August 2008 Retrofitting a Telematics Control Unit (TCU) with Bluetooth® Technology

<u>MODEL</u>

E90, E91, E92 (3 Series) with SA640 (Phone prep)

SITUATION

On a vehicle equipped with phone preparation (SA 640), the customer would like, at his or her own expense, to install a BMW Assist[™] TCU with Bluetooth technology.

PROCEDURE



- 1. Disconnect the battery.
- 2. Remove the trunk floor panel.

Remove two Hex bolts (1) and locate the TCU connectors (2-7).



3. Mount the TCU (1) to the bracket (2), using four Hex nuts (3).



4. Connect the TCU connectors (1 and 2) to the TCU.

- 5. Connect the TCU connectors (4 and 5) to the TCU (1).
- 6. Slide the bracket assembly into the tabs in the trunk floor (2) as shown, and secure with two Hex nuts (3).
- 7. Secure the harness clip into the bracket (6).
- 8. Fold down the driver's side rear seat backrest and remove the left backrest part to access the MOST junction blocks **X14280** and **X14255**.

- 9. Separate the upper black junction block (1) from the lower black junction block (2) by pushing the locking tab (black arrow) to the left and sliding the upper block rearward.
- 10. Separate the lower junction block (2) from the plastic mounting bracket by pushing the locking tab (black arrow) to the left and sliding the block rearward.

Fiber optic cables not shown in illustration S65 04 U01.



Warning: Before proceeding with the next step, please label all fiber cables, including whether the cable is Input or Output, to avoid cabling errors.

- 11. Unlock the cover caps from the MOST-bus junction blocks, with the aid of a small flathead screwdriver.
- 12. Remove the TCU fiber optic cables (1 and 2) from the upper black junction block **X14280**, with the aid of a small flathead screwdriver.
- 13. Remove the fiber optic cable (1) from **Position 1** on the lower black junction block **X14255**, and reconnect it to **Position 2**.

Note: The number of fiber cables connected to MOST junction block X14255 may differ than shown, depending on vehicle options.

Note: It may be necessary to remove and reconnect multiple fiber cables into the next slot positions from Step 14 if Position 2 is already occupied.

- 14. Connect the TCU fiber optic cable (1) removed from junction block X14280 in Step 13 into the empty slot **Position 1** of junction block **X14255**.
- 15. Connect the TCU fiber optic cable (2) removed from junction block X14280 in Step 13 into the empty slot **Position 2 (or the next available slot, depending on vehicle options)** of junction block **X14255**.

Note: The number of fiber cables connected to MOST junction block X14255 may differ than shown, depending on vehicle options.

16. Lock the cover caps onto the upper and lower black junction blocks, and resecure both junction blocks to the plastic bracket.



- 17. Take down the drivers under-dash panel (1).
- 18. Locate the loudspeaker connector (2) next to the under-dash light.
- 19. Locate the Bluetooth antenna (3) above the footrest area.

- 20. Remove the padding just above the loudspeaker and Bluetooth antenna locations.
- 21. Connect the Bluetooth connector to the Bluetooth antenna and clip onto the under-dash panel.
- 22. Connect the loudspeaker connector to the loudspeaker and clip onto the under-dash panel.
- 23. Remove the light switch console (1).

- 24. Unplug the connectors and remove the microphone connector from the light switch console.
- 25. Unplug the microphone connector (1) from the blank panel (2).

- 1 2 84 05 U166 1 2) 84 05 U167 1 84 05 U160
- 26. Connect the microphone connector (1) into the microphone (2).

27. Reconnect the removed connectors and install the microphone (1) into the SOS-equipped light switch console (2).

28. Reinstall the SOS-equipped light switch console (1) into the headliner.

- 29. Reconnect the battery and reinstall all components removed during installation.
- Retrofit BMW Assist using Progman. Follow the procedure outlined in the "Retrofits" section of SI B09 05 01 (Coding, Individualization, Programming), using V-26.01.01 (target data status E89x-07-06-510) or higher. Note: This will automatically update any control modules not at the latest software level.
- 31. The VIN must be added to the vehicles with the BMW Assist database. To add the VIN to the database, contact the Telematics Analyst at (201) 307-3707 during regular business hours (8:30 AM to 4:30 PM EST). It will take one to two business days to have the VIN added to the database.

The Telematics Analyst will need the following information:

- VIN
- Electronic Serial Number (ESN) of the TCU that was installed in the vehicle.
- 32. Once the VIN is added to the database, the customer must complete a valid, active subscriber agreement with the BMW Assist Response Center through the enrollment application on DCSnet, located at Sales | BMW Assist | Electronic Subscriber Agreement.
- 33. Initialize BMW Assist services. Refer to SI B84 15 03 (BMW Assist™ Initialization).
- 34. Test the BMW Assist[™] service for proper operation by placing a test call (press the Roadside Assistance "Wrench" button). Make sure that the BMW Assist Response Center has received the correct MIN/MDN, VIN and location of the vehicle. Have the representative update his or her records as needed.
- 35. Pair the customer's compatible handset to the vehicle, following the procedure outlined in SI B84 13 04.
- 36. Allow the phonebook to complete downloading and check the functionality of the system.

PARTS INFORMATION

Part Number	Description	Quantity
Refer to EPC for production	Telematics Control Unit (TCU),	1
date specific part	e.g., 84 10 9-120-741 is for a 3/06 vehicle	
65 15 6 927 700	Bracket for Telematics Control	1
	Unit	
07 11 9 904 019	Hex Nut	4
84 50 6 928 461	Bluetooth Antenna	1
84 31 6 938 762	Hands Free Telephone	1
	Microphone	
65 13 6 938 657	Loudspeaker	1
Refer to EPC for production	Roof Function Center (FZD) -	1
date & color specific part	Refer to EPC for correct	
	production date and color	
65-20-6-935-024	Backup CDMA BMW Assist	1
	antenna	

WARRANTY INFORMATION

This is NOT a warranty issue. All costs are the customer's responsibility, except if the vehicle required a software update prior to the performing the retrofit. Refer to SI B01 09 06 for more information.