

Parts and Accessories.

Installation Instructions.



Harman Kardon hi-fi system retrofit

MINI ONE (R50)

MINI COOPER (R50)

MINI COOPER S (R53)

The installation kit is only suitable for cars with a Boost radio (SA 657).

Retrofit kit No. 65 13 0 029 635

Installation time

The installation time is 5 -6 hours, but this may vary depending on the equipment in the car.

Important information

These installation instructions are primarily designed for use within the MINI dealership organisation and by authorised BMW service companies.

In any event the target group for these installation instructions is specialist personnel trained on MINI cars with the appropriate specialist knowledge.

All work must be completed using the latest MINI repair manuals, circuit diagrams, servicing manuals and work instructions in a rational order using the prescribed tools (special tools) and observing current health and safety regulations.

To avoid unnecessary extra work and/or costs, if any installation or function problems occur, after a brief troubleshooting session (approx. 0.5 hours), an inquiry is to be sent straight away to the technical parts support via the Aftersales Assistance Portal (ASAP), quoting the chassis number, the part number of the retrofit kit and a precise description of the problem.

Do not archive the hard copy of these installation instructions since daily updates are made by ASAP.

See ASAP for details of the pictograms.

Pictograms



denotes instructions that draw your attention to dangers.



denotes instructions that draw your attention to special features.

◀ denotes the end of the instruction or other text.

Subject to technical modifications.

Ensure that the cables/lines are not kinked or damaged as you install them in the car. The costs incurred as a result of this will not be reimbursed by BMW AG.

Additional cables/lines that you install must be secured with cable ties.

Installation information

Some of the installation of the aerial is shown only on the left-hand side of the car, proceed in the same way on the right-hand side of the car.

List of special equipment

The following special equipment must be taken into consideration when installing the retrofit kit:

SA 657 Boost radio

SA 672 CD changer

SA 609 Navigation system

SA 640 Car phone preparation

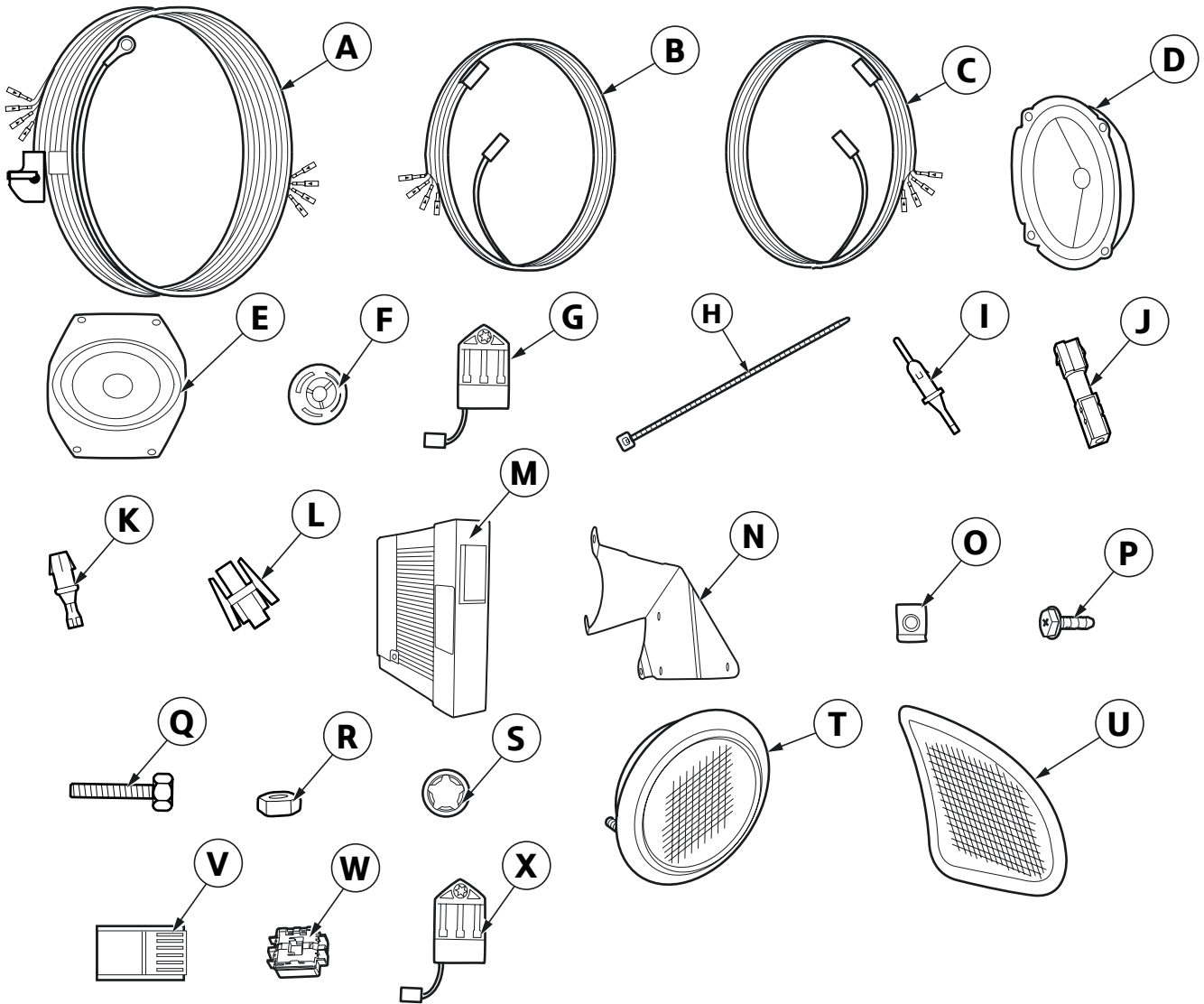
Special tools required

None

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1. Parts list



R50 1081 Z

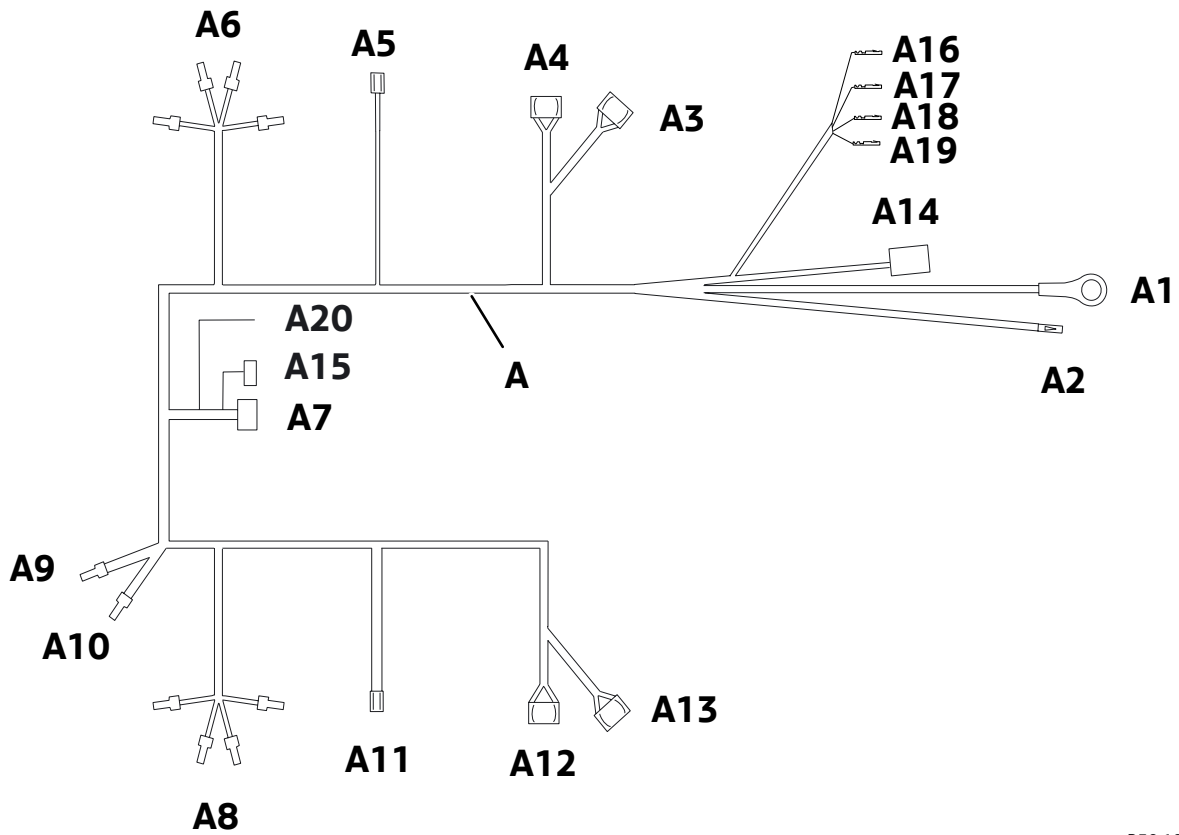
Legend

- | | | | |
|---|----------------------------------|---|-------------------------------|
| A | Hi-fi wiring harness | M | Hi-fi amplifier |
| B | Door wiring harness, right | N | Holder |
| C | Door wiring harness, left | O | Speed nut (2x) |
| D | Rear woofer (2x) | P | Self-tapping screw (2x) |
| E | Front mid-range speaker (2x) | Q | Screw M6 x 10 mm |
| F | Front tweeter (2x) | R | Nut M6 (2x) |
| G | Joint connector (WS/RT/GE cable) | S | Securing washer (8x) |
| H | Cable ties (20x) | T | Front speaker cover (2x) |
| I | Plug contact (2x) | U | Rear speaker cover (2x) |
| J | Plug casing (2x) | V | 6-pin SW socket casing |
| K | Socket contact (2x) | W | Miniature connector |
| L | Socket casing (2x) | X | Joint connector (GR/RT cable) |

2. Preparations

	TIS No.
Conduct a brief test	---
Disconnect the negative pole of the battery	12 00 ...
The following components must be removed first of all	
Door trim, left and right	51 47 000
Radio	65 11 030
Trim between front centre console and instrument panel	51 16 198
Bottom steering column trim	32 31 020
Door sill cover strip, left and right	51 47 000
Rear seat fittings	52 20 070
Front mid-range speakers (if fitted)	65 13 070
Front tweeters (if fitted)	65 13 100
Side trim, left and right	51 43 005
Rear woofers (if fitted)	65 13 080
C pillar trim (not in cars with SA 609 or SA 640)	51 43 251
Lower the headlining at the rear (not in cars with SA 609 or SA 640)	51 44 011

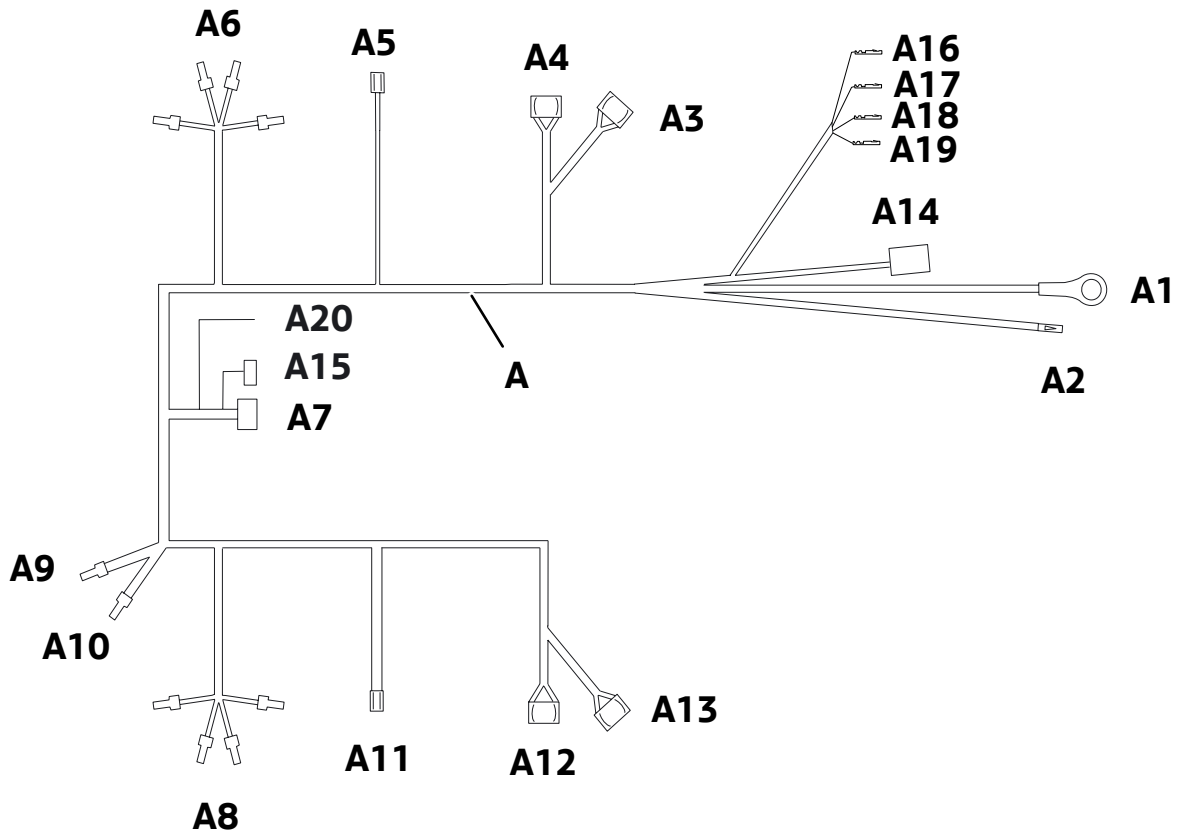
3. Hi-fi wiring harness connection diagram



R50 1082 Z

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Hi-fi wiring harness	---	---	---	---
A1	Eyelet	Terminal 31	BR 4.0 mm ²	Without SA 609 and SA 640 To the earth post in the roof With SA 609 and SA 640 Aerial booster securing screw on the right side window	Without SA 609 and SA 640 only X13016
A2	SW 1-pin plug	---	WS 0.5 mm ²	To aerial booster N45	X813 PIN 1
A3	SW 2-pin plug	---	---	To speaker, rear right D	X18514
A4	SW 2-pin plug	---	---	To speaker, rear right D	X1261
A5	Joint connector contact	---	WS/RT/GE 0.35 mm ²	To the joint connector on the right door sill	X10116
A6	Plug contacts	---	GE/GR GE/BL GE/SW GE/BR 0.75 mm ²	To the 22-pin SW plug, A pillar on the right	X256
A7	SW 16-pin plug	---	---	To radio N9	X18126

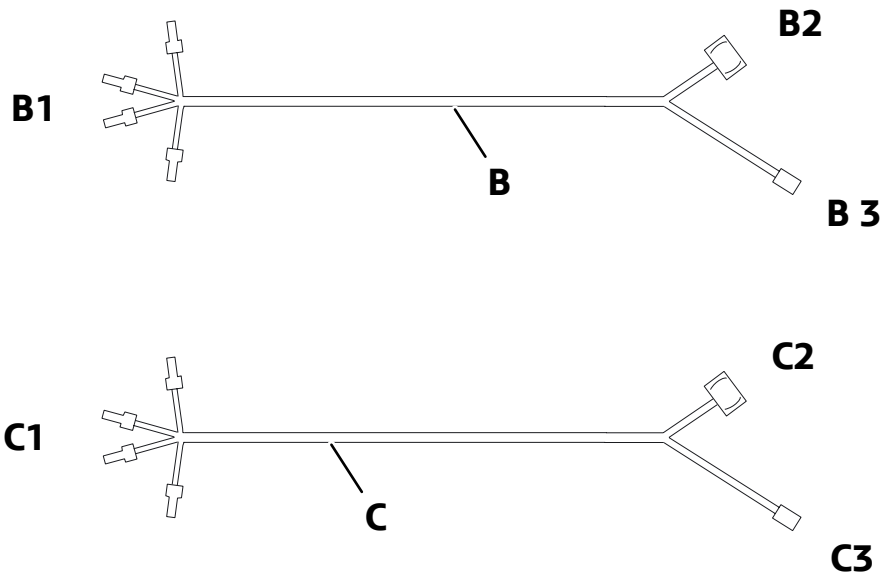
3. Hi-fi wiring harness connection diagram



R50 1082 Z

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A8	Plug contacts	---	GE/GR GE/BL GE/SW GE/BR 0.75 mm ²	To the 22-pin SW plug, A pillar on the left	X257
A9	SW 1-pin plug	Terminal 30	RT/BR 1.0 mm ²	12-pin blue plug on fuse box	X10205 PIN 2
A10	SW 1-pin plug	Terminal R	VI/BL 0.75 mm ²	12-pin GN plug on fuse box	X10206 PIN 11
A11	Joint connector contact	Connector 58g	GR/RT 0.35 mm ²	To the joint connector on the left door sill	X1019
A12	SW 2-pin plug	---	---	To speaker, rear left D	X18515
A13	Black 2-pin socket casing	---	---	To speaker, rear left D	X397
A14	SW 42-pin plug	---	---	To hi-fi amplifier A18 in the boot	X10266
A15	SW 6-pin plug	---	---	To radio N9	X11605
A16	Socket contact	Tel NF-	SW/WS 0.35 mm ²	Cars before 09/03 only	A14 PIN 41
A17	Socket contact	Tel NF +	SW/BR 0.35 mm ²	Cars before 09/03 only	A14 PIN 42
A18	Socket contact	Nav. NF-	GE/BR 0.35 mm ²	Cars before 09/03 only	A14 PIN 29
A19	Socket contact	Nav. NF+	GE/RT 0.35 mm ²	Cars before 09/03 only	A14 PIN 37
A20	Open cable	Mute	SW 0.35 mm ²	Using a miniature connector W to the radio plug X18126 PIN 10	---

4. Door wiring harness connection diagram

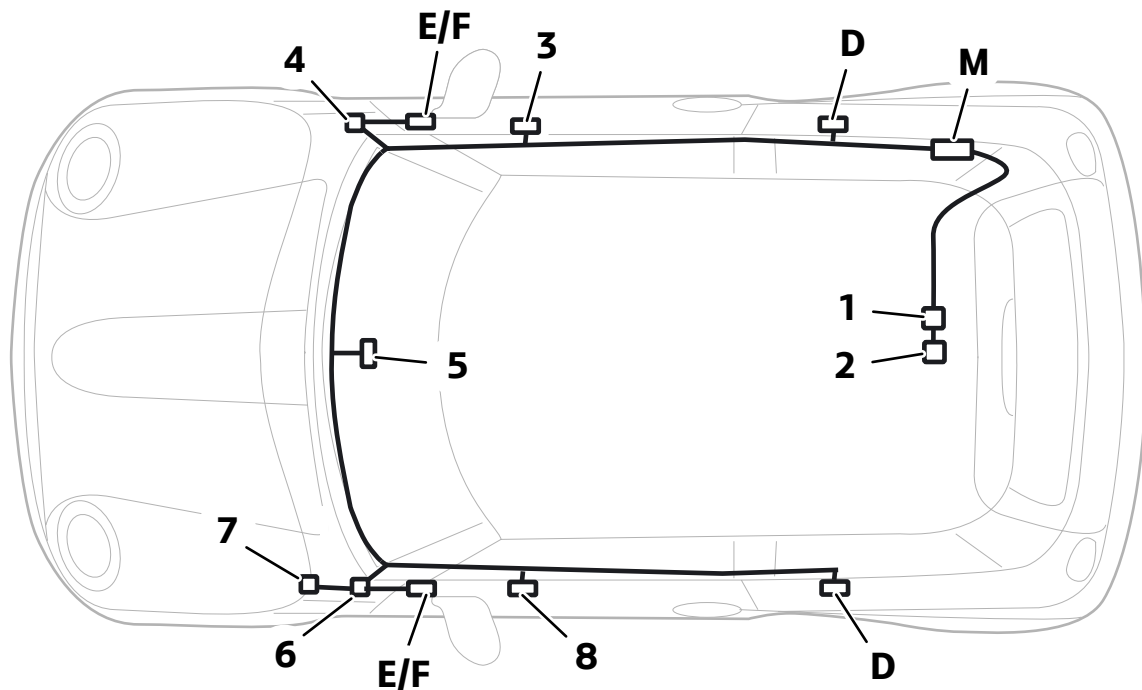


050 0335 V

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
B	Door wiring harness, right	---	---	---	---
B1	Socket contacts	---	GE/GR GE/BL GE/SW GE/BR 0.75 mm ²	To 30-pin black socket casing, stop section on right A pillar	X256
B2	Black 2-pin socket casing	---	GE/GR GE/BL 0.75 mm ²	To mid-range speaker H54 in the right door	X10366
B3	SW 2-pin plug	---	GE/SW GE/BR, 0.75 mm ²	To tweeter H50 in the right door	X746
C	Door wiring harness, left	---	---	---	---
C1	Socket contacts	---	GE/GR GE/BL GE/SW GE/BR 0.75 mm ²	To 30-pin black socket casing, stop section on left A pillar	X257
C2	Black 2-pin socket casing	---	---	To mid-range speaker H55 in the left door	X10364
C3	SW 2-pin plug	---	---	To tweeter H59 in the left door	X753

5. Installation and cabling diagram

Cars without SA 609 and/or SA 640 only



R50 1089 Z

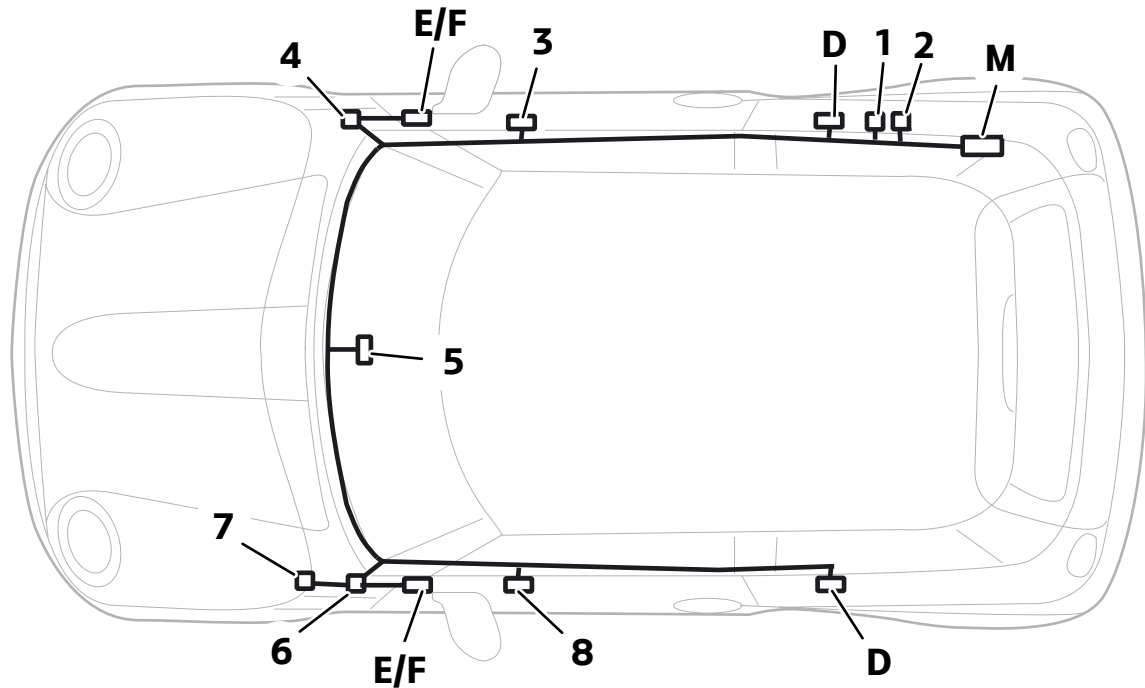
Legend

- D** Rear woofer, left/right
- E/F** Woofer/Tweeter in the left/right door
- M** Hi-fi amplifier

- 1** Earth post
- 2** Aerial booster
- 3** K bus joint connector
- 4** Plug **X256**
- 5** Radio
- 6** Plug **X257**
- 7** Fuse box
- 8** Terminal 58g joint connector

5. Installation and cabling diagram

Cars with SA 609 and/or SA 640 only

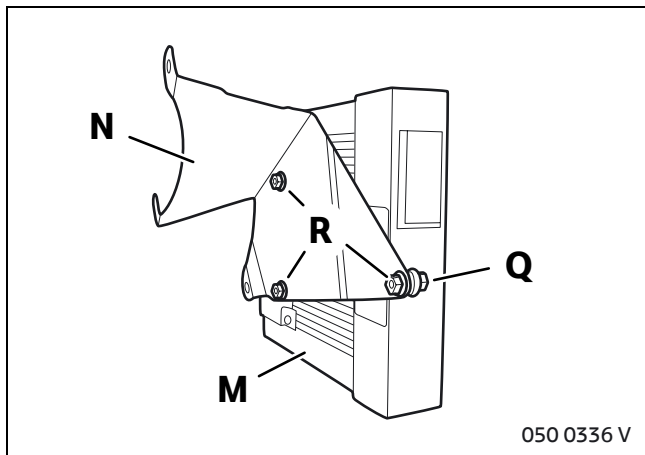


R50 1090 Z

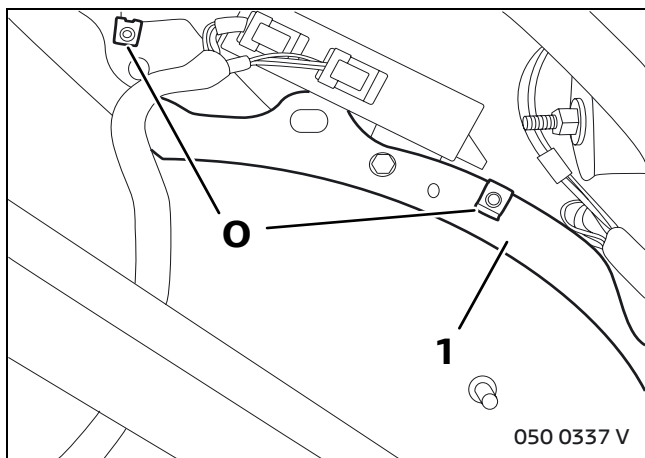
Legend

- | | |
|------------|---------------------------------------|
| D | Rear woofer, left/right |
| E/F | Woofer/Tweeter in the left/right door |
| M | Hi-fi amplifier |
| 1 | Earth post |
| 2 | Aerial booster |
| 3 | K bus joint connector |
| 4 | Plug X256 |
| 5 | Radio |
| 6 | Plug X257 |
| 7 | Fuse box |
| 8 | Terminal 58g joint connector |

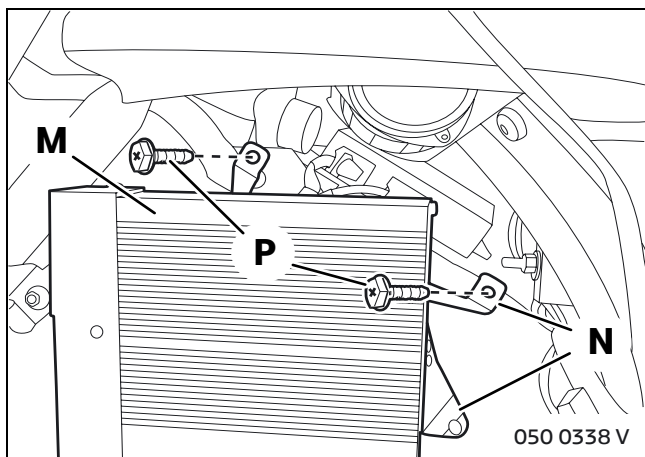
6. To install the retrofit kit



Secure the hi-fi amplifier **M** to the holder **N** using screw **Q** and nuts **R**.

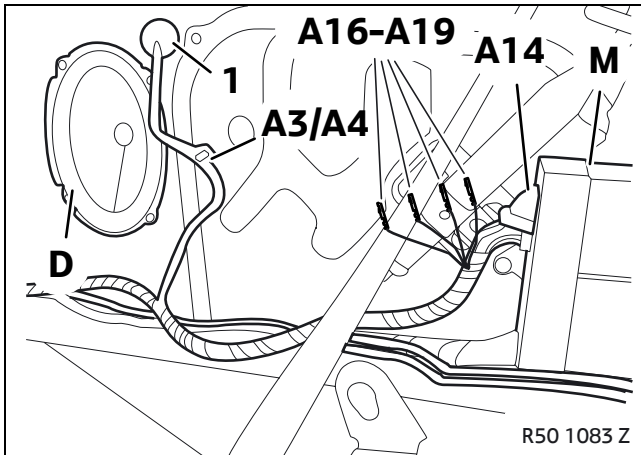


Fit the speed nuts **O** to the holes on the body plate (1) in the boot at the rear right (behind the cover).



Secure the hi-fi amplifier **M** and holder **N** using the self-tapping screws **P**.

6. To install the retrofit kit



Cars before 09/03 only

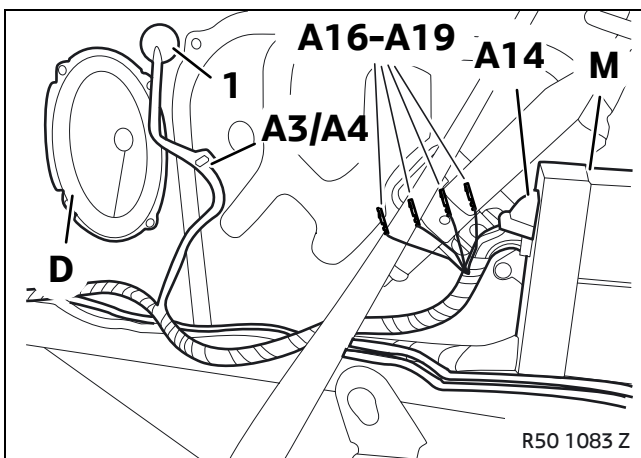
Connect branches **A16** to **A19** as follows to branch **A14**:

- Branch **A16** to PIN 41
- Branch **A17** to PIN 42
- Branch **A18** to PIN 29
- Branch **A19** to PIN 37

Connect branch **A14** to the hi-fi amplifier **M**.

Thread branches **A3** and **A4** through the grommet (1) and connect them to the speaker **D**.

Install the woofer **D** as described in TIS 65 13 080.



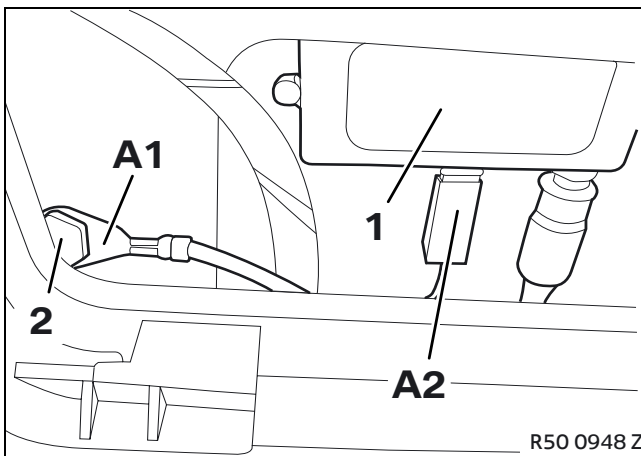
Cars after 09/03 only

Insulate branches **A16** to **A19** and tie them back.


Connect branch **A14** to the hi-fi amplifier **M**.

Thread branches **A3** and **A4** through the grommet (1) and connect them to the speaker **D**.

Install the woofer **D** as described in TIS 65 13 080.



Cars without SA 609 and/or SA 640

 Ensure that the cables are routed cleanly (the deployment area of the side airbag must not be adversely affected). Secure the cables with cable ties **H**. ◀

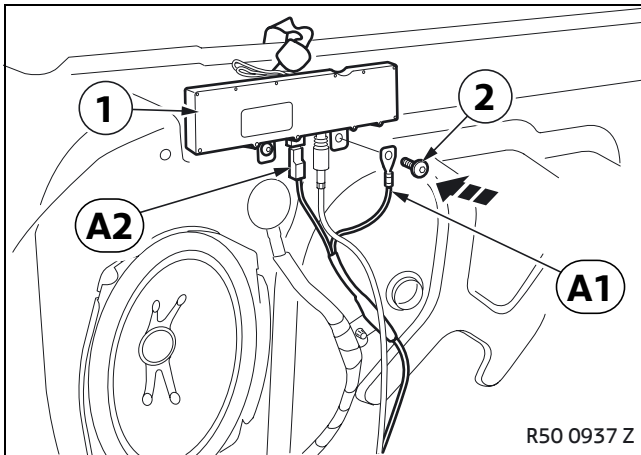
Route branches **A1** and **A2** over the right C pillar and the lowered headlining to the aerial booster (1).

Connect branch **A1** to the earth post **X13016** (2).

Disconnect the original cables, insulate and tie them back, they are no longer required.

Connect branch **A2** to plug **X813** on the aerial booster (1).

6. To install the retrofit kit



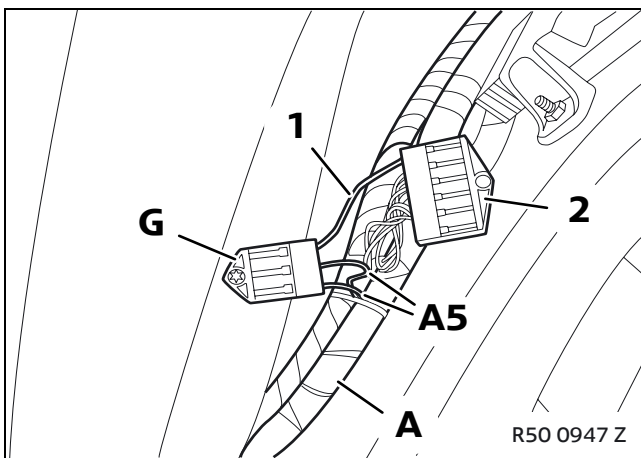
Cars with SA 609 and/or SA 640 only

Route branches **A1** and **A2** to the aerial booster (1) on the right side.

Connect branch **A1** to the aerial booster (1) using the screw (2).

Disconnect the original cables, insulate and tie them back, they are no longer required.

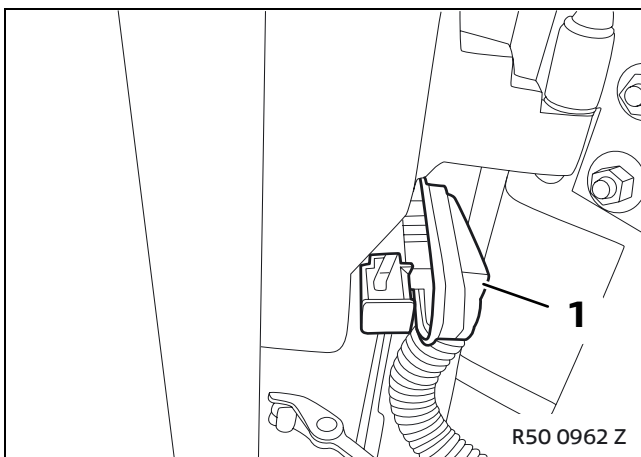
Connect branch **A2** to plug **X813** on the aerial booster (1).



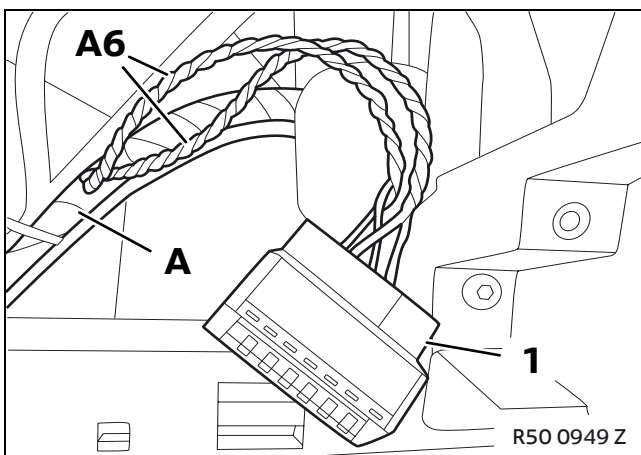
All cars


Route the hi-fi wiring harness **A** on the right door sill towards the front.

Connect branch **A5** to joint connector **G** and connect the cable (1), WS/RT/GE cable, to the free slot in the K bus joint connector **X10116** (2).



Disconnect plug **X256** (1) on the right-hand **A** pillar.



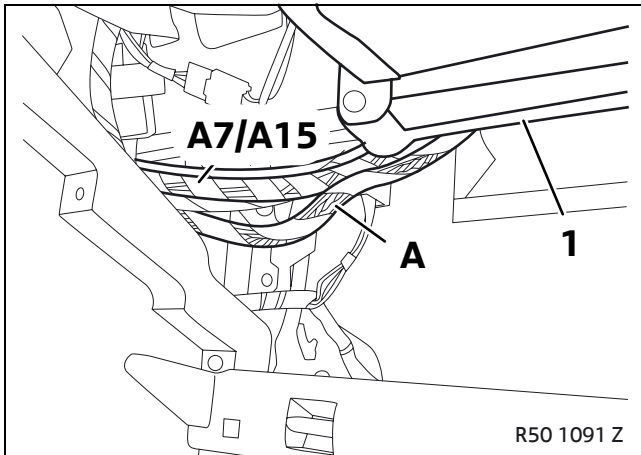
 If the following pin chambers are occupied, disconnect the pin contacts, insulate them and tie them back. ◀

Route the hi-fi wiring harness **A** on to the right **A** pillar.

Connect branches **A6** as follows to the 22-pin SW plug **X256** (1):

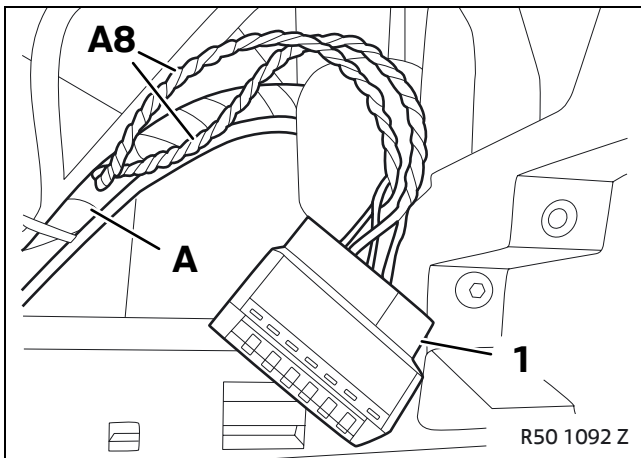
- Pin contact, GE/GR cable, to PIN 5
- Pin contact, GE/BL cable, to PIN 6
- Pin contact, GE/SW cable, to PIN 7
- Pin contact, GE/BR cable, to PIN 8

6. To install the retrofit kit



Route the hi-fi wiring harness **A** behind the instrument holder (1) to the left.

Route branches **A7** and **A15** to the installation site of the radio.



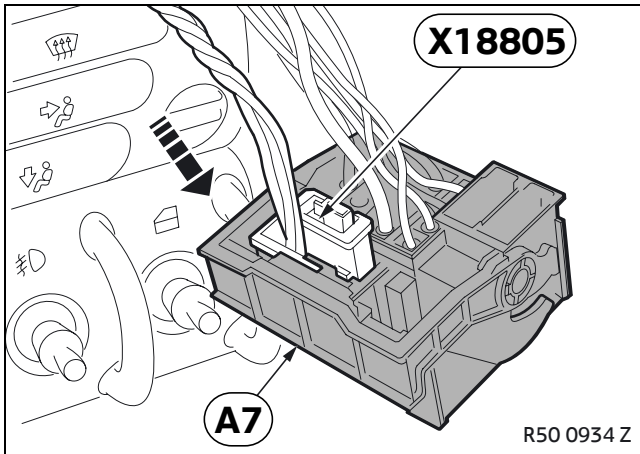
▶ If the following pin chambers are occupied, disconnect the pin contacts, insulate them and tie them back. ◀

Route the hi-fi wiring harness **A** on to the left A pillar.

Connect branches **A8** as follows to the 22-pin SW plug **X257** (1):

- Pin contact, GE/GR cable, to PIN 5
- Pin contact, GE/BL cable, to PIN 6
- Pin contact, GE/SW cable, to PIN 7
- Pin contact, GE/BR cable, to PIN 8

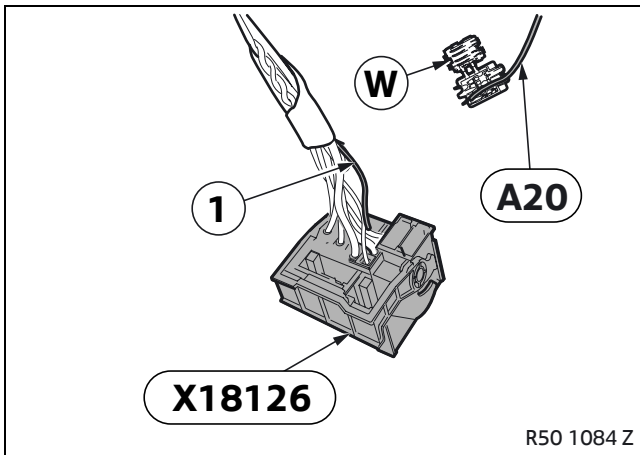
6. To install the retrofit kit



Cars with SA 672 only

Disconnect the plug for the CD changer **X18805** from the radio plug **X18126**.

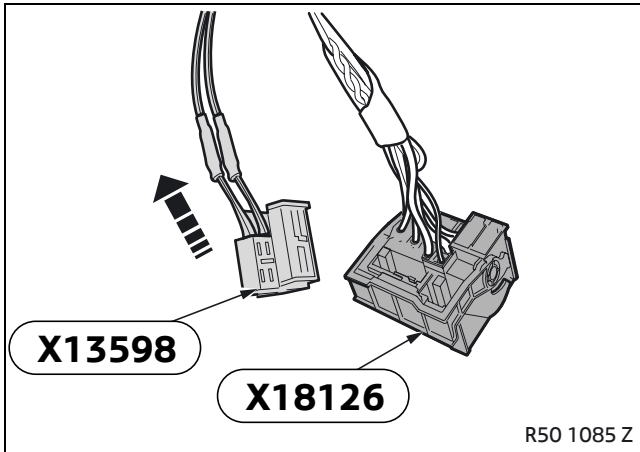
Connect plug **X18805** to branch **A7**.



Cars with SA 640 only

Disconnect the SW cable (1) from plug **X18126** PIN 10 and cut off the socket contact.

Connect the open cable end (1) from PIN 10 to branch **A20** using a miniature connector **W**.

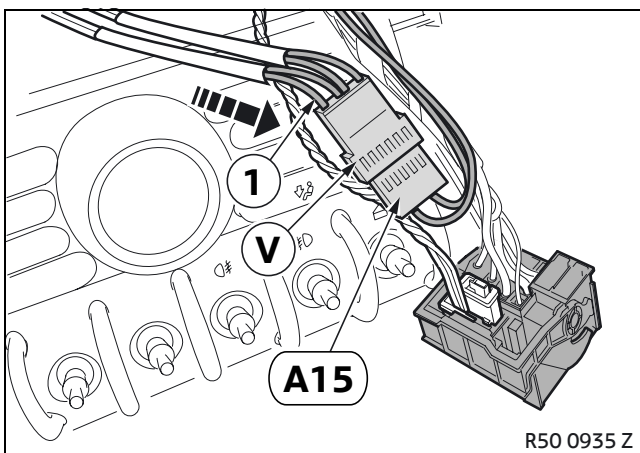


Cars with SA 609 and/or SA 640 built before 09/03 only

Disconnect plug **X13598** from plug **X18126**.

Connect the socket contacts for **SA 609**, GE/RT cable PIN 5, and GE/BR cable PIN 11.

Disconnect the socket contacts for **SA 640**, SW/WS cable PIN 6, and SW/BR cable PIN 12.



Connect the disconnected socket contacts (1) as follows to the 6-pin socket casing **V**:

SA 609

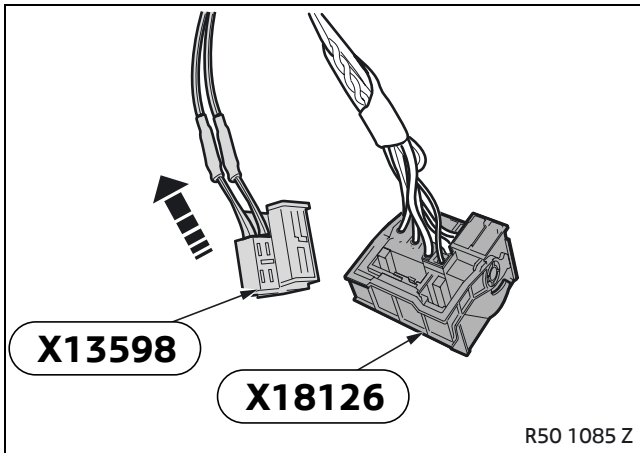
- GE/RT cable to PIN 6
- GE/BR cable to PIN 5

SA 640

- SW/WS cable to PIN 1
- SW/BR cable to PIN 2

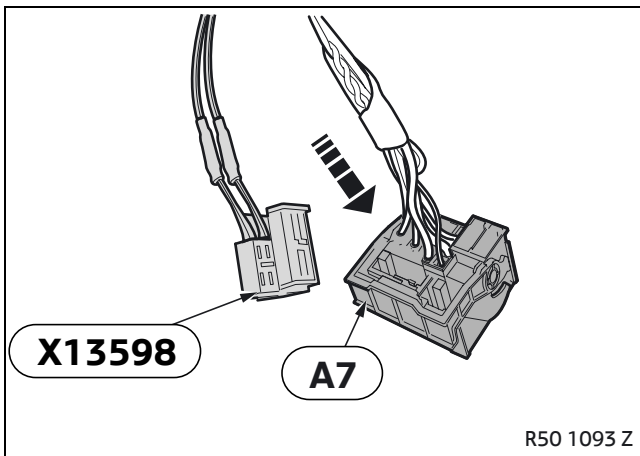
Connect the 6-pin socket casing **V** to branch **A15**.

6. To install the retrofit kit

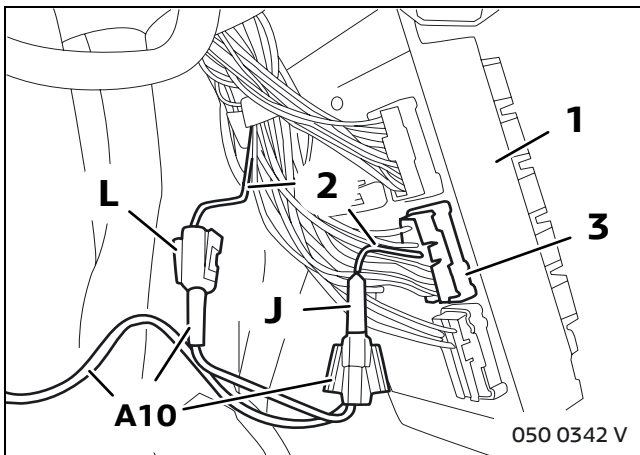


Cars with SA 609 and/or SA 640 built after 09/03 only

Disconnect plug **X13598** from plug **X18126**.



Connect plug **X13598** to branch **A7**.



All cars

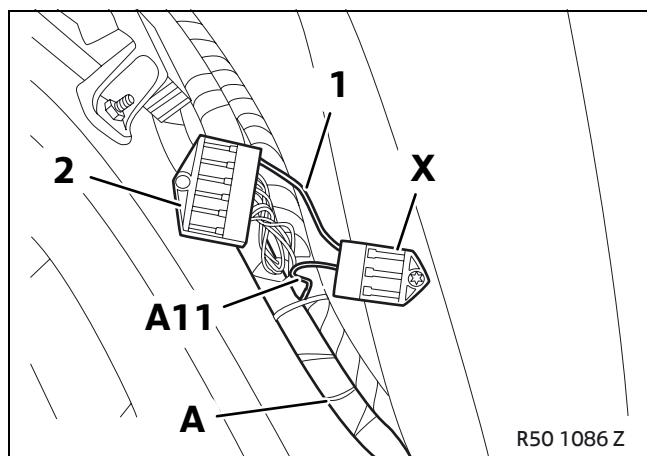
Release the fuse box (1) and route branches **A9** and **A10** to the fuse box (1).

Cut the VI/BL cable (2) on PIN 11 of the 12-pin GN plug (3). Crimp a plug contact **I** on the plug side and connect it to the plug casing **J**.

Crimp a socket contact **K** on the vehicle side and connect it to the socket casing **L**. Connect branch **A10**, VI/BL cable, as shown in parallel.

Connect branch **A9**, RT/BR cable, to the RT/BR cable on PIN 2 of the 12-pin BL plug.

6. To install the retrofit kit



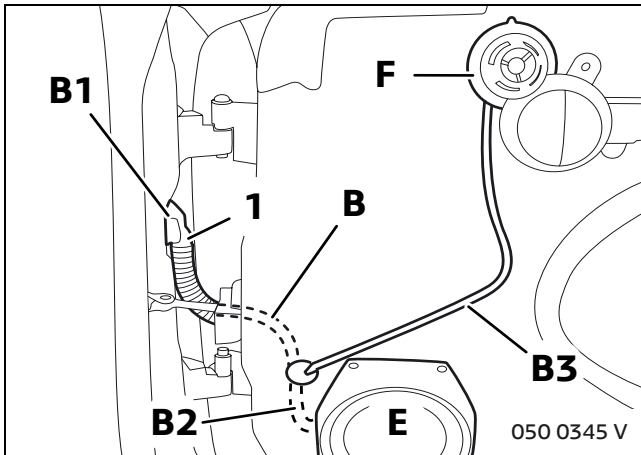
Route the hi-fi wiring harness **A** on the left door sill towards the rear.

Connect branch **A11**, GR/RT cable, to joint connector **X** and the GR/RT cable (1) to the free slot in joint connector **X1019** (2).

Route branches **A12** and **A13** to the rear.

Install branches **A12** and **A13** in the same way as branches **A3** and **A4** (see Figure R50 1083 Z) and connect them to the speaker **D**.

6. To install the retrofit kit



▶ If the following pin chambers are occupied, disconnect the socket contacts, insulate them and tie them back. ◀

Thread branches **B1** and **B2** on the right door wiring harness **B** through the recess and branch **B1** further through the grommet to the 30-pin black plug **X256** (1) and connect it as follows:

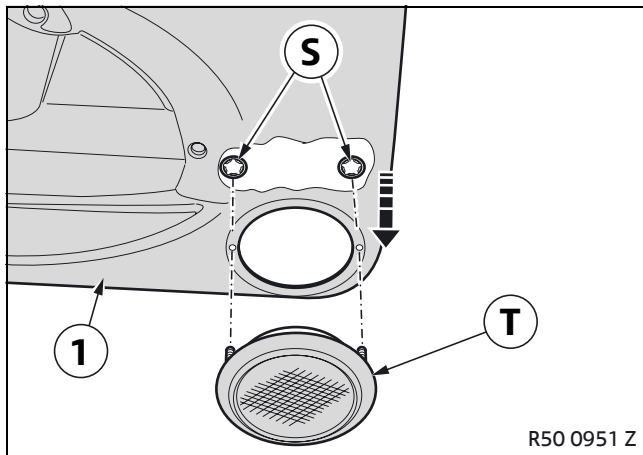
- Socket contact, GE/GR cable, to PIN 5
- Socket contact, GE/BL cable, to PIN 6
- Socket contact, GE/SW cable, to PIN 7
- Socket contact, GE/BR cable, to PIN 8


Connect branch **B2** to the mid-range speaker **E** and install the mid-range speaker **E** as described in TIS 65 13 070.

Connect branch **B3** to the tweeter **E** and install the tweeter **E** as described in TIS 65 13 100.

Install the left door wiring harness **C** in the same way.

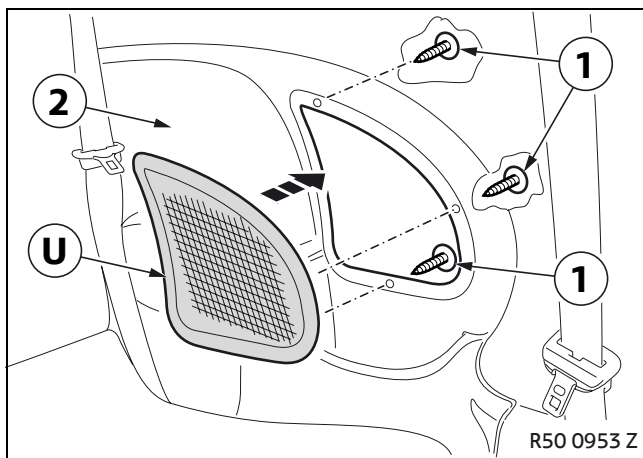
7. To replace the speaker covers



 When drilling out the plastic rivets, ensure that you do not damage the door trim. ◀

Remove the plastic rivets on the rear of the original speaker cover and remove the cover.

Insert the speaker cover **T** into the door trim (1) and fit the locking washer **S**.



Remove the screw (1) from the side trim (2).

Remove the original speaker cover.

Insert the speaker cover **U** into the side trim (2) and secure it with the existing screws (1).

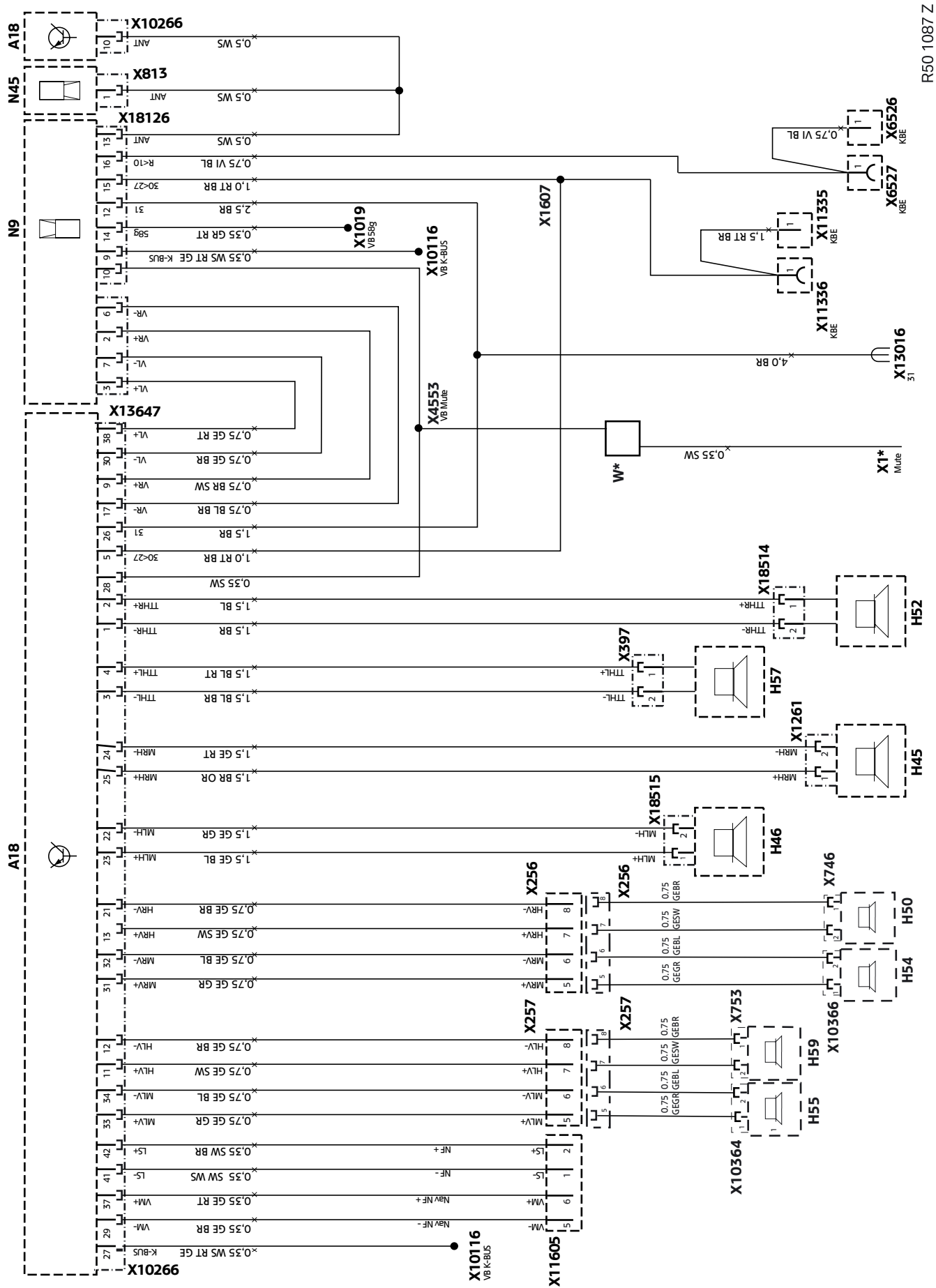
8. Concluding work

This retrofit system does not require coding.

- Connect battery
- Conduct a brief test
- Conduct a function test
- Re-assemble the car

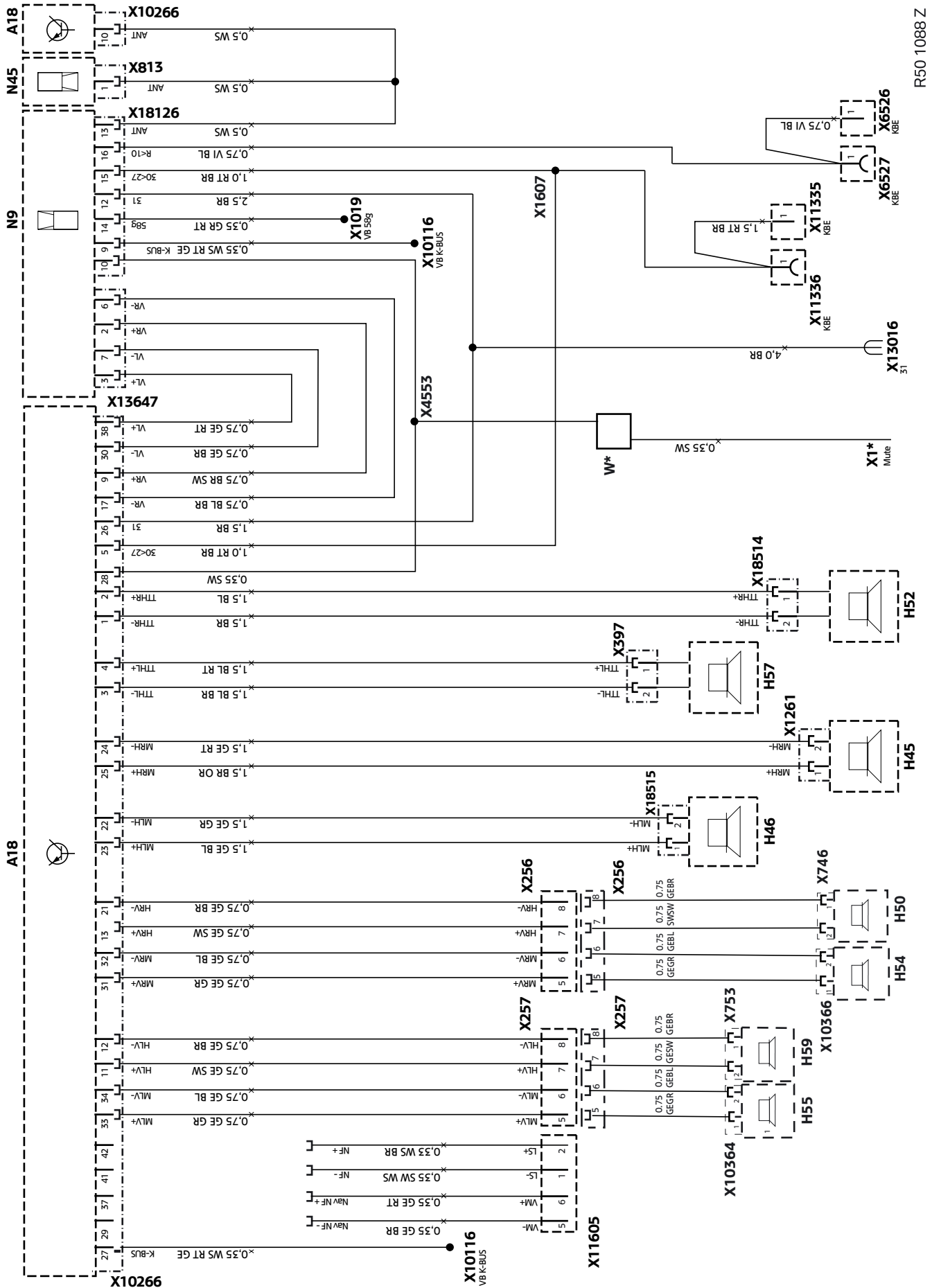
9. Circuit diagram

Cars before 09/03 only



9. Circuit diagram

Cars after 09/03 only



R50 1088 Z

9. Circuit diagram

Legend

A18	Hi-fi amplifier
H45	Rear right woofer
H46	Rear left woofer
H50	Front right tweeter
H52	Rear right woofer
H54	Front right mid-range speaker
H55	Front left mid-range speaker
H57	Rear left woofer
H59	Front left tweeter
N9	Radio
N45	Aerial booster
X1	Open cable end from radio plug X18126 PIN 10
X256	22-pin SW plug,. A pillar on the right
X257	22-pin SW plug,. A pillar on the left
X397	SW 2-pin plug
X746	SW 2-pin plug
X753	SW 2-pin plug
X813	SW 1-pin plug
X1019	Joint connector 58g
X1261	SW 2-pin plug
X1607	Terminal 30 connector
X4553	Terminal Mute connector
X6526	SW 1-pin plug
X6527	Black 1-pin socket contact
X10116	K bus joint connector
X10266	SW 42-pin plug
X10364	SW 2-pin plug
X10366	SW 2-pin plug
X11335	SW 1-pin plug
X11336	Black 1-pin socket contact
X11605	SW 6-pin plug
X13016	Earth post on the aerial booster in the roof
X13647	SW 8-pin plug
X18126	SW 16-pin plug
X18514	SW 2-pin plug
X18515	SW 2-pin plug

9. Circuit diagram

Cable colours

WS	White
BL	Blue
BR	Brown
SW	Black
GE	Yellow
RT	Red
GR	Grey
OR	Orange
VI	Violet