

| GROUP | MODEL |
|--------------------------|---|
| Customer Satisfaction | 2011-2020MY Optima (TF, QF, JF, JFa) |
| NUMBER | DATE |
| 2303 (Rev 1, 03/10/2023) | February 2023 |

TECHNICAL SERVICE BULLETIN

CUSTOMER SATISFACTION: ANTI-THEFT S/W LOGIC UPGRADE & DECAL INSTALLATION (CS2303)

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 upgrade the software logic of the Integrated Body Control Unit (IBU) or Body Control Module (BCM) system on certain 2011-2015MY Optima (TF), 2012-2015MY Optima (QF) and 2016-2020MY Optima (JF, JFa) vehicles produced within the dates outlined on page 10, which may not be equipped with an immobilizer. This logic upgrade will add anti-theft ignition start logic to the vehicle's system operation. Follow the procedure outlined in this publication to apply the improved logic to the 'IBU-BCM' system using the KDS ECU Upgrade function as described in this bulletin. For confirmation that the latest reflash has been applied to a vehicle you are working on, verify the ROM ID using the table on page 3 of this bulletin.

Window decals should also be applied to both front windows in accordance with the instructions on page 8 to indicate this anti-theft S/W logic upgrade has been completed (unless a customer specifically requests, they not be installed). An initial supply of window decals will be shipping directly to dealers. Should there be a delay in receipt of this supply, please track any customers that may need window decals installation upon receipt of the stickers.



NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service \rightarrow Warranty Coverage \rightarrow 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.

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(i) IMPORTANT

Since the launch of this software upgrade, Kia has identified a compatibility issue involving vehicles equipped with a remote start accessory which results in the activation of the burglar alarm when the remote start is used. Therefore, we would like to delay installation of the software upgrade until we can investigate and address this compatibility issue unless the customer is aware of this issue and specifically requests the upgrade anyway.

ECU Upgrade Procedure:

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

| , , , , , , , , , , , , , , , , , , , |
|--|
| Upgrade Event Name |
| 658. TF/QF BCM UPGRADE FOR NON-IMMO VEHICLE |
| 659. JF/JFa BCM UPGRADE FOR NON-IMMO VEHICLE |

NOTICE

- Confirm a <u>fully charged battery</u> (12.3 volts or higher is necessary) is used <u>or</u> utilize a fully charged jump starter box connected to the battery.
- Ensure the KDS GDS is sufficiently charged at 60% or higher prior to reflash.
- All ECU upgrades must be performed with the ignition set to the 'ON' position unless otherwise stated.
- Damaged VCI II units should not be used and promptly replaced.
- Be careful not to disconnect the VCI-II connected to the vehicle 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 10 seconds before starting the engine.
- ONLY use approved ECU upgrade software designated for the correct application.

(i) IMPORTANT

It is recommended to ALWAYS check the Electronic Parts Catalog (EPC) to locate the ECU Part Number respective to Auto/Manual Mode ROM IDs. DO NOT reference the parts label affixed to the ECU.



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NOTICE

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

ROM ID INFORMATION TABLE:

Upgrade Event #658 (TF, QF) and #659 (JF, JFa)

| Model | odel MY System | | IMMO 🔼 | ECU P/No. | ROM ID | | |
|--------|----------------|---------|--------|---|--|------|--|
| Model | IVI Y | System | IMMO 🚅 | Previous | | New | |
| TF/QF | 11-15 | IBU/BCM | No | 95400 2T800 95400 2T840 95400 2T900 95400 2T940 | 1.01, 1.02 1.03, 1.04 1.05, 1.06 1.07, 1.08 1.09, 1.10 1.20 | 1.30 | |
| | | | NO | 95400 2T805 95400 2T815 95400 2T835 95400 2T845 | 1.00, 2.00 2.01, 2.02 2.03, 2.04 | 2.10 | |
| JF/JFa | 16- 20 | IBU/BCM | No | 95400 D4090 95400 D5000 95400 D5010 95400 D5020 95400 D5030 954A0 D5000 954A0 D5020 954A0 D5010 954A0 D5030 | 0 | 1 | |

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

DO NOT perform a 'Manual Mode' upgrade if the ECU PN is not listed.



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NOTICE

Prior to performing the ECU upgrade, be sure to check that the KDS is fully charged.

1. Connect the VCI-II to the OBD-II connector, located under the driver's side of the instrument panel.

NOTICE

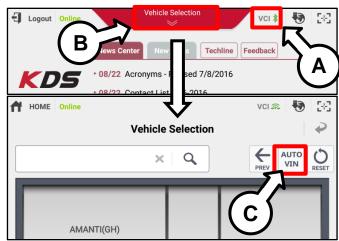
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



2. With the ignition **ON**, turn ON the KDS tablet. Select **'KDS'** from the home screen.



Confirm communication with VCI (A) and then configure the vehicle (B) using the 'AUTO VIN' (C) feature.



4. Select 'ECU Upgrade'.





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5. The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #658 (TF, QF) or #659 (JF, JFa).

NOTICE

The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.

6. Select Auto Mode.

ACAUTION

Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.

7. Select the **IBU-BCM** system under the System selection menu. Touch ID Check (D) and confirm that the latest update is available.

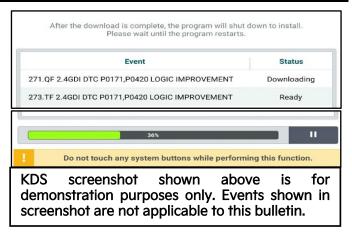
Select Upgrade Event:

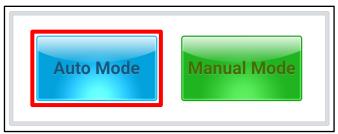
#658. TF/QF BCM UPGRADE FOR NON-IMMO VEHICLE, or 659. JF/JFa BCM UPGRADE FOR NON-IMMO VEHICLE, and select Upgrade to continue.

8. The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.

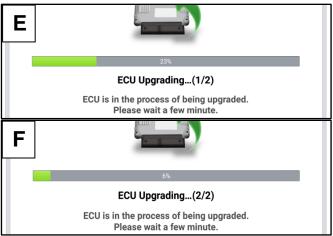
ACAUTION

Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.











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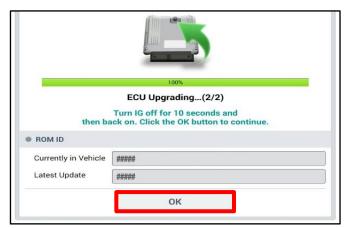
 If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Select 'OK' and restart the from step 4.

NOTICE

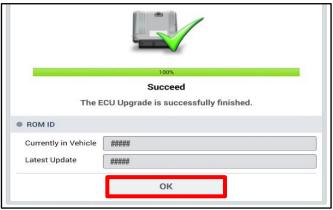
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



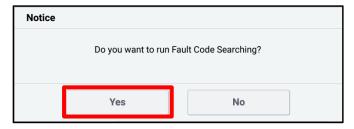
When instructed on the KDS, turn the ignition
 OFF for ten (10) seconds then back on. Select
 'OK' to continue.



11. Once the upgrade is complete, select 'OK' to finalize the procedure.



12. When prompted, select 'YES' to check for Diagnostic Trouble Codes (DTC) and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during the upgrade.



13. Start the engine to confirm normal operation of the vehicle.



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Manual Upgrade Procedure:

NOTICE

The manual upgrade should ONLY be performed if the automatic upgrade fails.

If the automatic upgrade fails, turn the ignition 'OFF' for about 10 seconds then place it back in the 'ON' position to reset the control unit BEFORE performing manual upgrade.

See table below for 'Manual Mode' passwords.

Manual Mode ECU Upgrade Passwords

| No. | Menu | Password |
|------|---|----------|
| #659 | TF/QF BCM: 95400-2T800/840/900/940 | 2940 |
| #658 | TF PE/QF PE: 95400-2T805/815/835/845 | 2845 |
| #659 | JF/JFa/JFa PE BCM: 95400-D4090, 95400/954A0-5000/10/20/30 | 4090 |

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- 2. Select the **IBU-BCM** system under the System selection menu. Select **Upgrade Event #658 (TF, QF)** or **#659 (JF, JFa)** and select **Upgrade** to continue.
- 3. Select the appropriate control unit part number with reference to the ROM ID Information Table on page 3, and select **OK**.
- 4. Enter the appropriate password from the Manual Mode password table above and select **OK**.
- 5. The upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 6. When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select OK.
- 7. Once the upgrade is complete, select **OK** to finalize the procedure.
- 8. When prompted, select **YES** to check for Diagnostic Trouble Codes (DTC) and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during the upgrade.
- 9. Start the engine to confirm proper operation of the vehicle.



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Decal Installation Procedure:

1. Print this page to 100% scale.

Cut-out the template sheet along the black dotted lines.

2. (Save the template for future use on other vehicles)

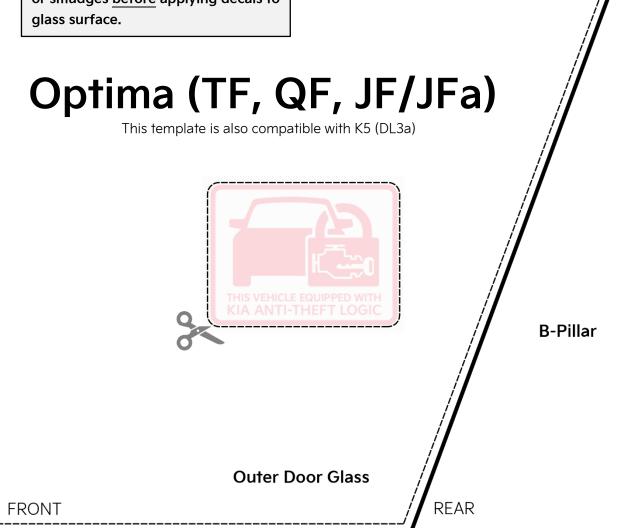


Continued on page 9.

Two (2) decals required per vehicle.

(i) IMPORTANT

Be sure the door window glass is dust free and clean from any fingerprints or smudges <u>before</u> applying decals to glass surface.



Outer Door Panel

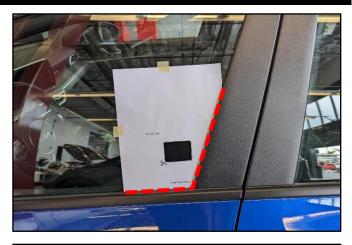


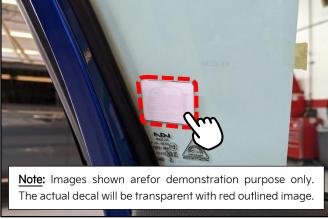
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- 3a. Confirm that the door glass is completely in the up position.
- 3b. Using masking tape (or similar no-residue tape), adhere the template sheet to the outside of the left driver front door glass as shown.

<u>Note</u>: Be sure that the template outlined edges are flush against the inner side and bottom door window trim.

- 4a. Carefully expose leading edge of label adhesive by simultaneously pulling back on liner and pushing leading edge of label forward. DO NOT TOUCH ADHESIVE.
- 4b. Once approximately half of the label is removed from the liner, position the label on the INSIDE of the driver's door window (aligned to template box).
- 5a. From the outside of the vehicle, confirm that the decal is perfectly aligned inside the template box.
- 5b. From the inside, begin to press on the decal in a forward direction (pushing any air bubbles out) until the label is fully applied to the window.
- 5. Remove the template sheet from the door glass and <u>turn the paper sheet over</u> to prepare for use on the right passenger side.
- 6. Repeat steps 1-5 for the right passenger side door glass.











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Other things to consider:

Vehicles equipped with 'aftermarket' window tint:

Be sure to get the customer's approval to install the 'kia anti-theft logic' decals if the vehicle has aftermarket window tint installed as they will adhere to the tint film surface and not the door glass surface, and alert customer that the 'kia anti-theft logic' decals may not be visible through the tint film from outside the vehicle.

For 'California' state vehicles only:

The proposition 65 decal may still be present on the inner front door glass. Be sure to get the customer's approval to remove this decal from the inner door glass before installing the 'kia anti-theft logic' decals.

AFFECTED VEHICLE RANGE:

| Model | Production Date Range |
|--------------|------------------------------------|
| Optima (TF) | August 12, 2010 to July 23, 2015 |
| Optima (QF) | August 12, 2011 to October 2, 2015 |
| Optima (JFa) | August 28, 2015 to June 23, 2020 |
| Optima (JF) | February 2, 2016 - April 5, 2018 |

REQUIRED TOOL:

| Tool Name | Figure | Comments |
|-----------|--------|-----------------------|
| KDS | | Kia Diagnostic System |

REQUIRED PART:

| Part Name | Part Number | Figure | Qty |
|----------------------------------|-------------|---|--|
| 'Kia Anti-Theft Logic' Decal* | SO230 ATL | THIS VEHICLE COUIPPED WITH KIA ANTI-THEFT LOGIC | 2 (Auto-shipped to dealers in a roll containing 100 qty.) |

*Note: Additional orders may be made through Archway (866) 542-6268. Please track any customers that may require window decals if unavailable at the time of the anti-theft S/W upgrade.

WARRANTY INFORMATION:

N Code: N99 C Code: C99

| Model | Claim Type | Causal P/N | Qty. | Repair Description | Labor Op Code | Op Time | Replacement P/N | Qty. |
|-------|---------------|------------|-----------------------------------|--------------------|------------------|------------|--------------------|------|
| TF | | | | | CS2303RA | | | |
| QF | \/ | 95400 | 0 | IBU-BCM S/W Logic | CS2303RB | 0.3 | N/A | 0 |
| JFa | 2T800 | 2T800 | Upgrade + - Decal(s) Installation | CS2303RC | M/H | IN/A | | |
| JF | | | | CS2303RD | | | | |

