



Installation Instructions

Audio, Alarm

Page 1 of 18
May 2007
Ver 3.0 Accessory
Development

These Installation Instructions supersede all previous versions.

SUBJECT

ALARM RETROFIT KIT (WITH MDD) - P/N 65 73 0 309 944

MODEL

Z4 Roadster (E85):
M Roadster (E85):

Vehicle Production 10/03-On*
SOP MY 2006-On*

** Must have alarm pre-wiring which is standard for U.S. spec vehicles.*

SUGGESTED INSTALLATION TIME: 1.5 HOURS** (Z4 ROADSTER)
2.0 HOURS** (M ROADSTER)
3.0 HOURS*** (SELECT VEHICLES)

*** Suggested installation time includes re-coding of the vehicle only for this retrofit kit.*

****Installation time for Alarm System Wiring Harness P/N 61 12 0 300 636 only and reimbursable under warranty using Defect code 61 11 15 79 00, Labor op: 61 99 000 WT 30 FRU, Parts: 61 12 0 300 636.*

Total installation time may vary depending on vehicle options and equipment.

The instructions below are developed for BMW vehicles and are not to be compared to any other existing instructions for vehicles other than BMW. No methods other than those specified in this document are to be used for installation in BMW vehicles. Left and right are determined from the driver's seat.

Carefully read all instructions and supplements before proceeding with the installation. Reference should be made to TIS for instructions dealing with a stock part of the vehicle but not stated in detail in these instructions.

The instructions were complete and up to date at time of publication; however, changes to the vehicle or installation may have occurred. Please report any problems or changes noted with the installation to BMW Technical Hotline, along with VIN, date of manufacture and as much detail as possible.

★ ★ DO IT RIGHT THE FIRST TIME, ON TIME, EVERY TIME ★ ★

PARTS INFORMATION**Contents of Kit - P/N 65 73 0 309 944**

Description	Qty	BMW Part Number
Hood Switch	1	61 31 8 374 745
Bracket (for Switch)	1	61 31 6 915 326
M6 Hex Nut w/Captive Flat Washer	3	11 61 1 708 413
Siren (US) w/ Built in Tilt Sensor	1	65 75 6 940 677 or 65 75 6 942 431
Bracket (for Siren)	1	65 75 6 937 448
ST 4.8-2 Cage Clip	1	07 12 9 904 323
ST 4.8x16 Hex Head Screw	1	07 11 9 901 299
MDD Interior Protection Module	1	65 75 6 937 080 or 65 75 6 944 875
Bracket (for MDD Module	1	65 75 6 908 839
M 5x10 Torx 25 Head Screw	2	54 31 8 234 675

ADDITIONAL REQUIRED PARTS*

Description	BMW Part Number
Oddments Tray (Shielded) Black	51 46 7 073 533
Oddments Tray (Shielded) Gray	51 46 7 073 534

**Only for vehicles without optional BMW Assist (SA 639).*

ADDITIONAL OPTIONAL PARTS**

Description	Qty	BMW Part Number
Alarm system wiring harness	1	61 12 0 300 636
Cable Strap	1pkg./50	61 13 1 367 599

****Only for the following vehicle production:**

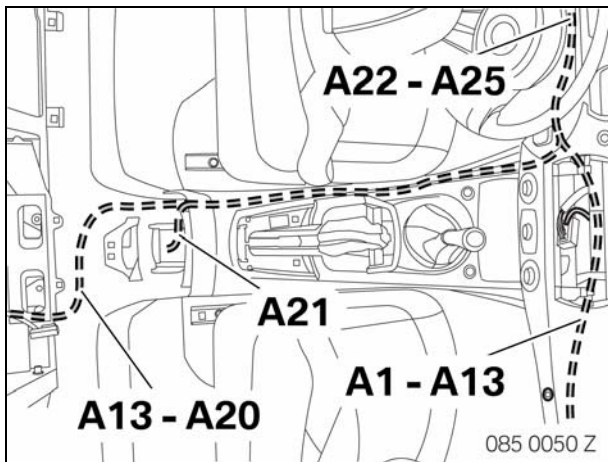
Model	Series	Year	Code	Effected VIN Range	Effected Production Dates
Z4 roadster 2.5i	E85	2005	BT33	LR69458 to LR69979	09/28/04 to 11/02/04
Z4 Roadster 2.5i	E85	2005	BT33	LR70269 to LR70766	01/13/05 to 02/25/05
Z4 Roadster 2.5iA	E85	2005	BT43	LS53481 to LS54393	09/28/04 to 11/02/04
Z4 Roadster 2.5iA	E85	2005	BT43	LS55204 to LS56377	01/13/05 to 02/25/05
Z4 Roadster 3.0i	E85	2005	BT53	LT27430 to LT27789	09/28/04 to 11/02/04
Z4 Roadster 3.0i	E85	2005	BT53	LT28031 to LT28342	01/13/05 to 02/25/05
Z4 Roadster 3.0iA	E85	2005	BT63	LU09057 to LU09544	09/28/04 to 11/02/04
Z4 Roadster 3.0iA	E85	2005	BT63	LU09907 to LU09908	01/13/05 to 02/25/05
Z4 Roadster 3.0iA	E85	2005	BT63	LU10151 to LU10449	01/13/05 to 02/25/05

VEHICLE PREPARATION - WIRING HARNESS

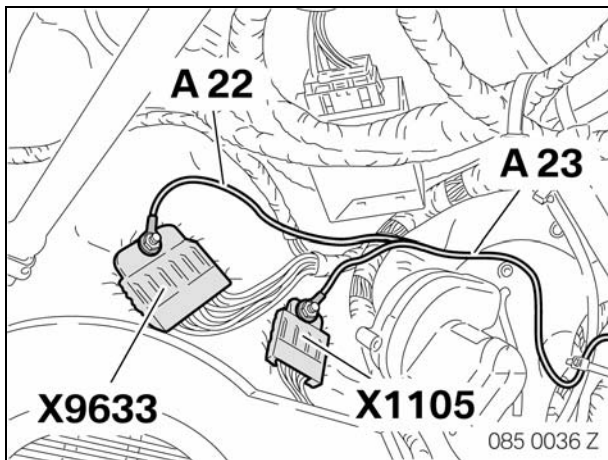
NOTE: ONLY FOR SELECT MY2005 VEHICLES. PLEASE REFER TO PAGE 2 FOR VIN RANGE. FOR ALL OTHER VEHICLE PRODUCTION, PROCEED TO PAGE 8.

The following components must be temporarily removed before proceeding with retrofit.

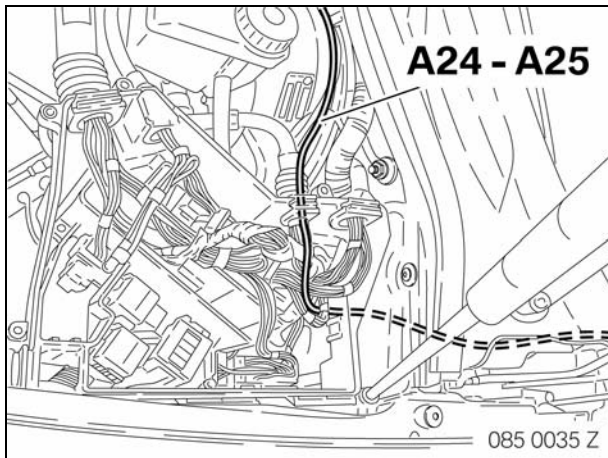
Item	TIS Instruction No.
Disconnect the negative battery terminal	12 00 ...
Pedal trim	51 45 185
Glovebox	51 16 360
Footwell trim on the right	51 45 181
A pillar trim on the right	51 43 201
Storage box and related parts	51 16 240 61 31 176 51 16 239 51 16 235
Rear bumper trim	51 12 156
Carpet trim on trunk floor	51 47 101
Remove right sun visor	51 16 080

Alarm System Wiring Harness (if required)

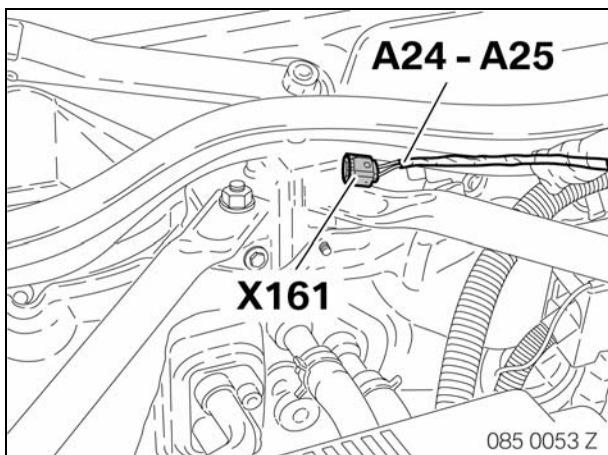
1. Route the wiring harness as shown.



2. Connect branches **A22** (BR) and **A23** (BR/SW) to same color joint connectors **X1105** (BR/SW) and **x9633** (BR) located in LH (driver's side) foot well area as shown.

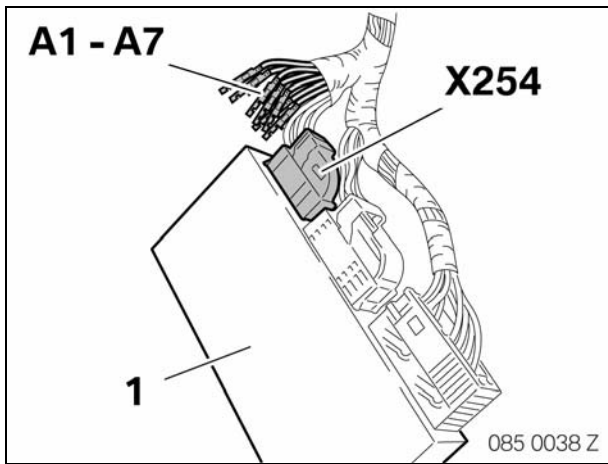


3. Remove electronics box cover. Direct branches **A24** (VI/GN) and **A25** (BR/SW) through the electronics box to the installation site of hood connector.



4. Connect the black plug **X161** as follows:

Branch	Wire Color	Position
A24	VI/GN	2
A25	BR/SW	1

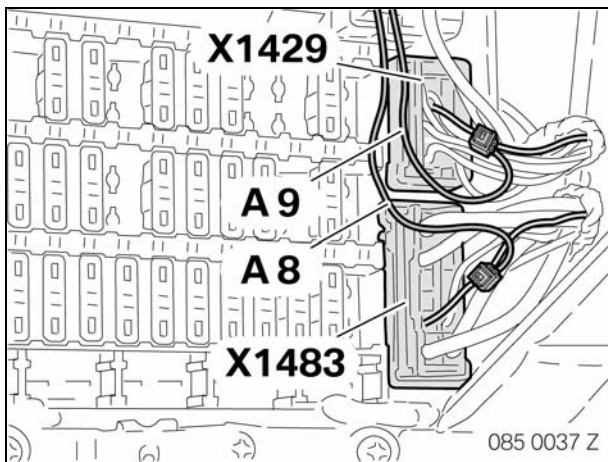


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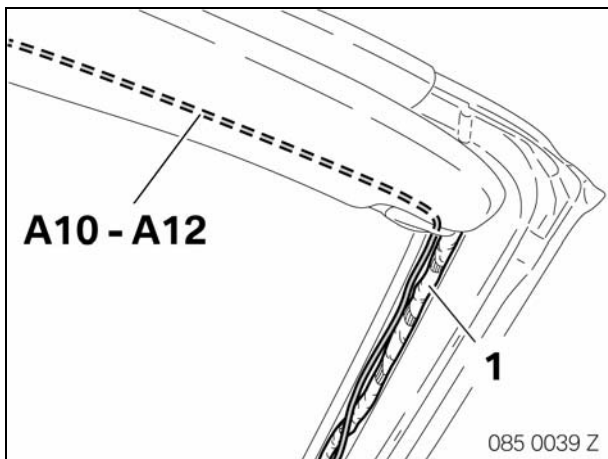
5. Disconnect and release plug **X254** from General Module (1) as shown. Connect branches **A1 - A7** into plug **X254** as follows:

Branch	Wire Color	Position
A1	VI/GN	7
A2	WS/BL	10
A3	SW/BL	8
A4	SW/GN	6
A5	SW/RT	5
A6	SW/GE	24
A7	GR/SW/GE	23

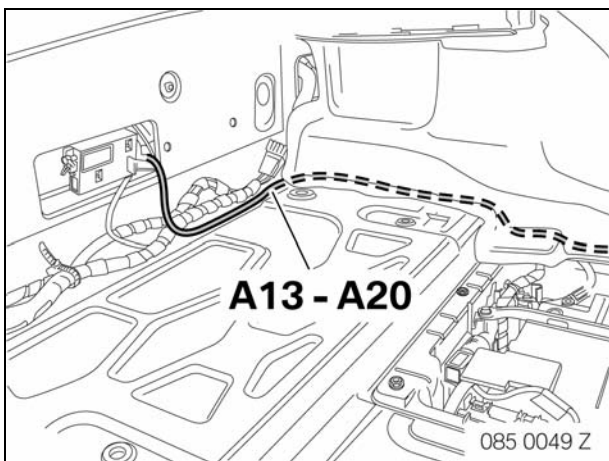
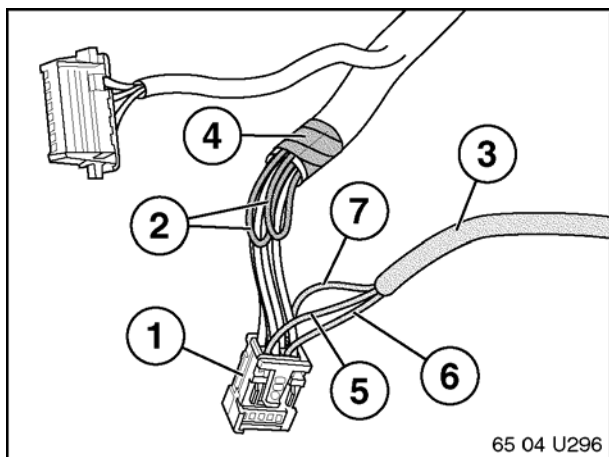
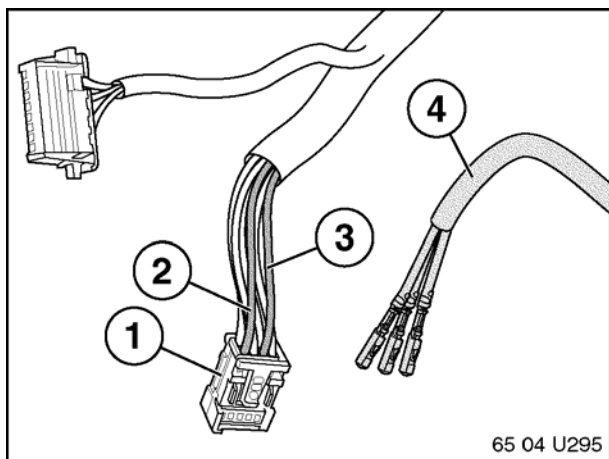
6. Reassemble plug **X254** and connect it into General Module (1).



7. Use a quick connector to connect branch **A8** (RT/GN color wire) to same color wire in terminal position #6 on violet plug **X1483**.
8. Use a quick connect to connect branch **A9** (GN/WS color wire) to same color wire in terminal position #14 on black plug **X1429**.



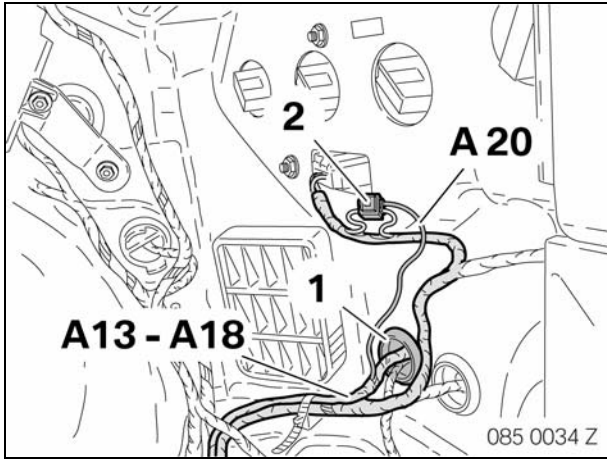
9. Route branches **A10 – A12** along the standard wiring harness (1) to the interior mirror.



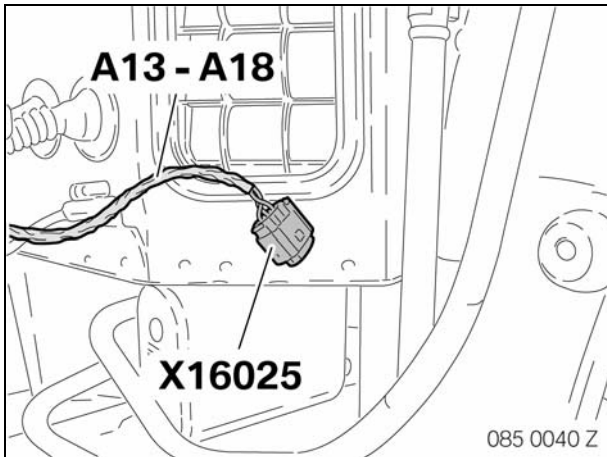
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10. Remove rearview mirror trim cover halves. Disconnect black 10-position plug **X18246** (1) from rearview mirror base connector.
11. Unlock secondary locks on both sides of plug **X18246** (1).
12. Remove original BL/GE color wire terminal (2) from plug **X18246** (1) position #1. Cut off female terminal from original BL/GE wire.
13. Remove original GN/WS color wire terminal (3) from plug **X18246** (1) position #3. Cut off female terminal from original GN/WS wire.
14. Direct Branches **A10 – A12** (4) to plug **X18246** (1).
15. Insert branch **A10** GR/SW/GE wire (7) into position #9 of plug **X18246** (1).
16. Insert branch **A11** BL/GE wire (5) into position #1 of plug **X18246** (1).
17. Insert branch **A12** (GN/WS) wire (6) into position #3 if plug **X18246** (1).
18. Bend back the original BL/GE and GN/WS wires (2) and insulate them with vinyl electrical tape (4) as shown.
19. Route branches **A13 – A20** in the trunk to the right tail light.

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20. Use a quick connector (2) to connect branch **A20**, BL/GE wire to same color wire on the right tail light.
21. Route branches **A13 - A18** through rubber grommet (1) to vehicle exterior.

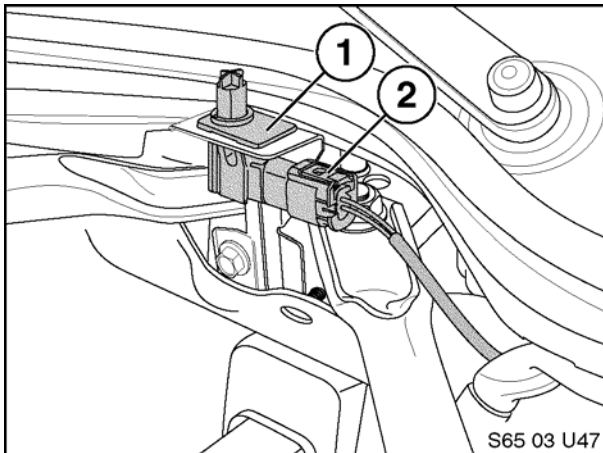
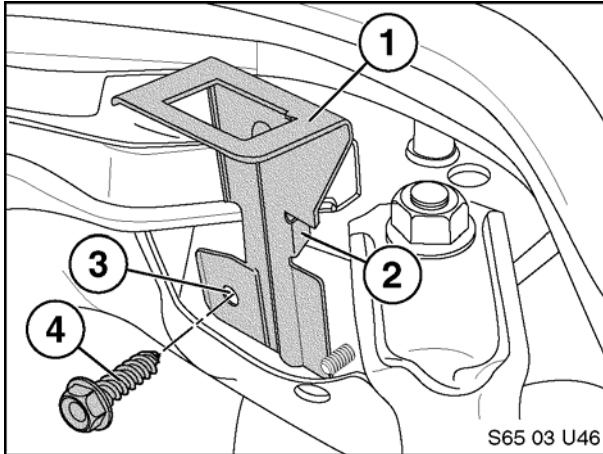
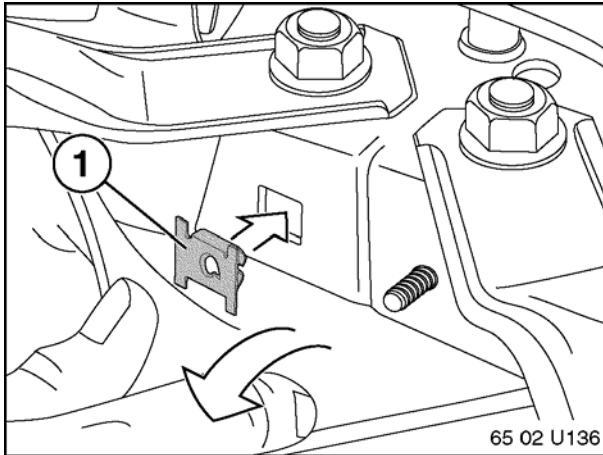
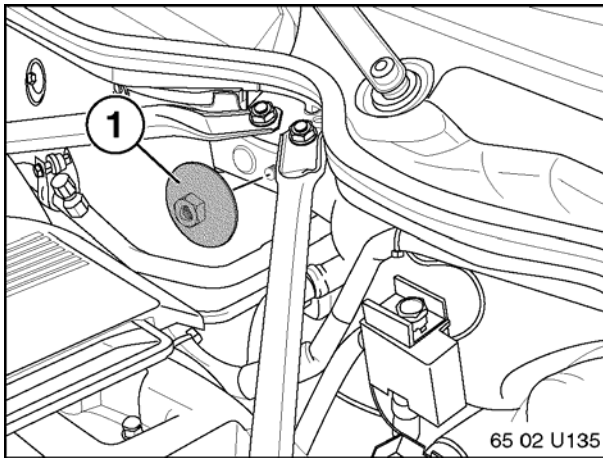


22. Connect branches **A13 - A18** to plug **X16026** as follows:

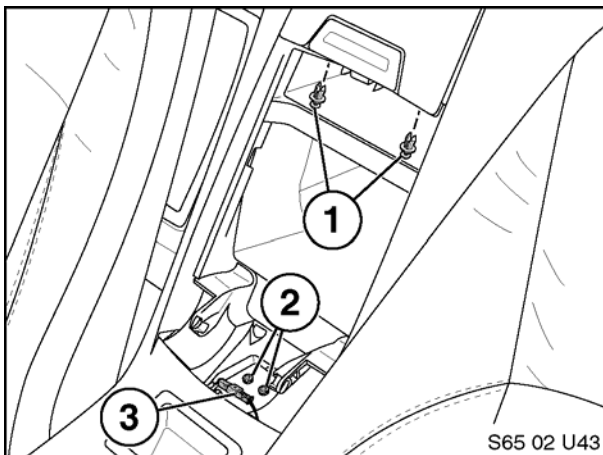
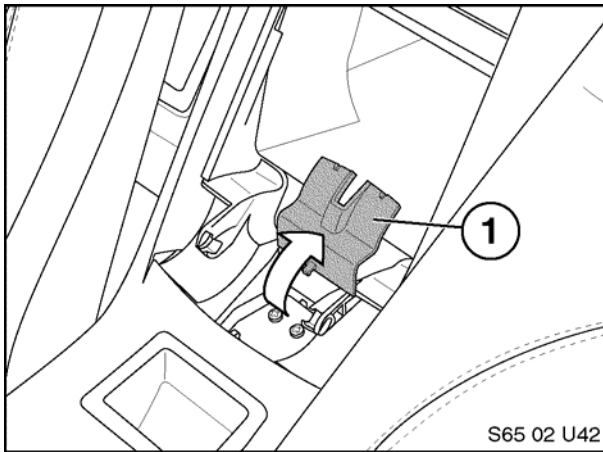
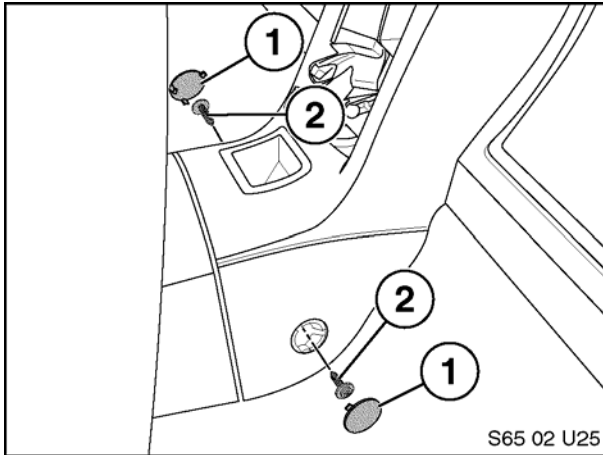
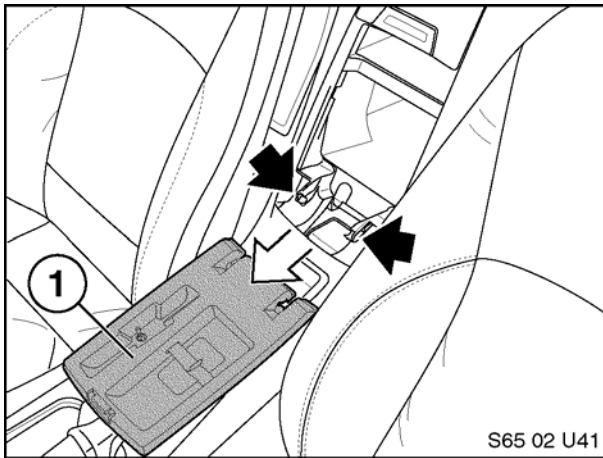
Branch	Wire Color	Position
A13	RT/GN	6
A14	SW/BL	5
A15	SW/GN	2
A16	SW/RT	1
A17	RT/GE	3
A18	BR	4

Installation Complete.

Continue with the installation of the Alarm with MDD Interior Protection Retrofit Kit P/N 65 73 0 309 944.

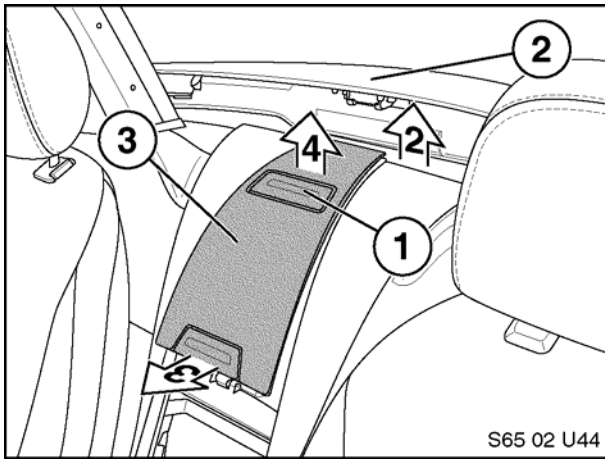
HOOD SWITCH

1. Connect battery negative terminal.
2. Locate and remove plastic fastener (1) in engine compartment near center firewall.
3. Pull down cover to reveal rectangular shaped opening. Install cage clip by pushing clip into opening until clip sits into position.
4. Position hood switch bracket (1) so that right angle tab (2) makes contact with horizontal surface while round hole (3) is aligned with center opening of cage clip. Secure bracket (1) in place with self-tapping 4.8x16 hex head screw (4) as shown.
5. Install hood switch (1) into bracket.
6. Locate 3-position hood switch connector found behind brake master cylinder booster. Remove securing tape and neatly direct hood switch connector and harness to bracket area.
7. Remove protective cover and install connector (1) to hood switch (2).
8. Reposition cover over assembly and secure in place with plastic fastener previously removed in Step 2.

INTERIOR PROTECTION MODULE

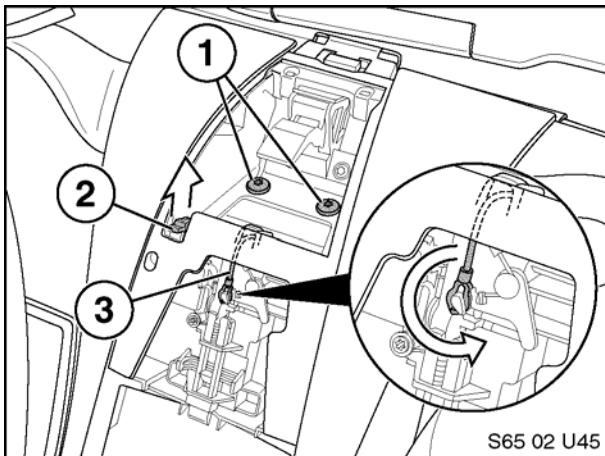
Note: Before proceeding, make sure hands are clean to prevent soiling of interior trim and parts.

1. Lower convertible top.
2. Remove pair of Phillips® head screws from mounting clips (black arrows). Firmly grasp oddments box cover (1) and pull forward to remove from mounting points as shown.
3. Move seats forward. Remove RH and LH covers (1) and mounting screws (2) as shown.
4. Pry out switch panel cover (1) exposing mounting screws as shown.
5. Remove pair of Phillips® head plastic rivets (1).
6. Remove pair of T20 Torx® head screws (2).
7. Disconnect connector attached to micro switch (3).

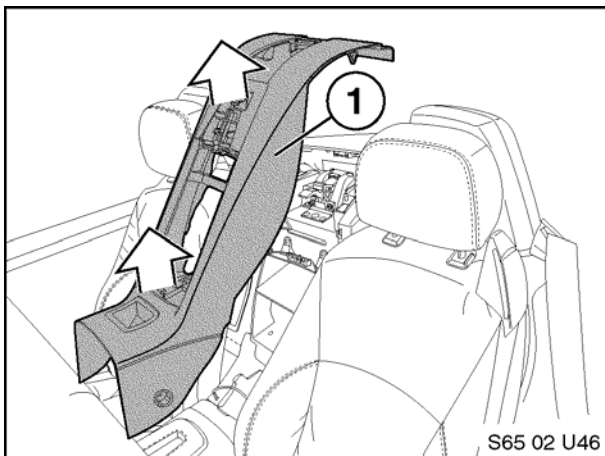


Note: Before proceeding further, the convertible top (2) must be positioned upward 2.0 inches (53mm) from its locked position to allow disassembly of oddments upper cover.

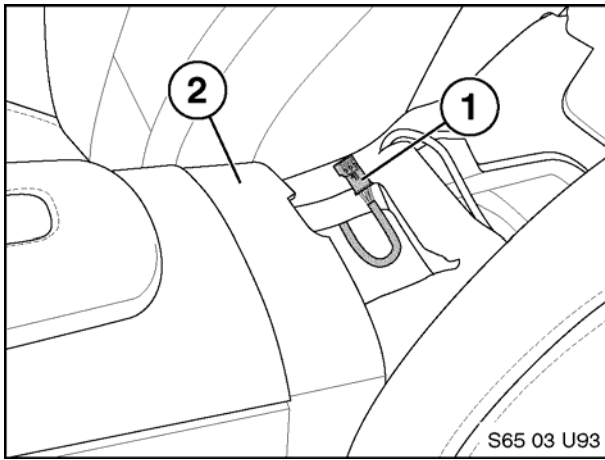
8. Press roof lock release control (1).
9. Carefully pull up slightly on upper edge of oddments cover (arrow 2) while simultaneously pulling outward on lower edge of oddments cover (arrow 3) to allow oddments cover (3) to be removed upward (arrow 4).



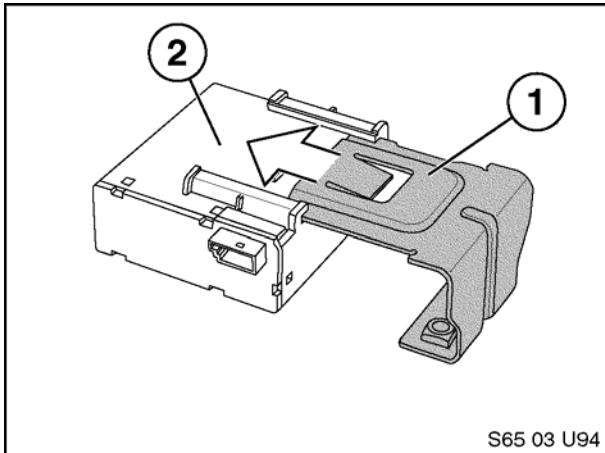
10. Remove pair of T30 Torx® head bolts (1).
11. Disconnect connectors (2) as shown.
12. Remove oddments box lock emergency release cord end "loop" (3) from cam. Route cord away from oddments box frame.
13. On BMW Assist option vehicle disconnect "SOS"/Roadside Assistance switch.



14. Remove oddments box (1) as shown.

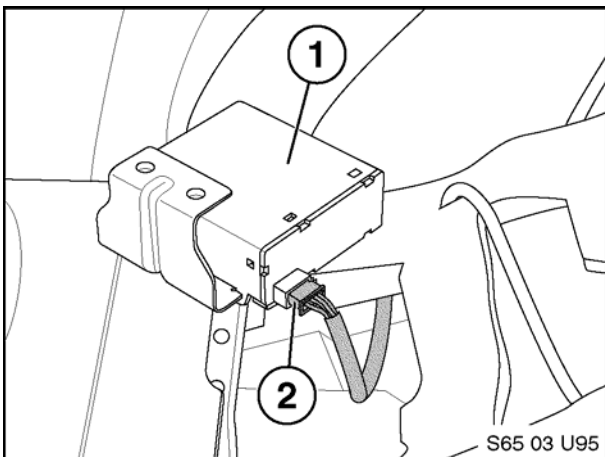


15. Locate alarm interior module 4-position black connector (1) from under center console (2).



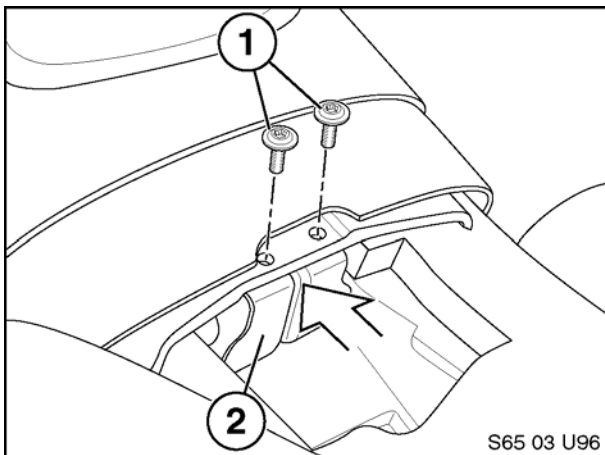
16. Slide mounting bracket (1) into mounting rails of alarm interior protection module (2) (specifically as shown) until bracket locks into place.

Note: *It is possible to mount bracket from opposite end. Doing so will orient connector in undesirable position when mounting module/bracket assembly into position.*

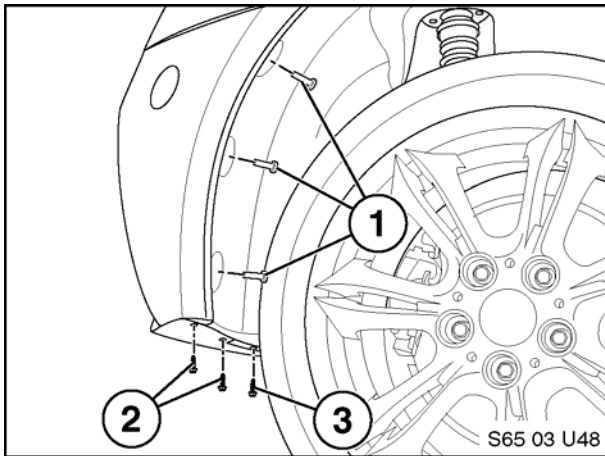


17. Connect alarm interior module connector (2) to module (1) as shown.

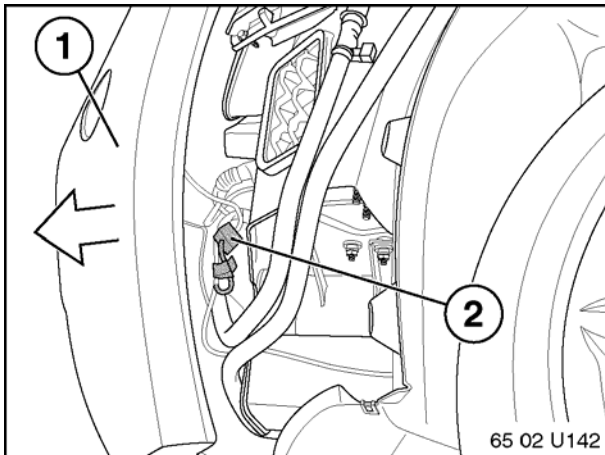
Note: *connector must face RH (passenger) side.*



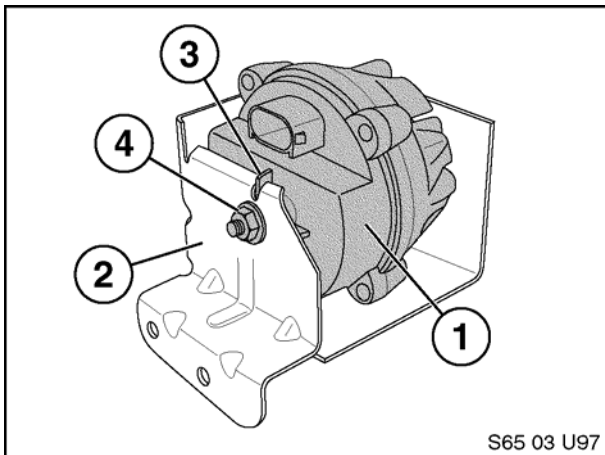
18. Position alarm interior module/bracket assembly (2) into center console so that pair of mounting holes on center console align with bracket holes. Secure in place with pair of T25 Torx® head screws.
19. On non BMW Assist option vehicle, replace oddments tray with shielded oddments tray. See page 2 for order information.
20. Reassemble all previously displaced or removed items.

Z4 ROADSTER SIREN/TILT SENSOR

1. Remove the three plastic rivets (1) from RH rear wheel well as shown.
2. Remove the two hex head self tapping screws (2) and the one M 5x12 hex head screw (3) from RH lower corner area of rear bumper as shown.



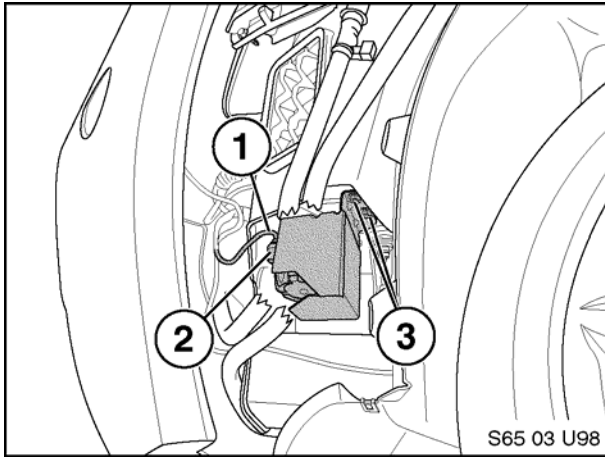
3. Slightly displace RH corner area of rear bumper (1) from RH wheel well area by about 10 inches (25.5 mm) to allow access to charcoal canister vent line area as shown.



4. Position alarm siren (1) to mounting bracket (2) as shown.

Note: *Make sure ridge directly below connector on siren (3) aligns with notch on bracket.*

5. Secure siren (1) to bracket (2) using M6 nut with captive flat washer (4).



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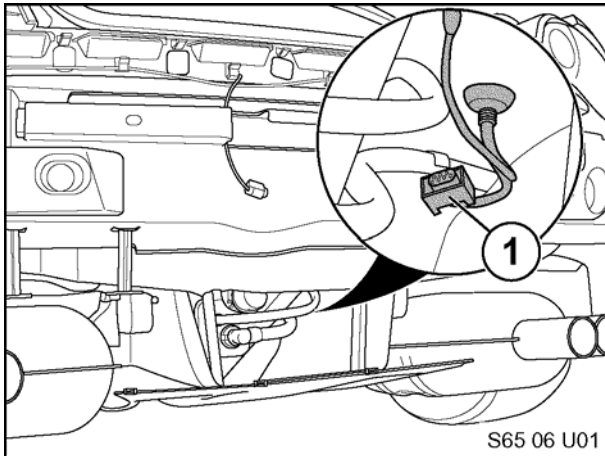
6. Locate 6-position black alarm siren connector (will require unwrapping securing tape and removing protective cover) found near the carbon canister vent line.
7. Connect siren harness connector (1) to siren (2). Position alarm siren/bracket assembly so that pair of threaded studs (3) protrude through the pair of holes on bracket as shown. Secure alarm siren/bracket assembly in place with pair of M6 hex nuts with captive flat washers.
8. Reassemble all previously displaced or removed items.
9. Reconnect battery negative terminal.

Installation Complete

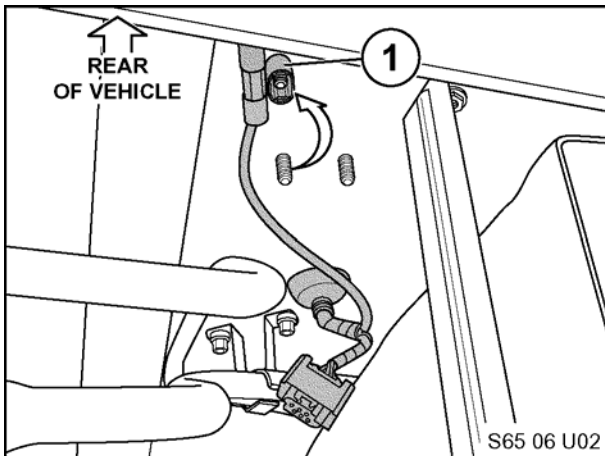
Continue with Retrofit Coding Procedure

M ROADSTER ALARM/TILT SENSOR

1. Remove rear bumper. Refer to TIS 51 12 156.

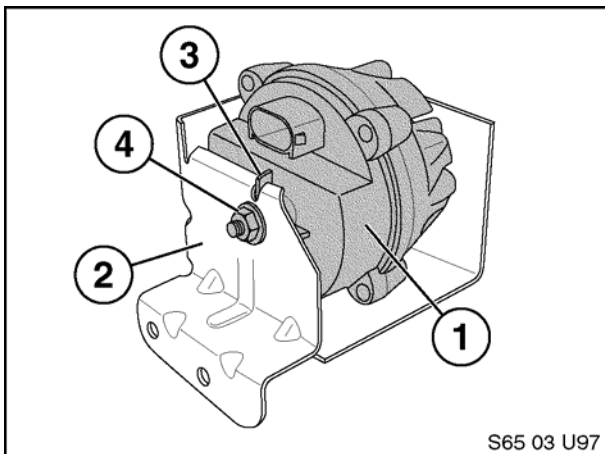


2. Locate 6-position black connector (1) found taped to wire harness located under trunk chassis towards RH side of ridged plastic emissions pipes (see detailed view).
3. Remove securing tape and protective cover from connector (1).



4. Reposition (if necessary) harness stay from one of two forward M6 threaded stud as shown.

Note: The two forward M6 threaded studs are mounting points for the siren/tilt sensor assembly bracket.

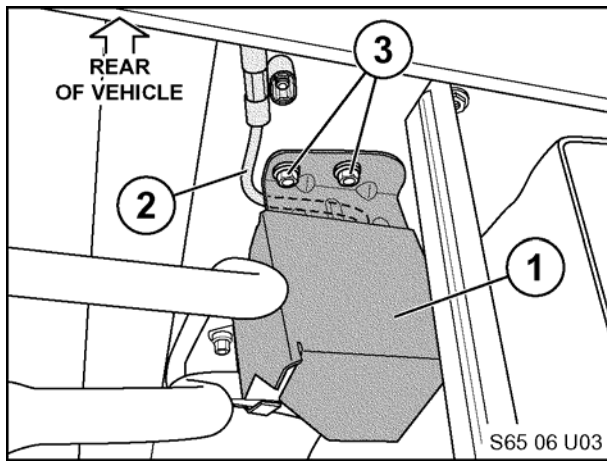


5. Position alarm siren/tilt sensor (1) to mounting bracket (2) as shown.

Note: Make sure ridge directly below connector on siren (3) aligns with notch on bracket (2).

6. Secure siren/tilt sensor (1) to bracket (2) using M6 nut with captive flat washer.

7. Direct alarm/tilt sensor mounting bracket assembly into mounting location area under trunk chassis.
8. Connect 6-position black connector to mating connector on siren/tilt sensor.



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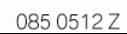
9. Direct harness (2) so that harness is forward of M6 threaded studs (3) as shown.
10. Position siren/tilt sensor bracket assembly, so M6 threaded studs protrude through holes (3) on bracket (1) as shown.
11. Secure alarm siren/tilt sensor bracket assembly (1) in place with M6 hex nuts and captive flat washers (3).

Note: Make sure harness directed forward of threaded studs does not get pinched when securing bracket assembly to vehicle.

12. Reassemble all previously displaced or removed items.
13. Reconnect battery negative terminal.

Installation Complete

Continue with Retrofit Coding Procedure.



Circuit Diagram of Anti-Theft Alarm System**Cable Colors**

A1	Base module	BL	Blue
A22	Interior mirror	BR	Brown
A501	Interior sensor	GE	Yellow
H16025	Siren	GN	Green
N*	Black 6-pin socket casing	GR	Grey
S19	Bonnet contact	RT	Red
X161	Black 3-pin socket casing	SW	Black
X254	Black 26-pin socket casing	VI	Violet
X1105	Eyelet A6		
X1169	Reversing signal connector		
X1191	Black 3-pin socket casing (not required)		
X1429	Connector terminal 15		
X1483	Connector terminal 30		
X6410	Connector terminal 30		
X9633	Eyelet		
X13756	Black 4-pin socket casing		
X16025	Black 6-pin socket casing		
X18246	Black 10-pin socket casing		

RETROFIT CODING

After completion of above installation, the retrofit anti-theft alarm system (DWA) must be coded to the vehicle using Progman as follows:

Note: Use coding software version Progman 21.0 or later versions.

Begin with Progman home screen

- Select "New Session"
- Select "Interface/IP Address"
- Select "Continue"
- Enter description (i.e. Z4 VIN AA111111)
- Select "Continue"

Coding Individualization Programming, Model series selection

- Select "Z"
- Select "E85"

Informational screen will appear stating "Progman is being starting vehicle order. The vehicle order (VO) is being determined".

SSS Selection

Program selection:

- Select "Load SW"

Screen will appear stating "Have control modules been replaced on this car?"

- Select "No"

Screen will appear stating "Fitted control modules are being determined, Select control module to be processed"

- Select "Retrofits"

Screen will appear stating "Selecting Retrofits"

- Select "Retrofits"

Screen will appear stating "Retrofits have been added"

- Select "DWA"

Screen will appear stating "Select sub function for retrofits or cancel with arrow in navigational column"

- Select "Added"

Screen will appear stating "Retrofitting Antitheft alarm system selected"

- Select "Continue"

Screen will appear stating "The voltage is being tested; vehicle context is being checked again" followed by "Measures plan is being determined"

Screen will appear stating "A measures plan has been created and accepted. It takes 1 minute to execute this measures plan"

- Select "Start"

Screen will appear stating "The CKM values are being saved"; "The GM control module _____"; "The CKM values are being restored"

Final Report

- Select "Finish"

To determine if DWA code number 302 is in vehicle order (VO)

- Select "Change"
- Select "Vehicle"
- Select "Complete encoding"

Screen will appear stating "You start coding the entire vehicle with the following functions"

- Select "Continue"

Screen will appear stating "Should coding of the entire car be started now?"

- Select "Yes"

Screen will appear stating "Measures Plan is being determined"

Screen will appear showing Measures Plan, DWA option code number 302 should be the last number listed in the vehicle order.

- Select "Print" if a printed copy of measures plan is desired.
- Select "End" **NOTE: DO NOT SELECT ACCEPT**

Upon completion of anti-theft alarm system coding, conduct alarm system test to verify functionality of alarm system.