Parts and Accessories Installation Instructions
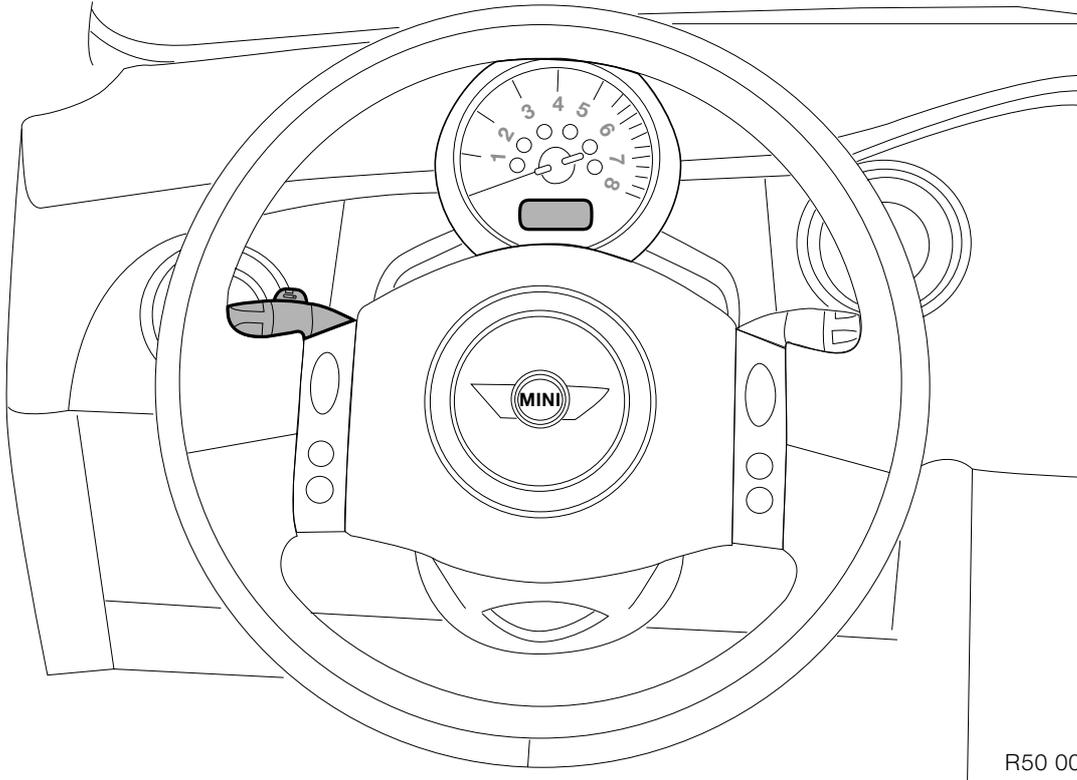
R50 0084 Z

On-board computer retrofit kit
MINI (R 50)

The installation time is approx. 2 hours, but this may vary depending on the condition of the car and the equipment in it.

Retrofit kit: 62 13 0 029 492

Contents

Important information

The retrofit kit is only for use within the dealership organisation.

Do not kink or damage the cables during the installation work since otherwise they may cause faults that can later only be identified by extensive additional work. The costs incurred as a result of this will not be reimbursed.

If the specified PIN chambers are occupied, bridges, double crimps or twin-lead terminals must be used.

Target group

The target group for these installation instructions is specialist personnel trained on MINI cars with specialist knowledge of vehicle electrical systems.

Work:
All servicing, repair and installation work on MINI cars is completed at your own risk.
All work is to be carried out using current MINI
- Repair manuals
- Circuit diagrams
in a rational order using the prescribed tools (special tools) and observing current health and safety regulations.

Required tools and equipment

Set of flat screwdrivers
Set of Philips screwdrivers
Torch
1/4 inch socket set
1/4 inch Torx socket set
Angle cutter
Combination pliers

1. Preparations

|	TIS instruction No.
Disconnect the negative pole of the battery	12 00 ...
The following components must be removed first of all:	
Oddments box on the driver's side	
Door sill strip, left	
Release the fuse holder II near the A pillar at the bottom left	
Top instrument panel cover	
Tachometer instrument panel	
Top and bottom steering column trims	
Front bumper trim (cars without an air conditioning system/xenon headlights only)	

2. Parts list
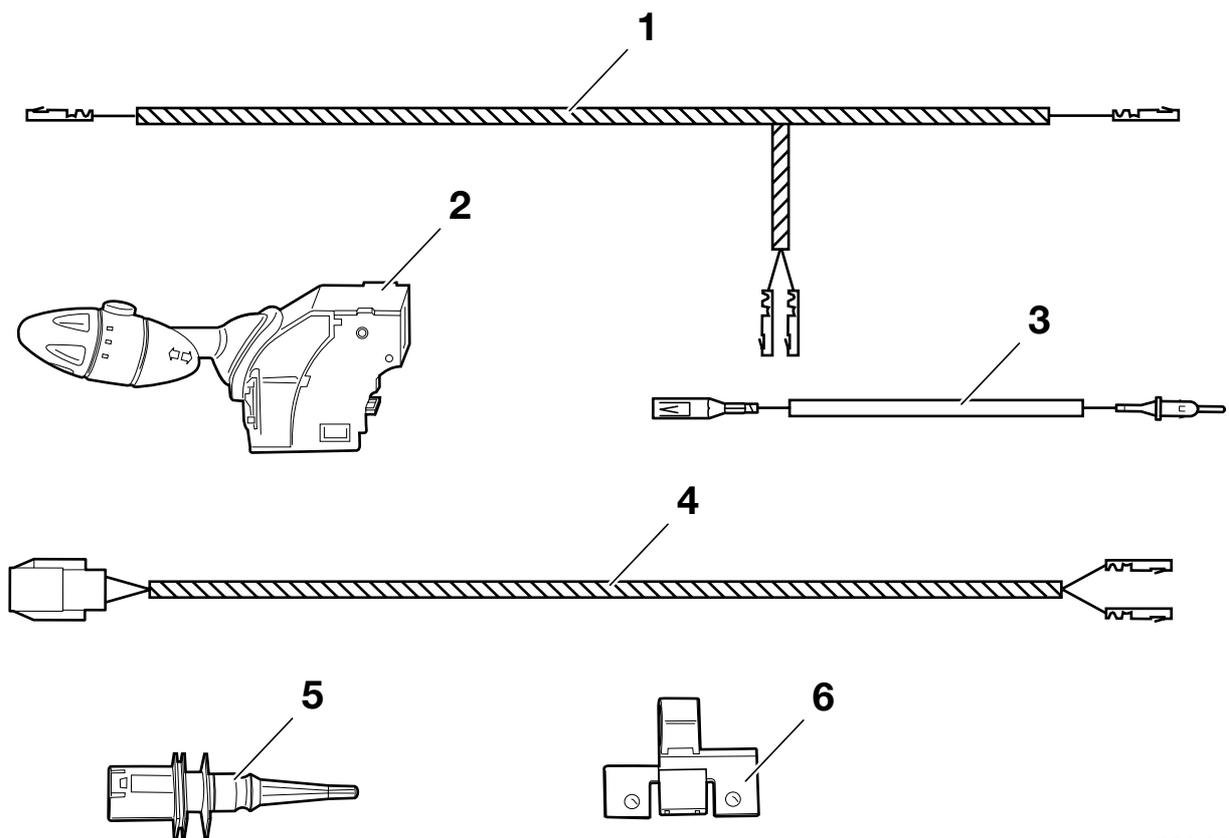
R50 0080 Z

Legend

1 On-board computer wiring harness **A**
2 Indicator and full/low beam switch for on-board computer
3 On-board computer wiring harness **B**
4 On-board computer wiring harness **C**
  (cars without an air conditioning system/xenon headlights only)
5 External temperature sensor
  (cars without an air conditioning system/xenon headlights only)
6 Holder for external temperature sensor
 (cars without an air conditioning system/xenon headlights only)

3. Installation and cabling diagram for retrofit wiring harness
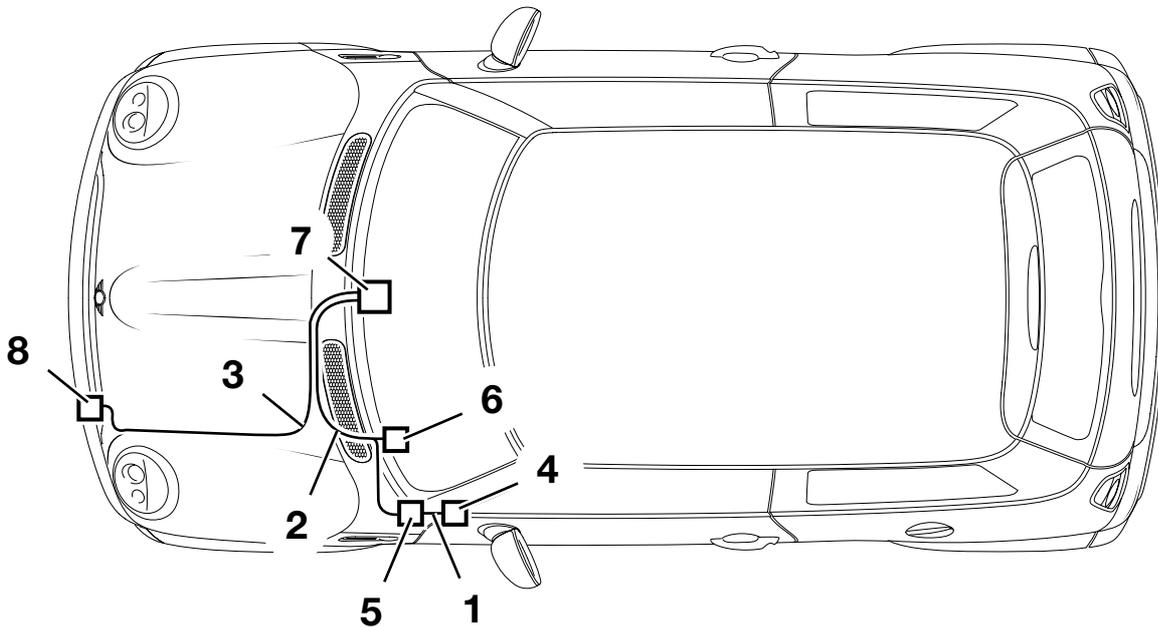
R50 0081 Z

Legend

1   On-board computer wiring harness **A**
2   On-board computer wiring harness **B**
3   On-board computer wiring harness **C**
    (cars without an air conditioning system/xenon headlights only)
4   Black 42-pin plug **X15**
5   Fuse holder II
6   Indicator and full/low beam switch
7   Tachometer Instrumententafel
8   External temperature sensor
    (cars without an air conditioning system/xenon headlights only)

4. On-board computer wiring harness connection diagram
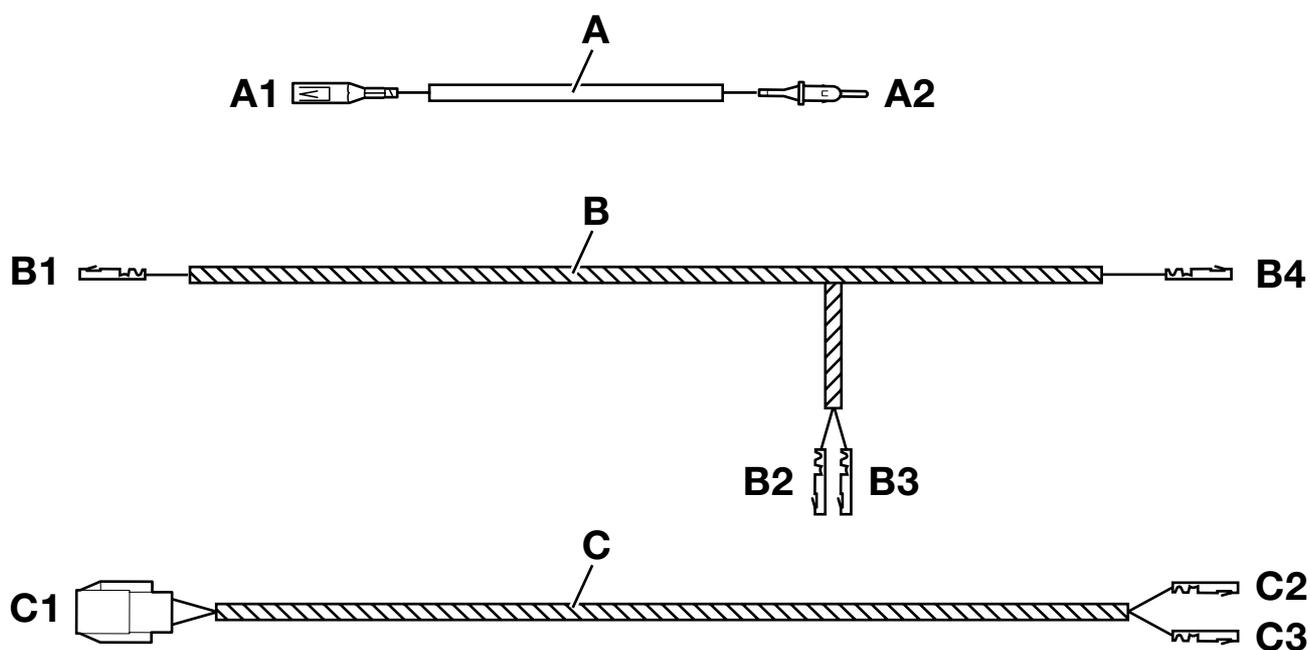
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Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	On-board computer wiring harness **A**	---	---	---	---
A1	Flat spring contact	Terminal R	VI/BR 0.5 mm²	To black 26-pin plug on the fuse holder II from fuse F8 (5 A)	X10200 PIN6
A2	Plug contact	Terminal R	VI/BR 0.5 mm²	To black 42-pin plug **X15**	X15 PIN4
B	On-board computer wiring harness **B**	---	---	---	---
B1	Socket contact	Terminal R	VI/BR 0.5 mm²	To black 42-pin plug **X15**	X15 PIN4
B2	Socket contact	Terminal R	VI/BR 0.5 mm²	To green 7-pin plug on the indicator and full/low beam switch	X32 PIN 12
B3	Socket contact	BC-TRIP	GE/RT 0.35 mm²	To green 7-pin plug on the indicator and full/low beam switch	X32 PIN 2
B4	Socket contact	BC-TRIP	GE/RT 0.35 mm²	To black 12-pin plug on the tachometer instrument panel	X11175 PIN3
C	On-board computer wiring harness **C**			Only required for cars **without** air conditioning system / xenon headlights	
C1	Black 2-pin socket casing	---	---	To external temperature sensor	X770
C2	Socket contact	CAN H	BL/BR0.5 mm in diameter	To black 26-pin plug on the tachometer instrument panel	X11177 PIN 11
C3	Socket contact	CAN L	BL/RT0.5 mm in diameter	To black 26-pin plug on the tachometer instrument panel	X11177 PIN 24

5. To install and connect the on-board computer wiring harness

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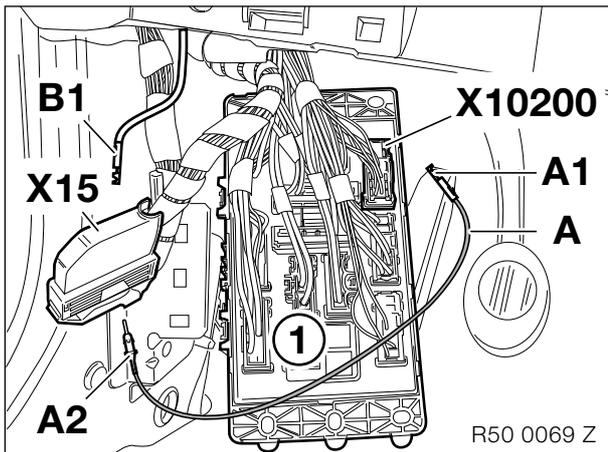
Disconnect the black 12-pin plug **X10200** from the fuse holder II (1) and connect branch **A1**, VI/BR cable, to **PIN 6**.
Reconnect plug **X10200** to the fuse holder II (1).

Lay wiring harness **A** from the fuse holder II (1) to the black 42-pin plug **X15** and secure it with cable ties.

Disconnect the 42-pin plug **X15** and connect branches **A2** and **B1**, VI/BR cable, to **PIN 4**.
Reconnect plug **X15**.

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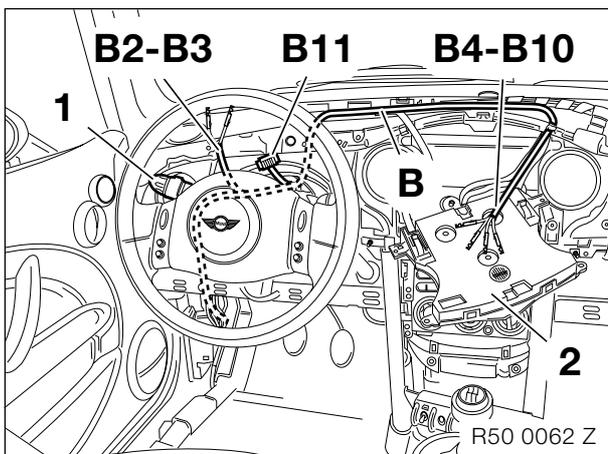
Lay wiring harness **B** as follows and secure it with cable ties:

Branches **B2** and **B3** to the indicator and full/low beam switch (1)

Lay branches **B4** - **B10** to the instrument cluster (2)

▷ Branches **B5-B11** must be insulated and tied back. ◀

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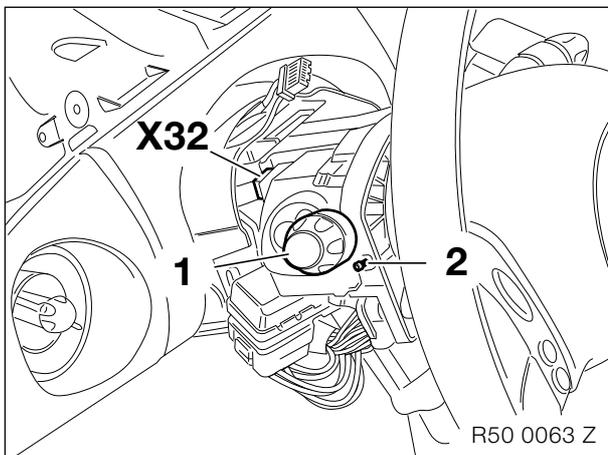
Disconnect plug **X32** from the indicator and full/ low beam switch (1).
Unscrew the Philips screw (2) and replace the indicator and full/low beam switch (1) with the enclosed indicator and full/low beam switch for the on-board computer.


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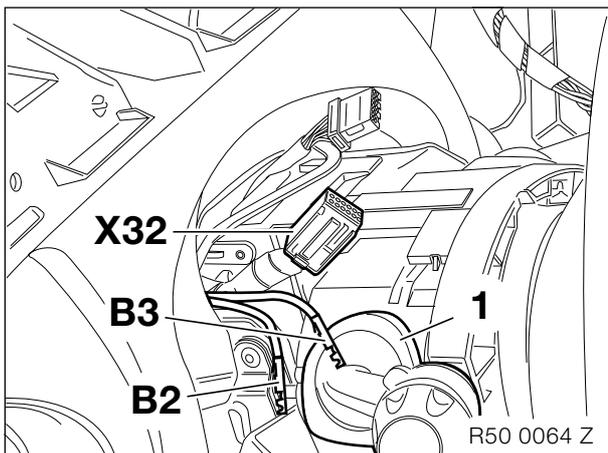
Connect branches **B2** and **B3** as follows to plug **X32**:

B2	VI/BR cable	**PIN 12**
B3	GE/RT cable	**PIN 2**

Reconnect plug **X32** to the indicator and full/low beam switch for the on-board computer (1).

5. To install and connect the on-board computer wiring harness
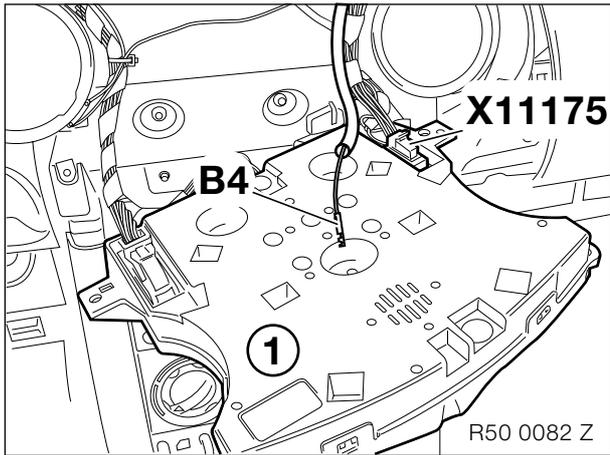
Connect branches **B4**, GE/RT cable, to **PIN 3** on the black 12-pin plug **X11175** .

Connect plug **X11175** to the tachometer instrument panel (1).

6. To install and connect the external temperature sensor (cars without an air conditioning system/xenon headlights only)


R50 0104 Z
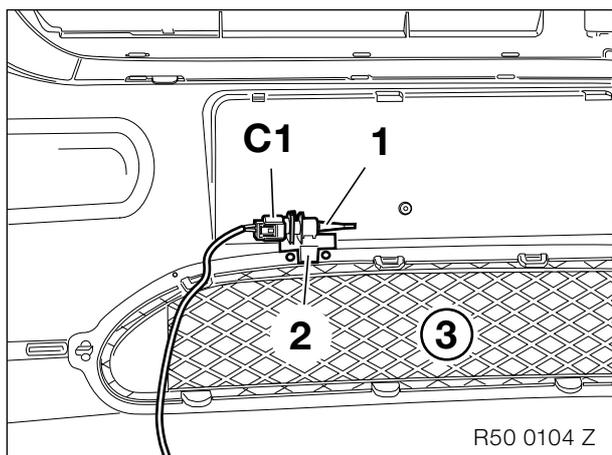
Insert the external temperature sensor (1) into the holder (2) and clip it into the front bumper trim (3) as shown.

Connect branch **C1**, plug **X770**, to the external temperature sensor (1).

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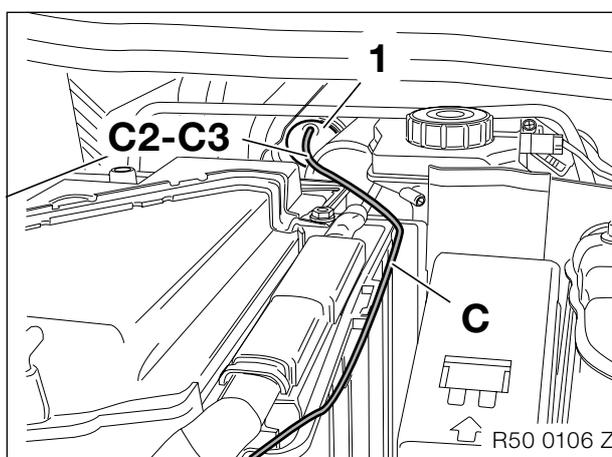
Lay wiring harness **A** along the standard wiring harness to the rubber grommet (1) and secure it with cable ties.

Lay branches **C2** and **C3** through the rubber grommet (1) to the tachometer instrument panel.

R50 0105 Z
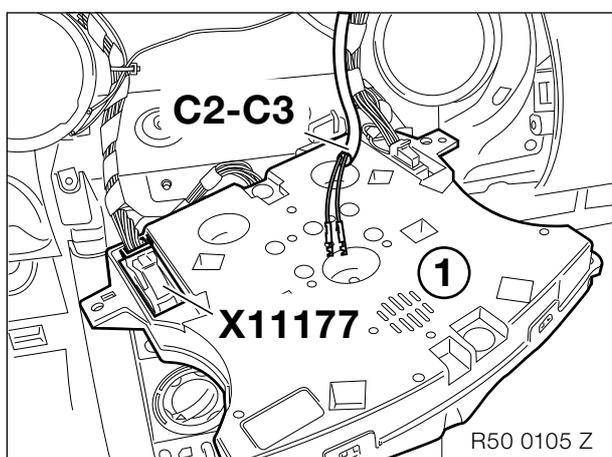
Connect branch **C2**, BL/BR cable, to **PIN 11** on the black 24-pin plug **X11177**.

Connect branch **C3**, BL/RT cable, to **PIN 24** on the black 26-pin plug **X11177**.

Connect plug **X11177** to the tachometer instrument panel (1).

7. Concluding work

- Connect the battery

- Complete the coding work (see section entitled "Coding")

- Conduct a function test

- Assemble the car again following the instructions to dismantle it in reverse order.

8. Coding

Retrofitting the on-board computer requires coding and must be coded using the "Retrofit on-board computer" path using the MoDiC/DIS.

The coding work must be completed using CD version **26.0** (or higher).

After the coding procedure disconnect the car's battery for at least 10 seconds, then reconnect it and conduct a function test.

9.   On-board computer circuit diagram

A47   5A   F8   R<A8   6   KAR

X10200

0.5
VIBR

X15   R<A8   4   KAR

4   KAR   R<A8   **X15**

0.35
VIBR

X32   R<A8   12   KAR

S7

2   KAR   BCTRIB   **X32**

0.35
GERT

BCTRIP

X11175   3   KAR

A2

A2   11   24   KAR

X11177

0.5   0.5
BLBR   BLRT

X770   1   2   KAR

B13   NTC
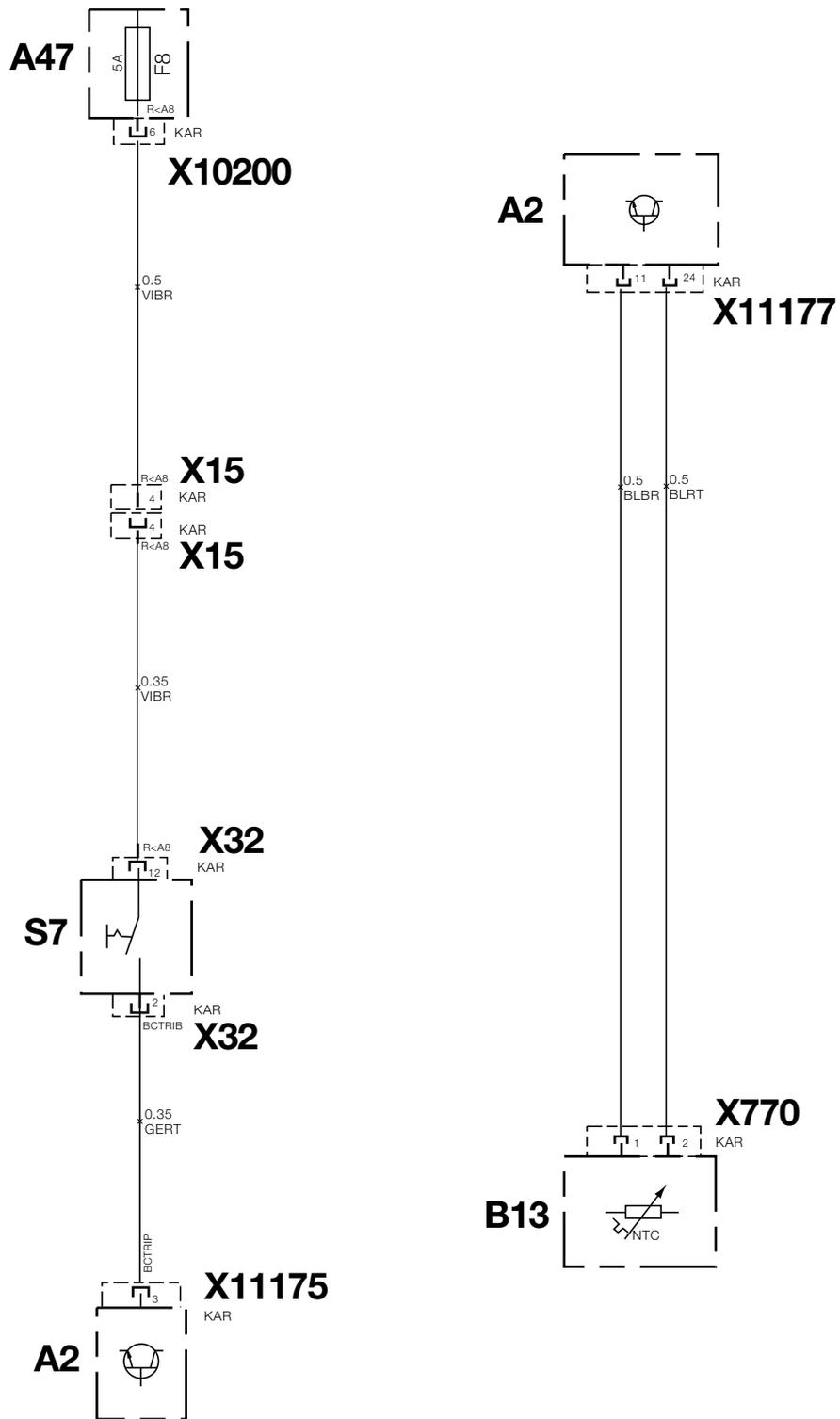
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9. On-board computer circuit diagram

Legend

A2   Tachometer instrument panel
A47   Fuse holder II

B13   External temperature sensor

S7   Indicator and full/low beam switch for on-board computer

X15   Black 42-pin plug
X32   Indicator and full/low beam switch for on-board computer
X770   External temperature sensor
X10200 Fuse holder II
X11175 Black 12-pin plug for the tachometer instrument panel
X11177 Black 26-pin plug for the tachometer instrument panel

Cable colours

BR   brown
GE   yellow
VI   violet
RT   red
BL   blue