	GROUP Electrical	MODEL **2012MY Soul (AM)** **2012MY Optima (QF)**
	NUMBER 060	DATE **August 2014**

TECHNICAL SERVICE BULLETIN

SUBJECT: COMBINED TSB/SERVICE ACTION: OPTIMA (QF) AND SOUL (AM) AVN AND BASE AUDIO SYSTEM UPGRADE (SA168)

This bulletin provides the procedure for upgrading the navigation system and base audio system software of some 2012MY Optima (QF) and some 2012MY Soul (AM) vehicles, to improve Bluetooth® connectivity. Kia is requesting the completion of this Service Action on all affected vehicles. Before conducting the procedure, verify that the vehicle is included in the list of the affected VINs.

For vehicles not on the Affected Vehicles list, but with a customer concern as described above, perform the following procedure outlined in this bulletin and submit a warranty claim per "customer concern" (Standard TSB) claim information on page 12.
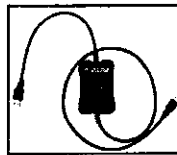
GDS - Audio Update Module (AUM)

★ **NOTICE**

This is a software upgrade for the navigation operating system and **NOT** a map upgrade.

★ **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 **SA168**.

File Under: <Electrical>

Circulate To: ☒ General Manager ☒ Service Manager ☒ Parts Manager

☒ Service Advisors ☒ Technicians ☒ Body Shop Manager ☐ Fleet Repair

COMBINED TSB/SERVICE ACTION: OPTIMA (QF) AND SOUL (AM) AVN AND BASE AUDIO SYSTEM UPGRADE (SA168)

STEP 1: Optima (QF) / Soul (AM) AVN Operating System Upgrade

(For Optima (QF) / Soul (AM) Base Audio update, proceed to Page 8)

★ NOTICE

- Delete all paired phones from the system and delete the head unit from all phones. If you do not delete phones, the phone(s) will still show and act as paired, but performance or functionality issues may occur. Anytime a software update is performed to either a paired phone or the system, the pairing should be deleted from both phone and system and then paired again after update.

- A fully charged battery is necessary before audio head unit upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used, in ECM mode, during charging. DO NOT connect any other battery charger to the vehicle during audio head unit upgrade.


★ NOTICE

USB sticks containing the 12MY QF/AM AUDIO/AVN upgrade for this TSB may NOT be available at the time of launch. Soon after release of this TSB, the USB sticks will be shipped to each dealer and will be addressed to the Service Manager.

Prior to arrival of the USB sticks, perform the upgrade using the GDS AUM.

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1. Start the vehicle or connect the Midtronics GR8-1299 charger.

2. Record the customer's radio presets before performing the upgrade.

3. If performing the update using the GDS AUM, refer to TSB SST 032 or click on **User's Guide** > **GDS AUM** on the GDS main screen, as shown below, and follow the on-screen instructions.
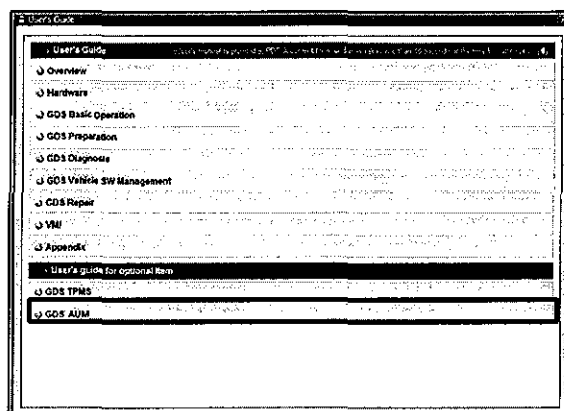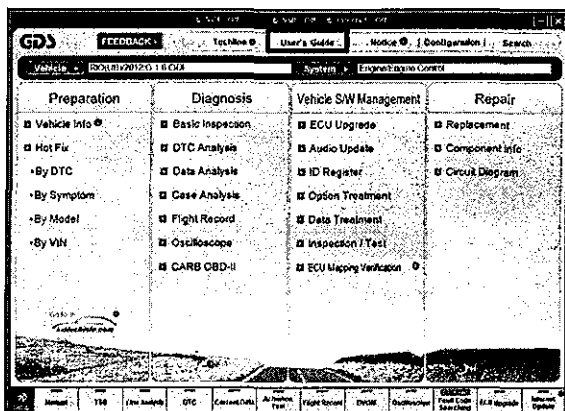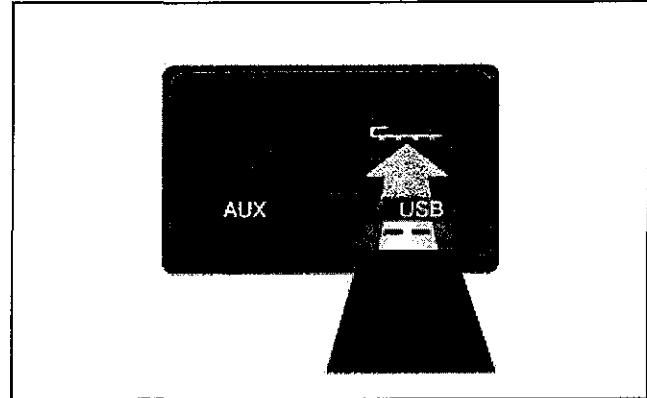
4. If performing the update using a USB stick, obtain the 12MY QF/AM AUDIO/AVN update USB stick from your Service Manager and insert it in the vehicle's USB port. Make sure to allow for the sound file to play for two seconds before proceeding to the next step.

★ NOTICE

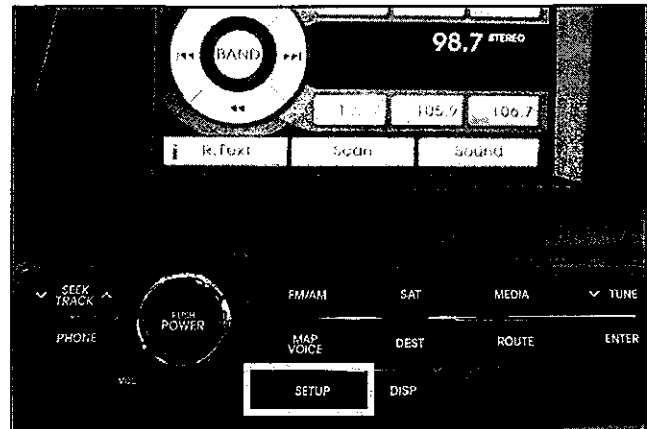**Do not remove the USB thumb drive, AUM connector or turn the radio OFF while the update is in progress.**

5. Press the **SETUP** button.

★ NOTICE

This AVN System Update consists of two steps:

1. **AVN System Update**
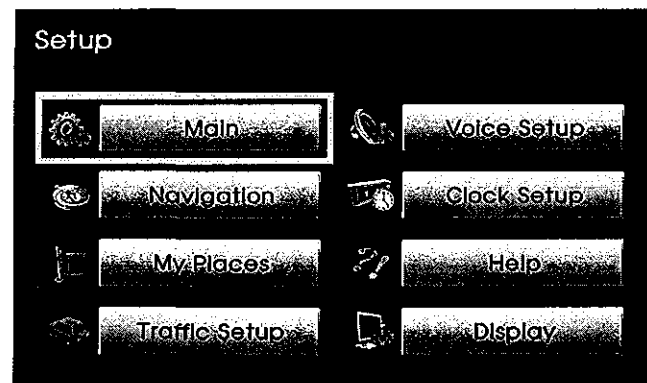2. **Bluetooth System Update (see page 6)**

The combined update will take approximately 10 to 15 minutes to complete.
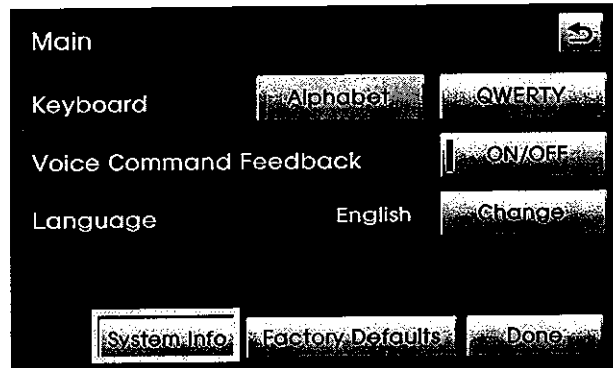
6. Touch **Main** on the screen.

★ NOTICE

Screens shown in this bulletin are for demonstration purposes only and will vary depending on the vehicle.
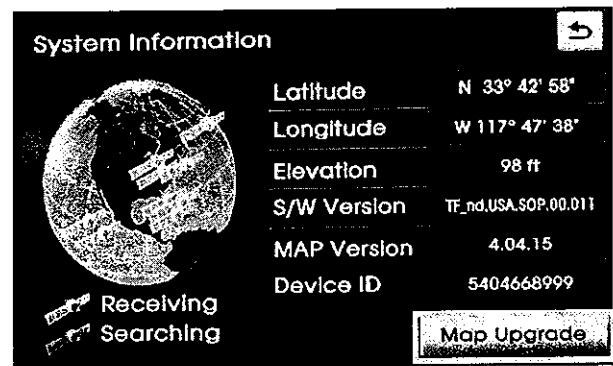
7. Touch **System Info** on the screen.

Main		
Keyboard	Alphabet	QWERTY
Voice Command Feedback		ON/OFF
Language	English	Change
	System Info	Factory Defaults	Done

8. Touch **Map Upgrade** on the screen.

System Information

Latitude	N 33° 42' 58"
Longitude	W 117° 47' 38"
Elevation	98 ft
S/W Version	TF_nd.USA.SOP.00.011
MAP Version	4.04.15
Device ID	5404668999

Receiving
Searching

Map Upgrade

9. The system will verify the update on the USB thumb drive.

System Information

Latitude	N 33° 42' 58"
Longitude	W 117° 47' 38"

Verifying update.
Please, wait a moment.

MAP Version 4.04.15
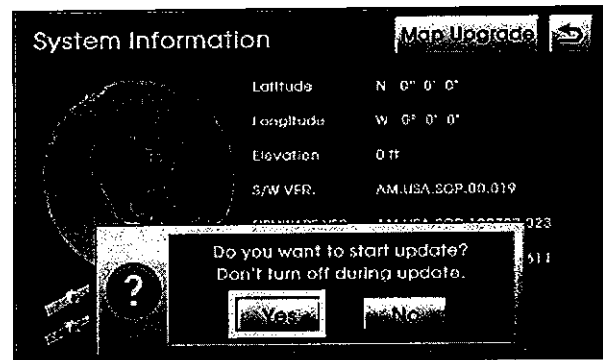Device ID 5404668999

Receiving
Searching

Map Upgrade
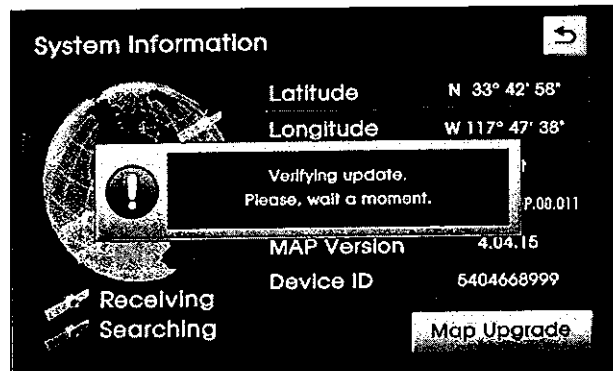
10. If update verification is not successful, the system will display an error message. If using a USB thumb drive, make sure it is the correct version.
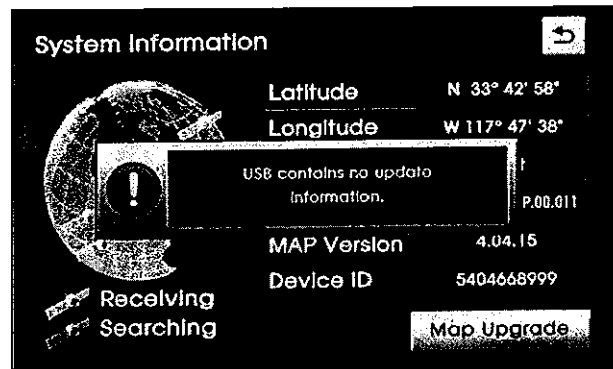
System Information

Latitude	N 33° 42' 58"
Longitude	W 117° 47' 38"

USB contains no update information.

MAP Version 4.04.15
Device ID 5404668999

Receiving
Searching

Map Upgrade

11. If update verification is successful, touch **YES** on the screen to begin installation.

12. The system will begin the upgrade and the progress will be displayed on the bar graph. After the update is complete, the head unit screen will go dark. Turn the radio **ON** and proceed to the next step.
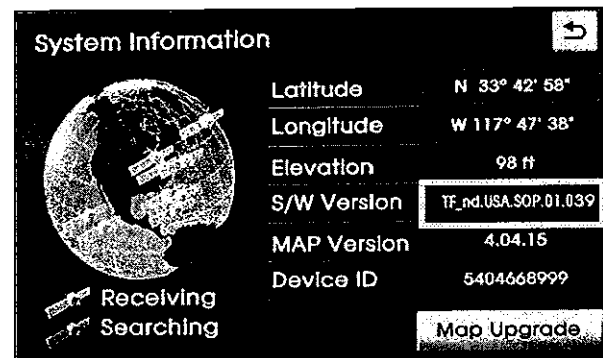
> ## ★ NOTICE
>
> **Do not remove the USB thumb drive, AUM connector or turn the radio OFF while the update is in progress.**
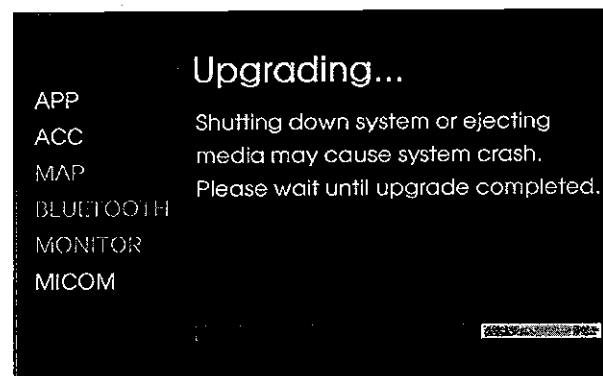
13. Access the System Information screen (**SETUP > Main > System Info**) to confirm the upgrade software version matches the information shown in the table below:

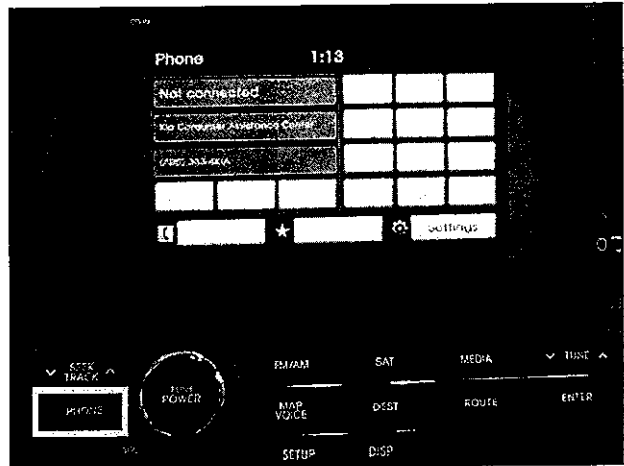| Model	Upgrade Software Version
Optima (QF)	TF_nd.USA.SOP.01.039
Soul (AM)	AM.USA.SOP.00.024

SUBJECT: COMBINED TSB/SERVICE ACTION: OPTIMA (QF) AND SOUL (AM) AVN AND BASE AUDIO SYSTEM UPGRADE (SA168)
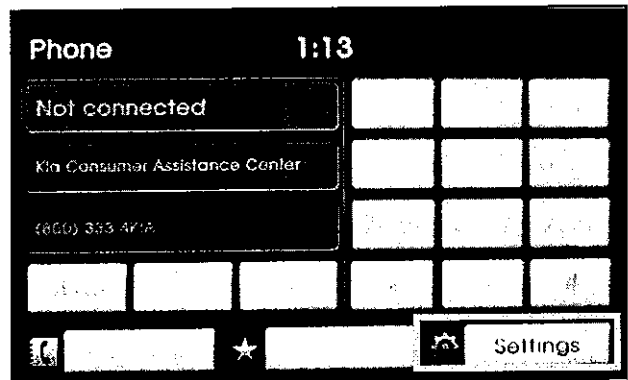
STEP 2: Optima (QF)/ Soul (AM) Bluetooth® System Upgrade

1. Once the AVN update is complete, proceed with the Bluetooth System Update: Press the **PHONE** button to display the dialing screen.
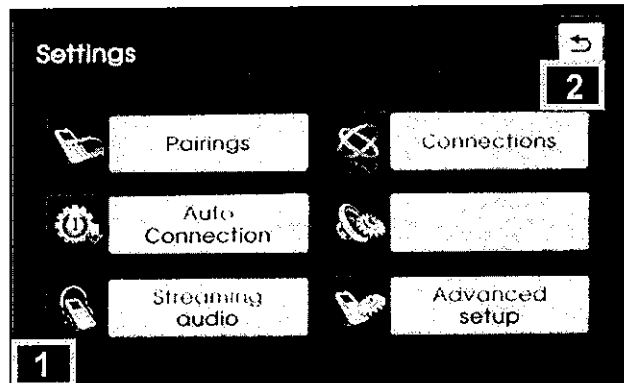
   ┌─── ★ **NOTICE** ───────────────────┐
   │ Do not remove the USB thumb   │
   │ drive, AUM connector or turn the   │
   │ radio OFF while the update is in   │
   │ progress.   │
   └─────────────────────────────────────┘

2. Press **Settings** on the screen.

3. To access the Bluetooth Engineering Mode, use a finger to touch the bottom left corner of the screen (1), then, immediately touch area above the **Connections** button (2), as shown.
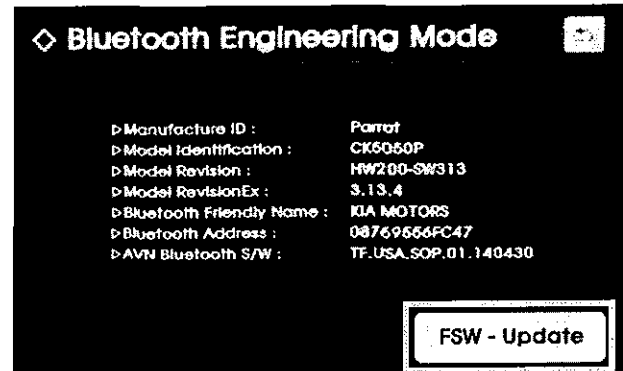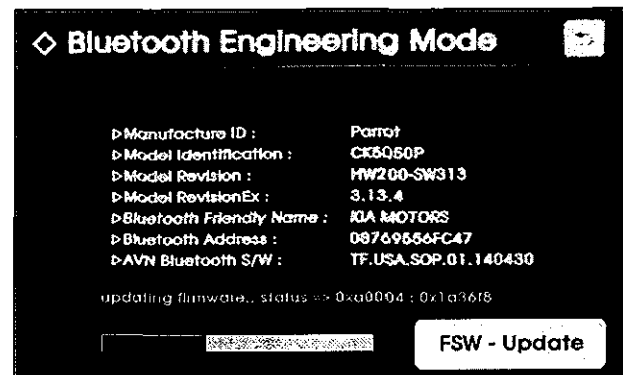
4. Once in the Bluetooth Engineering Mode screen, press **FSW – Update** to begin the installation.

> ⭐ **NOTICE**
>
> **The update will take approximately two (2) minutes to complete.**

◇ **Bluetooth Engineering Mode**

▷ Manufacture ID :   Parrot
▷ Model Identification :   CK5050P
▷ Model Revision :   HW200-SW313
▷ Model RevisionEx :   3.13.4
▷ Bluetooth Friendly Name :   KIA MOTORS
▷ Bluetooth Address :   08769556FC47
▷ AVN Bluetooth S/W :   TF.USA.SOP.01.140430
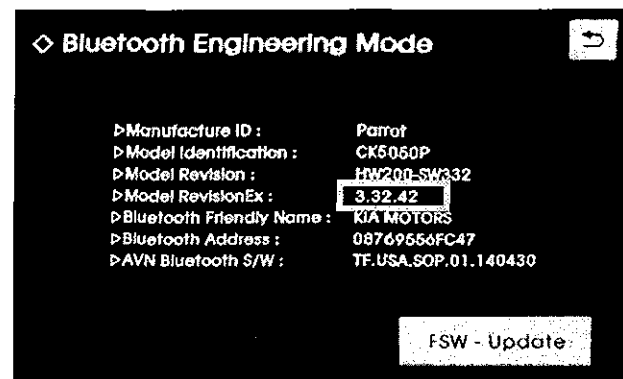
FSW - Update

5. The system will begin the upgrade and the progress will be displayed on the bar graph. Once the update is complete, <u>turn the ignition **OFF** for five (5) seconds. Then,</u> turn the ignition back **ON** and power up the head unit.

◇ **Bluetooth Engineering Mode**

▷ Manufacture ID :   Parrot
▷ Model Identification :   CK5050P
▷ Model Revision :   HW200-SW313
▷ Model RevisionEx :   3.13.4
▷ Bluetooth Friendly Name :   KIA MOTORS
▷ Bluetooth Address :   08769556FC47
▷ AVN Bluetooth S/W :   TF.USA.SOP.01.140430

updating firmware.. status -> 0xa0004 : 0x1a36f8

FSW - Update

6. Perform step 3 again to access the Bluetooth Engineering Mode screen and confirm the upgrade software version matches the information shown in the table below:

Model	Bluetooth Software Version
Optima(QF) / Soul (AM)	3.32.1 ~ 3.32.42.

◇ **Bluetooth Engineering Mode**

▷ Manufacture ID :   Parrot
▷ Model Identification :   CK5050P
▷ Model Revision :   HW200-SW332
▷ Model RevisionEx :   3.32.42
▷ Bluetooth Friendly Name :   KIA MOTORS
▷ Bluetooth Address :   08769556FC47
▷ AVN Bluetooth S/W :   TF.USA.SOP.01.140430

FSW - Update

7. Restore the customer's radio presets as recorded in step 2 (Page 2).

8. Verify proper system operation by obtaining the customer's phone(s) and pairing it (them) with the system. <u>If the customer's phone is not available for pairing, inform the customer that the phone must be paired to the head unit.</u>
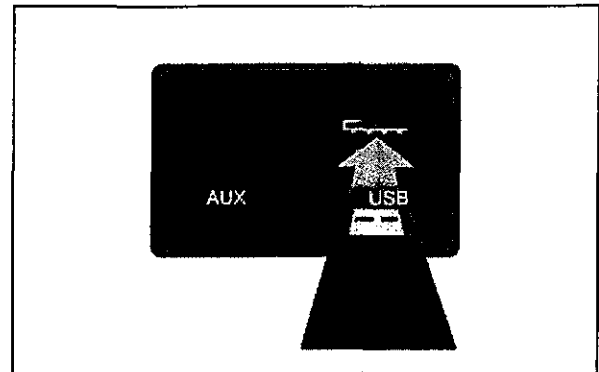
Optima (QF) / Soul (AM) Base Audio System Upgrade Procedure:

1. Start the vehicle or connect the Midtronics GR8-1299 charger.

2. Record the customer's radio presets before performing the upgrade.

3. If performing the update using the GDS AUM, refer to TSB SST 032 or click on User's Guide > GDS AUM on the GDS main screen, as shown below, and follow the on-screen instructions.
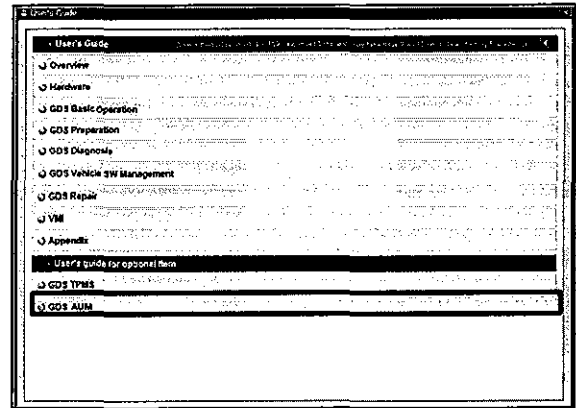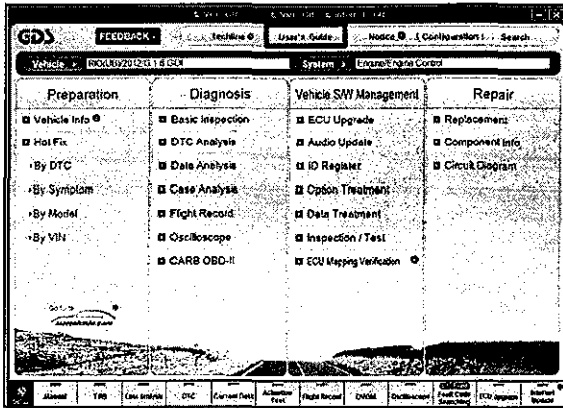

4. If performing the update using a USB stick, obtain the 12MY QF/AM AUDIO/AVN update USB stick from your Service Manager and insert it in the vehicle's USB port. Make sure to allow for the sound file to play for one second before proceeding to the next step.
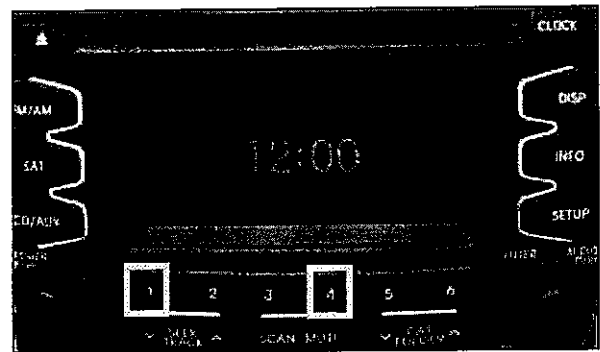

5. Turn the head unit OFF.

> **★ NOTICE**
>
> **Screens shown in this bulletin are for demonstration purposes only and will vary depending on the vehicle.**
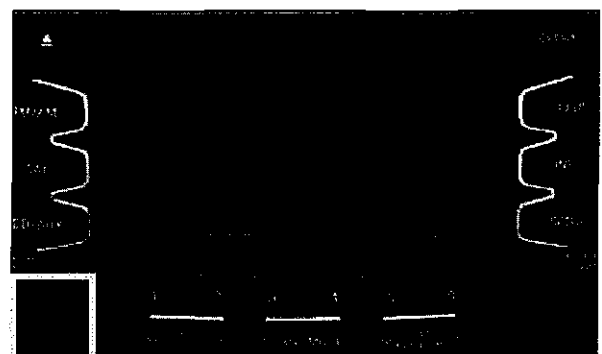
6. Press and hold buttons "**1**" and "**4**" at the same time for one second. Immediately after releasing buttons "**1**" and "**4**", press button "**1**" four (4) times in a row to access the Engineering Mode screen.

7. Once in the Engineering Mode screen, make sure there is a letter "F" in parentheses (F) at the upper left corner of the screen. Then, press button "**1**" to access the firmware update menu

    ┌─ ★ **NOTICE** ─────────┐

    If the (F) is not present on the screen, restart the procedure from step 4.
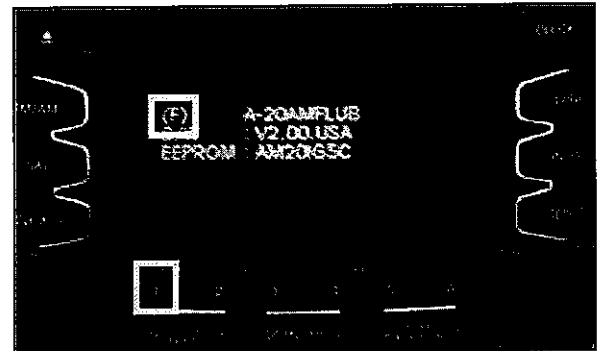
8. Press button "**4**" to update **MICOM**.

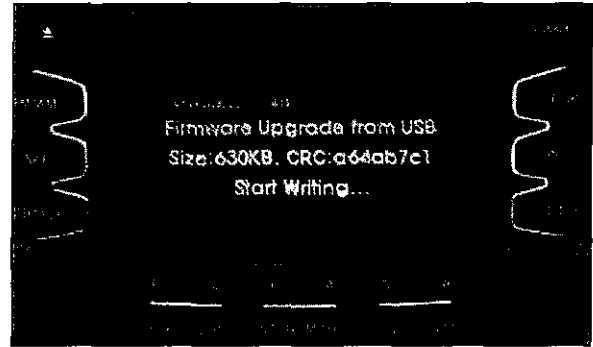   ┌─ ★ **NOTICE** ─────────┐

    Do not remove the USB thumb drive, AUM connector or turn the radio OFF while the update is in progress.

9. The upgrade will begin and system will display Erasing -> Writing -> Verifying on the screen.

> ★ **NOTICE**
>
> **The update will take approximately one (1) minute to complete.**

Firmware Upgrade from USB
Size:630KB. CRC:a64ab7c1
Start Writing...

10. Power up the head unit, then, press and hold buttons "**1**" and "**6**", at the same time, for one second to check the software version matches the information shown in the table below:

Model	Upgrade Software Version
Optima (QF) / Soul (AM)	V8.00.USA

S/W V8.00.USA
EEPROM
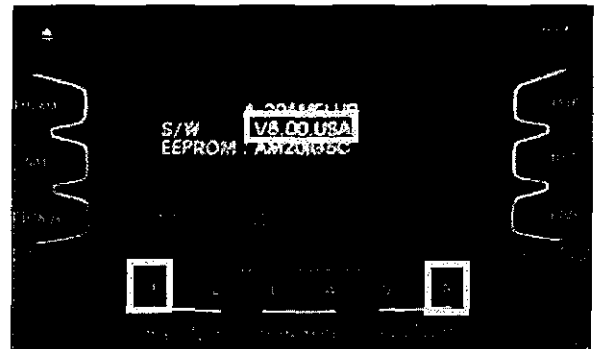
11. Restore the customer's radio presets as recorded in step 2.

12. Verify proper system operation by obtaining the customer's phone(s) and pairing it (them) with the system. If the customer's phone is not available for pairing, inform the customer that the phone must be paired to the head unit.

SUBJECT: COMBINED TSB SERVICE ACTION: OPTIMA (QF) AND SOUL (AM) AVN AND BASE AUDIO SYSTEM UPGRADE (SA168)

REQUIRED TOOLS:

Part Name	Description	Figure	Comments
GDS AUM / Upgrade USB Drive	12MY QF/AM AUDIO/AVN		**USB sticks for this TSB may not be available at the time of launch. <u>Perform the upgrade using the GDS AUM.</u>**

AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Soul (AM)	2012MY
Optima (QF)	2012MY

SERVICE ACTION CLAIM INFORMATION:

N CODE: M51 C CODE: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
V	96120 2T100	0	(SA168QF) Base Audio Software Upgrade	140A03R0	0.3 M/H	N/A	0
V	96120 2T100	0	(SA168QF) AVN Software Upgrade	140A03R1	0.3 M/H	N/A	0
V	96120 2K350	0	(SA168AM) Base Audio Software Upgrade	140040R0	0.3 M/H	N/A	0
V	96120 2K350	0	(SA168AM) AVN Software Upgrade	140050R0	0.3 M/H	N/A	0

SUBJECT: COMBINED TSB/SERVICE ACTION: OPTIMA (QF) AND SOUL (AM) AVN AND BASE AUDIO SYSTEM UPGRADE (SA168)

STANDARD WARRANTY CLAIM INFORMATION:

Use this information only to file a warranty claim for vehicles for which:
1. A customer complains of the same concern, as described on Page 1.
2. The VIN does not appear on the Affected Vehicles list for Service Action 168.
3. The vehicle model year and production date range are as identified in this bulletin.

N CODE: M51 C CODE: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	96120 2T100	0	(ELE 060) Base Audio Software Upgrade (QF/AM)	28325F05	0.3 M/H	N/A	0
W	96120 2K350	0	(ELE 060) AVN Software Upgrade (QF/AM)	28325F08	0.3 M/H	N/A	0

★ NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA168 when accessing the WebDCS system.