bulletin provides information related to the Heater & A/con Control Unit (FATC) software upgrade for some 12~14MY Rio (UB) vehicles with an ADS (Auto Defog System) to improve A/CON Logic.

Applicable Vehicle

- Model: 2012~2014MY Rio (UB) vehicles with the Heater & A/con Control Unit(FATC)
- Applicable vehicle production date: Check Outstanding Campaign Vehicle Lookup site
- Area: Europe, General

[NOTE]

- To verify the vehicle is affected, be sure to check the version of the vehicle's control unit ROM ID with reference to the ROM ID Information Table mentioned below before attempting to upgrade the control unit software.

- Make sure your GDS / G Scan software is up to date and the latest internet update have been downloaded / installed. Failure to do this may result in the ECU upgrade not being installed on your GDS / G-Scan and not being visible being in the event table.

- Make a note on the repair order of the current ECU part number ROM ID prior to starting the upgrade.

■ **Upgrade event #334**

MODEL	Region	FATC P/NO	ROM ID	
			PREVIOUS	**NEW**

UB (12~14MY)	Europe	97250-1W520 97250-1W540 97250-1W720 97250-1W700	97250-1WXXXFFFF 97250-1WXXX0C0D 97250-1WXXX0D0E	**97250-1WXXX1216**
	General	97250-1W530 97250-1W710		
	General (Middle)	97250-1W550	97250-1W55XFFFF 97250-1W55X0C0D 97250-1W55X0D0E 97250-1W55X0E0F	**97250-1W55X1015**

Operation Code And time

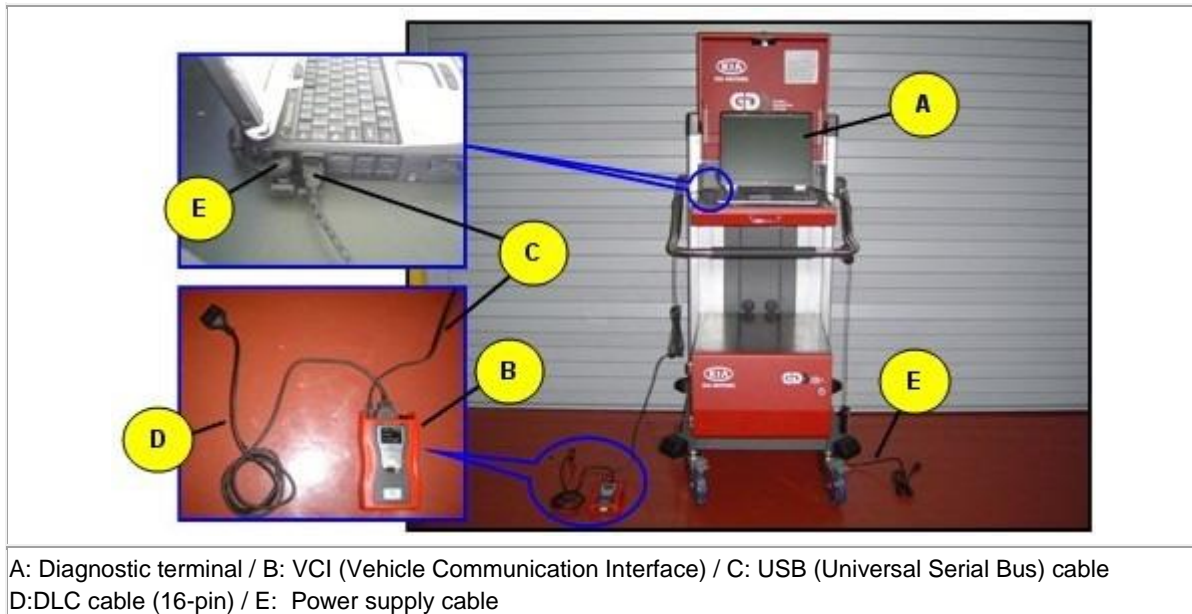| OP CODE	OP NAME	OP TIME	NATURE	CAUSE
130139R0	A/con Control Unit(FATC) UPGRADE	0.2 M/H	N94	C40

Service Procedure

PREPARATION & CAUTIONS DURING CONTROL UNIT UPGRADE
1) Make sure the vehicle's battery has reasonable charge. Connect the Midtronics battery charger that was supplied with your GDS and set to power supply mode / ECU upgrade function.
2) Turn off all lamps (Do not leave head lamp switch in auto mode.) and all accessories (including heater, A/C, blower, radio, seat warmer, defroster, etc.) Do not to allow the battery to be discharged during upgrade.
3) Perform upgrade with the ignition switch in the ON position.
4) Be careful not to disconnect any cables connected to the vehicle or GDS during upgrade.
5) Do not start the engine during upgrade.
6) Do not turn off the ignition switch during upgrade. After completing the upgrade ensure all other system control units are checked for DTC and any erased.

■ **CONTROL UNIT UPGRADE PROCEDURE**

1. GDS (Global Diagnostic System) INSTALLATION PROCEDURE

A: Diagnostic terminal / B: VCI (Vehicle Communication Interface) / C: USB (Universal Serial Bus) cable
D:DLC cable (16-pin) / E: Power supply cable

1) Connect the power supply connector to the diagnostic terminal.
   [NOTE]
- *If attempting to perform the upgrade with the power supply cable disconnected from the*
  diagnostic terminal, make certain that the diagnostic terminal is charged enough for the upgrade.
  If not, the upgrade may fail in progress. Therefore, it is strongly recommended to connect the
  power supply cable to the diagnostic terminal during the upgrade procedure.
2) Connect the USB cable between the VCI and the diagnostic terminal.
   [NOTE]
- *When performing the upgrade using the GDS, wireless communication between the VCI and the*
  diagnostic terminal is NOT available. Therefore, be sure to connect the USB cable between the
  VCI and the diagnostic terminal.
3) Connect the 16-pin DLC cable from the VCI into the vehicle's DLC connector under the driver side
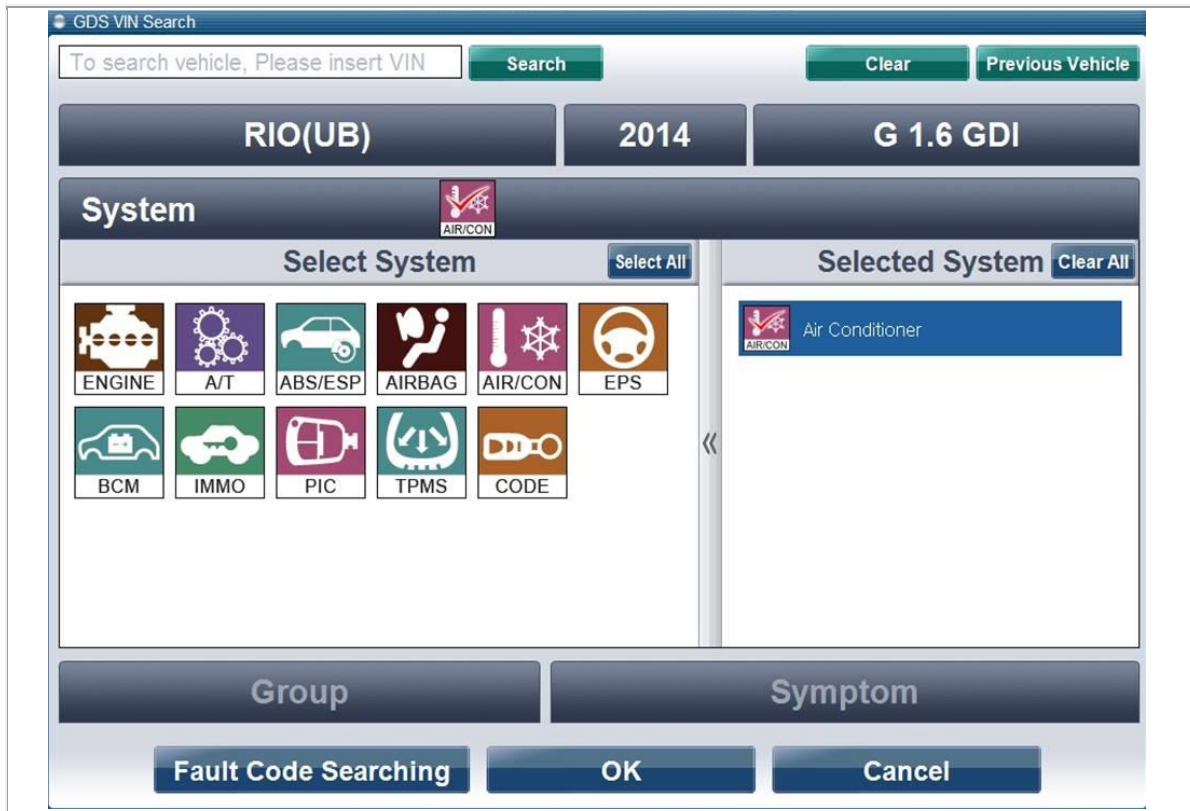   instrument panel.
4) Turn on the VCI and diagnostic terminal with the ignition key in the ON position.
   [NOTE] Do not start the engine.
2. AUTOMATIC UPGRADE PROCEDURE USING GDS

1) Choose **VIN** or **ECU Upgrade** on the initial screen.
2) Enter the vehicle information by entering the vehicle's VIN or selecting the vehicle model, model year,
   engine/fuel type and **AIR/CON** as the system and then click **OK**.

3) Select **ECU Upgrade** on the initial screen after entering the vehicle information.

4) Select **Auto Mode** then **AIR/CON** in the left **ECU Upgrade** column.

5) Read **Preparation** and click **OK**.

6) The GDS will read the vehicle's ROM ID.

7) After the **Current ROM ID** is displayed, select the **Upgrade Event, "334.UB FATC ADS LOGIC IMPROVEMENT" 8) After clicking the Upgrade button, read Information then click OK.**

9) The vehicle battery voltage is checked to make sure it is at least 12 volts to assure reliable upgrade results. Click OK if the results indicate Voltage is OK.

  [NOTE]

- If voltage is below 12 volts, click Cancel and then run the engine to assure an adequate battery
 charge state for reliable upgrade results.

10) Upgrade will begin and the progress of the upgrade will appear on the bar graph.

11) Upgrade will occur until 100% is reached on the bar graph. Turn the ignition key OFF for 10 seconds, place it back in the ON position and then 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) have been created by the upgrade and clear the DTC (s) present.

14) Start the engine to confirm proper operation of the vehicle.

3**. CONTROL UNIT UPGRADE PROCEDURE USING THE G-SCAN**

2-1. G-SCAN INSTALLATION PROCEDURE

1) Connect the 16-pin Data Link Connector (DLC) cable to the G-Scan and securely tighten the three bolts. 2) Insert the updated SD memory card into the G-Scan bottom slot. 3) Connect the 16-pin DLC cable from the G-Scan into the OBD-II connector, located under the driver's side of the instrument panel.	

2-2. AUTOMATIC UPGRADE PROCEDURE USING THE G-SCAN

1) Select **ECM Upgrade**. Select the vehicle model, model year, **AIRCON** as the system and engine displacement, and then touch **OK**.	
2) Select the upgrade event,"**334.UB FATC ADS LOGIC IMPROVEMENT**" and touch **AUTO**. 3) Perform the ECM upgrade in accordance with the instructions given on the G-Scan screen.	

4) Turn the ignition key OFF for 10 seconds and place it back in the ON position, then touch OK to continue.
5) Check for any diagnostic trouble codes (DTC) and erase the DTC (s) present.
6) Start the engine to confirm proper operation of the vehicle.