91 MMI High System software update (Zug 864 - update)
procedure

Release date: Jul 31, 2009

Condition

REVISION HISTORY		
Revision	Date	Purpose
2	-	Revised Service (Section 5, added 8 and 9)
1	3/25/2009	Original publication

- Customer may request a customer-pay MMI System Software Update.

- Reference from a Technical Service Bulletin to perform a MMI System software update.

- A MMI component was replaced, and it may be necessary to update all MMI modules to the same Zug level.

Technical Background

The term "Zug" (a German word for "train") is used to identify a specific combination of MMI modules according to their software versions.

For example, "Zug 317"defines the MMI module software versions of an A8 or A6 of MY2005 after November 2004. The current MY2009 software combination of all MMI modules in A4, A5, A6, A8, and Audi Q7 is "Zug 864."

This document describes the MMI System Software Update procedure (also called Zug Update procedure) for all MMI High-equipped models prior to model year 2009.

A6 and A8 prior to production date November 2004 may require an interim Zug update to Zug 317 as well as a Navigation DVD Update to Version 5. This is due to compatibility issues with the subsequent MMI Zug Update to Zug 864.

Production Solution

Not applicable.

Service

Section 1: Preparation

1. Install a recommended battery charger or maintainer with a 30 Ampere minimum output current. Connect the charger to the designated charging posts in the vehicle.

Note:

It will take more than one hour to perform an MMI system software update. The high current introduces the risk of damaging vehicle battery or MMI components if the battery charger or maintainer is not installed.

2. Turn or leave off the ignition (terminal 15).

3. Turn off the interior lights.

4. Turn off cell phones and other wireless devices or remove them from the vehicle. Keep these devices out of the vicinity of the vehicle.

5. Do not have a scantool connected to the vehicle during the MMI software update.

Section 2: Verification (A8 MY2004-2005 and A6 MY2005 only)

Tip: If vehicle is MY2006 or newer, proceed directly to Section 4.

There are two compatibility requirements to update the MMI system of a vehicle directly to Zug 864:

Requirement 1: Navigation DVD must be at least Version 5

If the Navigation DVD is Version 4, replace it with a Version 5 Navigation DVD.

The Version 5 DVD can be obtained through Navteq at a reduced price.

See details in section Required Parts and Tools

Requirement 2: The MMI system software must be at least Zug 317

1. To verify the Zug level, turn on the MMI system with the ON button of E380. Do not turn on the ignition.
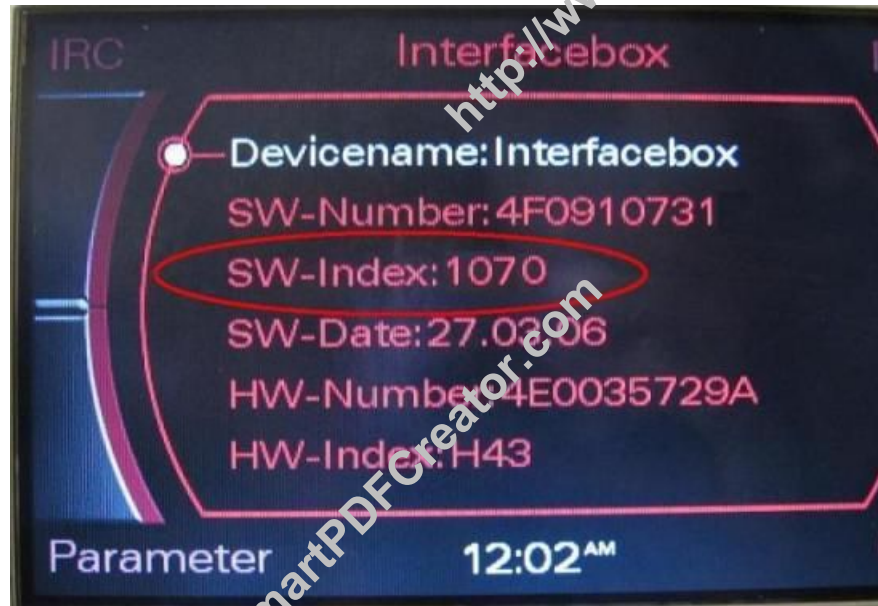
2. Press and hold the SETUP button and then press and hold the RETURN button. Hold both buttons down until the red update menu appears.

3. Select Interfacebox (0x0100) to verify its software version.

- If SW -Index is higher or equal to 1070: The vehicle the MMI system can be directly updated with the Zug 864 Update CD bundle.

  a. Press the Return button several times to exit the red menu.

  b. Proceed to Section 4.

- If SW -Index is below

1070: An interim Zug 317 update is necessary.

a. Press the Return button several times to exit the red menu.

b. Proceed to Section 3.

Section 3: Interim Zug 317 Update procedure (MY2004-2005 only)

1. Remove all CDs from the CD changer, if applicable.

2. Insert MMI Zug Update CD W42 A8 317 in the first slot of the vehicle's CD changer.
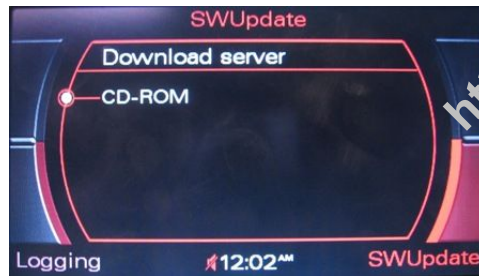
3. Wait 30-60 seconds until the MMI system recognizes the MMI Zug Update CD.

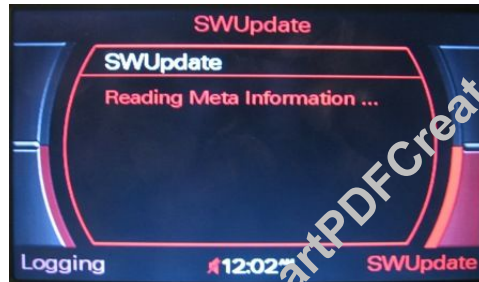Then access the Red Update Menu (press and hold SETUP and RETURN
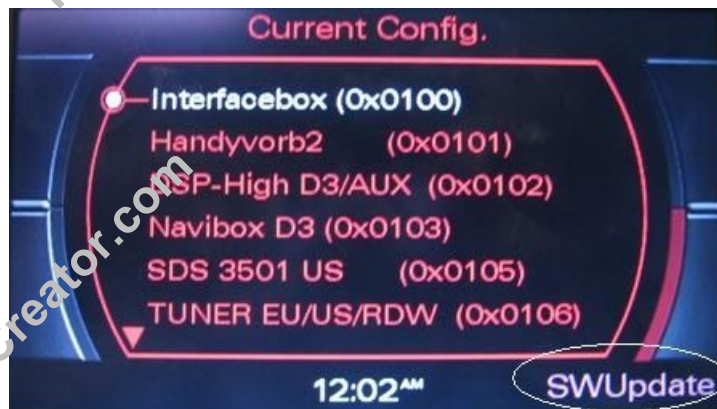
buttons) and select the function SW Update with the lower right soft button.
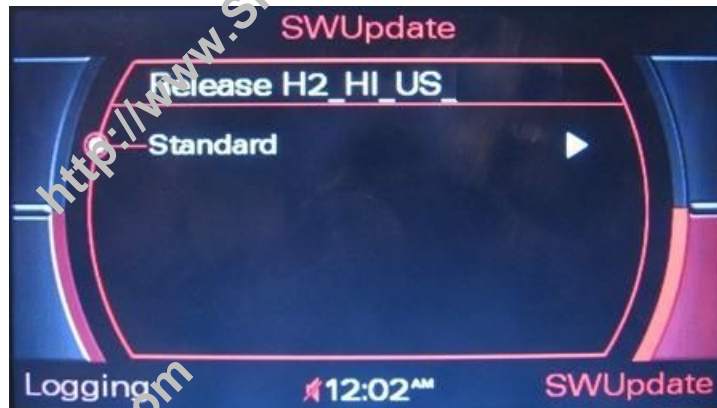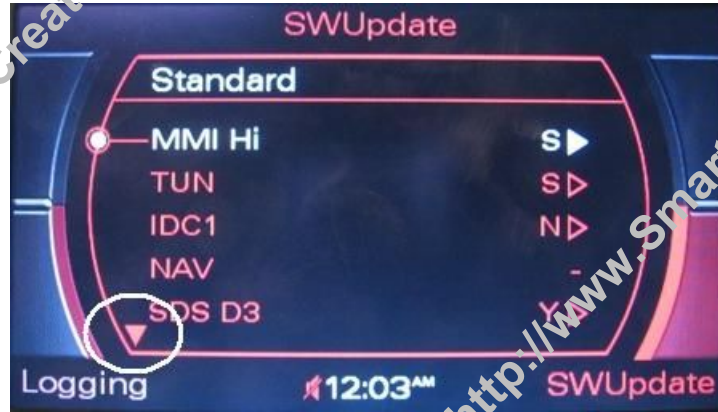
4. Select CD-ROM.

Wait until the META-Information is read.

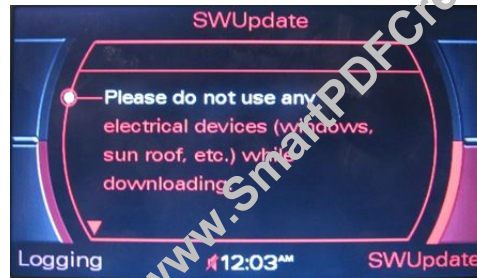5. Select Standard to access the MMI component list.
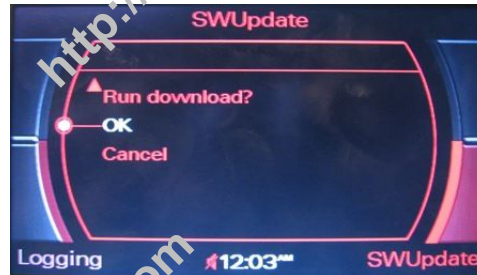
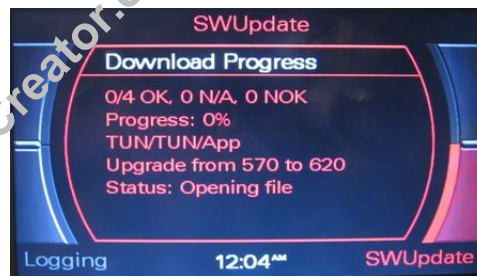6. Scroll down the list to Start download.

Select Start download.

7. Read and remember to obey the warning.
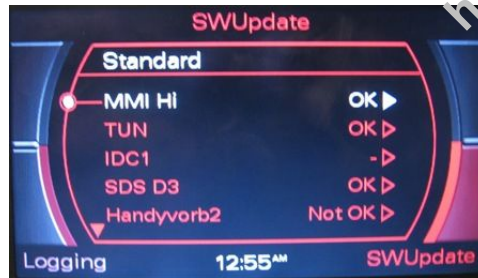
8. Scroll down to select OK to start the update.

9. The screen displays the progress of the Zug software update. Depending on

the number of MMI components that have to be updated, the download duration time differs.

10. After the update is completed, the system reinitializes, which takes a few seconds.

This or a similar screen appears.

11. If you scroll down the component list, you may discover that not all necessary component updates were performed in the first step. In this case, select Try again.
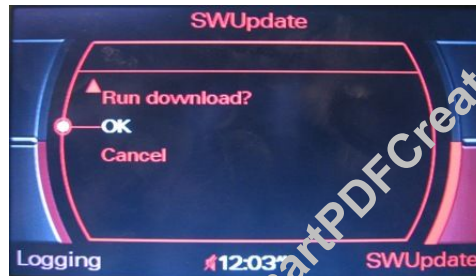
12. If Try again is greyed out, select Restart MMI.

12. Wait at least 2 minutes, until all MMI components are reinitialized.

13. To determine whether any other component was missed in the update, perform the following simple test:

Return to the red update screen and follow the steps to update the MMI system until you select Run download? – OK.
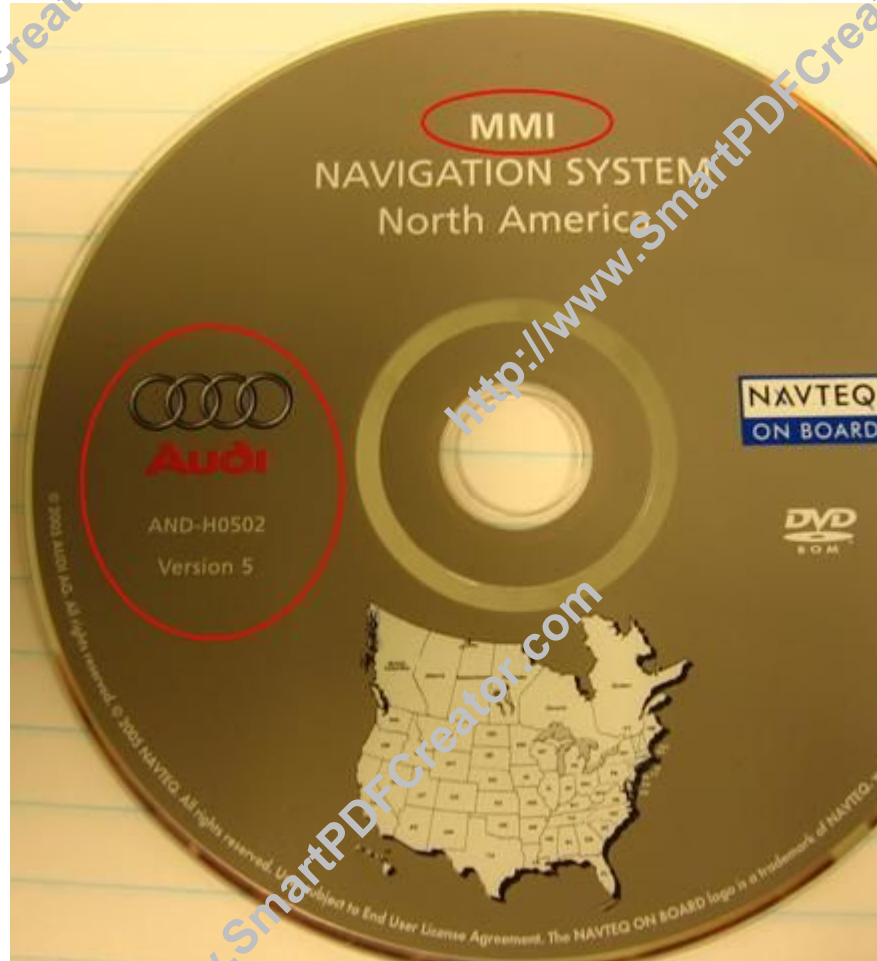

If No device is selected for updating appears, then all components are updated.
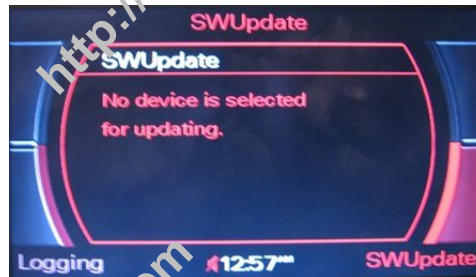
Exit the red update screen by pressing the RETURN button several times.

14. Remove the Zug 317 Update CD from the CD changer.

15. If not already replaced, verify that at least Version 5 Navigation DVD is installed.

ℹ Tip: An SVM Update is not required for the Interim Zug update.

Section 4: Zug 864 Update Procedure

ℹ Tip: Ensure that the minimum requirements (as decribed in Section 2) have been met to update the vehicle's MMI system to Zug 864.

Zug 864 Procedural Overview

Note that CD#1 will be used to perform two updates. The procedure must be performed in the sequence described below.

1. The firmware of the phone preparation control unit will be updated using CD #1 (CleanUp CD USA) of CD bundle 4F0 998 961.

2. The software of the phone preparation control unit will be updated using CD #1 (CleanUp CD USA) of CD bundle 4F0 998 961.
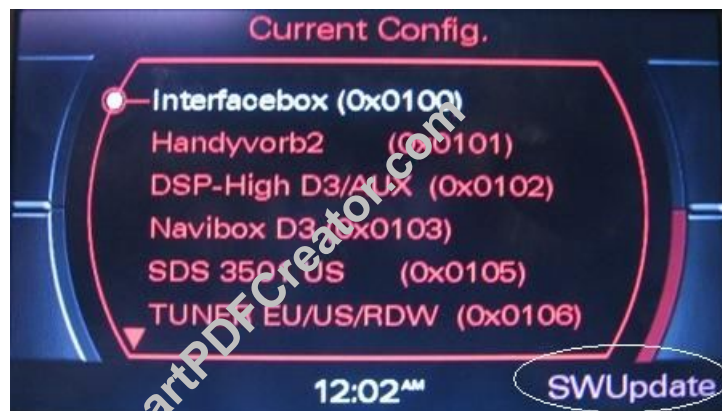
3.	The final software update of the remaining MMI components will be performed using CD #2 of CD bundle 4F0 998 961.
4.	Software Version Management (SVM) feedback documentation will be performed.

Tip: For successful results, be careful to complete the steps in the order indicated below.

Firmware Update

1. Insert CD #1 of CD bundle 4F0 998 961 in the single CD drive or in the first slot of the vehicle's CD changer.
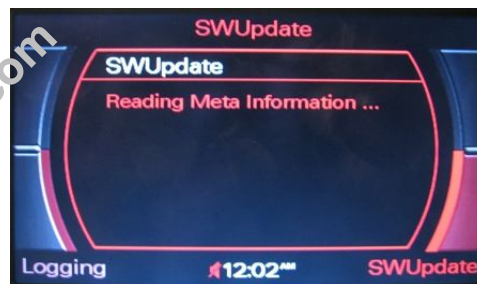
2. Wait 30-60 seconds until the MMI system recognizes the CD. Then access the red update menu (press and hold SETUP and RETURN buttons) and select the function SW Update with the lower right soft button.

Current Config.

Interfacebox (0x0100)
Handyvorb2 (0x0101)
DSP-High D3/AUX (0x0102)
Navibox D3 (0x0103)
SDS 350 US (0x0105)
TUNER EU/US/RDW (0x0106)

12:02ᴬᴹ   SWUpdate

3. Select CD-ROM.

SWUpdate
Download server
CD-ROM

Logging   12:02ᴬᴹ   SWUpdate

Wait until the META-Information is read.

SWUpdate
SWUpdate
Reading Meta Information ...

Logging   12:02ᴬᴹ   SWUpdate

4. Select Standard.

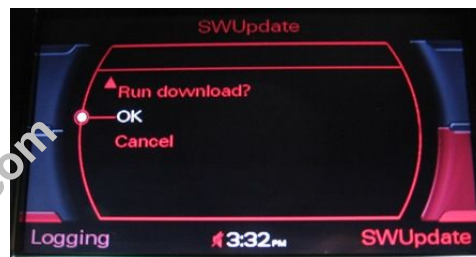5. Access the MMI component list.

6. Scroll down and select Start download.
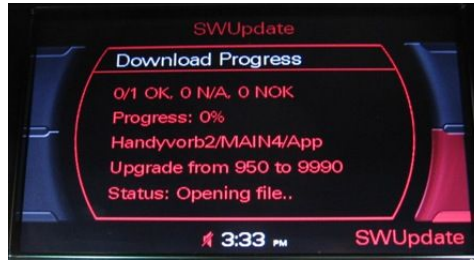
7. Read and obey the warning.

8. Scroll down to the next screen and select OK.

9. The firmware of the phone preparation will be updated now.

   This may take up to 6 minutes.

10. After the firmware of the phone preparation is updated, the internal repair process is performed. This may take up to 5 minutes.

11. After the system reinitializes and the adjacent screen appears, scroll down.

12. Restart the MMI system.

13. If the option Try again? is highlighted, it is necessary to try the firmware update again.

If the second repair attempt is not completed successfully either, replace the telephone control module (see Required parts and tools) and claim the part under this RVU. (See

Workshop Manual >> Electrical system >> Rep. Gr. 91 >> Infotainment, telephone system >> Removing and installing telephone transmitter and receiver unit –R36).
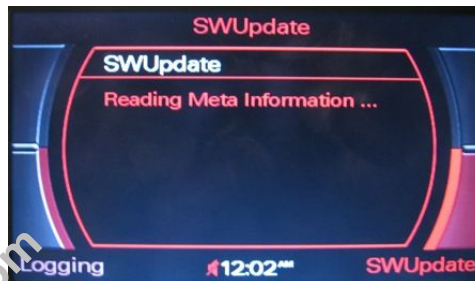
Software Update

1. To update the software of the phone preparation to SW 1130, leave CD#1 in the CD changer and access the red update menu again.

2. Select SWUpdate.
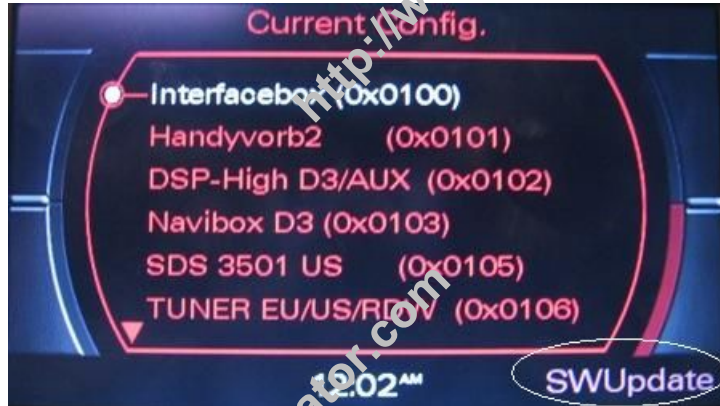
3. Select CD-ROM.

Wait until the meta information is read.

4. Select Standard.

5. Scroll down the component list and select Handyvorb2.

6. Check or verify the check of thebox: Application (0 > 1130).

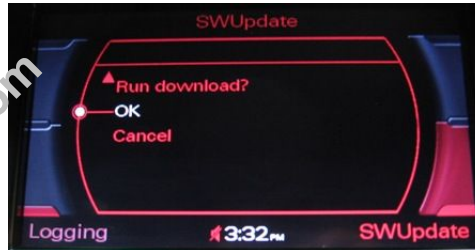7. Press the E380 - RETURN button once.

8. Scroll down the MMI component list and select Start download.

9. Read and obey the warning.

10. Scroll down to the next screen and select OK.

11. The software of the phone preparation will be updated to SW1130 now. This may take up to 45 minutes.

13. The system will reinitialize. The adjacent screen will appear.

13. Scroll down to reset the MMI system.

Final Software Update

1. Eject CD#1 and insert CD#2 of CD bundle 4F0 998 961 in the single CD drive or in the first slot of the vehicle's CD changer.

2. Wait 30-60 seconds until the MMI system recognizes the CD. Then access the red update menu (press and hold the SETUP and RETURN buttons) and select the function SW Update with the lower right soft button.
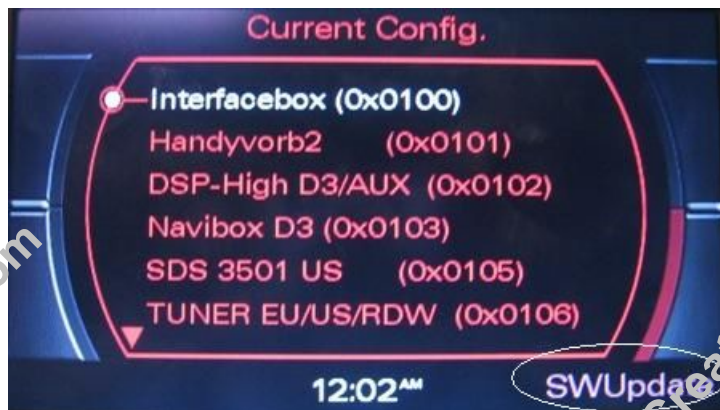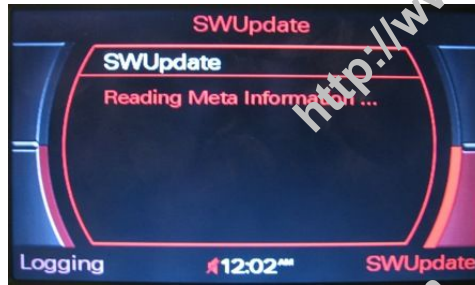
3. Select CD-ROM.
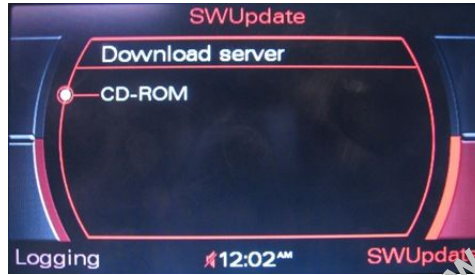
Wait until the META-Information is read.

4. Select Standard to access the MMI component list.

5. Scroll down and select Start download.
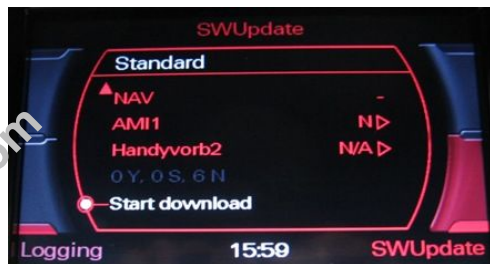
6. Read and obey the warning.

7. Scroll down to the next screen and select OK.
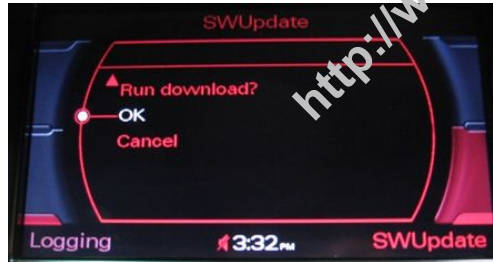
8. The update of the components may take more than 30 minutes.

   When finished, a component list will appear. Scroll down the list.

9. Select Restart MMI.

10. To ensure that all components were updated succesfully, follow the steps of the Zug Update procedure again until the adjacent screen appears.

11. Remove CD#2 from the CD changer.

12. Connect vehicle diagnostic, testing and information system VAS 5051, VAS 5051B, or VAS 5052 (with online capability) to the vehicle and erase all communication faults.

Software Version Management (SVM) Feedback Documentation

1. Connect VAS 5051 or VAS 5052 to your workshop network (CPN).

2. Perform a Problem-related hardware and software update. Use the SVM code MMIUSK864.

   ℹ️ Tip: The SVM code is also printed on the software update CD #2 and the case of the CD bundle.

3. After GFF scans all modules, if it states you need to update another module, select No. It is normal for GFF to state The SVM action code leads to no result, please contact Technical Assistance. It is not necessary to contact the Technical Assistance Center; the procedure is complete.

Section 5: Troubleshooting Q&A

Adaptation channels of the 07 – display/control unit may change their value during the MMI Zug update. Additional information can be found in Technical bulletin 2017424.

1. Q: The function Windows is now displayed but grayed out in the CAR SYSTEMS Menu.

   A: Refer to TSB 2019927.

2. Q: The function Instrument Cluster is not displayed in the CAR SYSTEMS Menu after the MMI Zug SW Update.

   A: Refer to TSB 2020250.

3. Q: The phone book and/or missed/received/send calls of the customer Bluetooth phone are no longer downloaded to the MMI system after the update.

   A: Delete the Bluetooth pair list of the customer's cell phone and perform an initial pairing to the vehicle again (where the PIN input is required). In addition, delete all missed/received/send calls in the phone.

   ℹ️ Tip: Audi of America only guarantees the proper Bluetooth connectivity with cell phones on the AUDI Bluetooth compatibility list. This list can be found under www.audiusa.com/bluetooth.

4. Q: Toggling between the Radio bands via the RADIO button is not possible after the update. In addition, the HVAC SETUP can no longer be accessed.

A: Change the adaptation value 11 of the 07 – Display/control unit to 36.

5. Q: I can't pair any cell phone to the vehicle after the update.

A: Verify that adaptation channel 12 of the 07 Display/control unit is set to 2. If it is not, set it to 2 and reset the MMI system before beginning the pairing procedure again.

6. Q: After the update, the CAR SYSTEMS menu list is incomplete.

A: Adaptation channel 01 and 02 may have lost their value. Enter the correct value via J523-Front Info Display Ctrl.Head, adaptation (RG.91) in Guided Fault Finding.

7. Q: The Vehicle battery status is no longer displayed in the CAR SYSTEMS menu after the MMI Update.

A: After the update, the vehicle battery status display is deactivated by default.

8. Q: One or both remote keys are not recalling the seat position (if applicable), and the function Seat adjustment is not displayed in the CAR SYSTEMS Menu after the MMI Zug SW Update.

A: Adaptation channel 1 (Car menu installation list) of the 07 - Display operating unit control unit J523 lost its value. Readapt Adaptation channel 1 with Guided Fault Finding according to the options in the vehicle.

9. Q: Navigation display only shows an arrow and an empty map after the MMI Zug SW update.

A: If GPS satellite reception is poor (e.g. in the workshop), the update programming may result in the navigation system losing its location. This results in an empty map. Leave the vehicle standing in the open with the MMI on for about 5-10 minutes. The navigation system usually re-initializes within this time. Otherwise perform an MMI reset and verify again.

Warranty

This TSB is informational only and not applicable to any Audi warranty.

Required Parts and Tools

Part Number	Part Description	Quantity

Harman Becker V. 5 Replacement DVD

Order only if Navigation DVD Version 4 or lower is currently installed. Use attached purchase form: Navteq_dvd_v5_replacement_form.pdf

Claim the DVD costs in the sublet field. | MMI Navigation DVD Version 5 | 1 |
| 4F0 998 961

(Order via ETKA) | Zug 864 - Update CD MMI | 1 |

Additional Information

The following Technical Service Bulletins may be helpful to complete this procedure:

- TSB 2017424, 91 MMI High: Some functions unavailable after 07 - Display/control unit replacement or MMI Zug software update.

- TSB 2011732,00 Software Version Management (SVM) operating instructions.

- TSB 2019927, 91 MMI Car Systems menu contains grayed out "Windows" option.

- TSB 2020250, 91 MMI Car Systems menu does not contain the option "Instrument Cluster"

All parts and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.