Original MINI Accessories.
Assembly instructions.

Retrofitting Additional Instruments
MINI ONE (R 56)
MINI COOPER (R 55, R 56)
MINI COOPER S (R 55, R 56)
MINI John Cooper Works (R 55, R 56)
MINI Cabrio (R 57)

Assembly instructions are not valid for RHD vehicles with Navigation Portable.

Retrofit set no.:	62 11 2 150 353	Retrofit set for one additional instrument
	62 11 2 149 355	Retrofit set for two additional instruments

Assembly time
The assembly time is **approximately 1 hour**. This may vary depending on the condition and equipment of the vehicle.

Important information
These assembly instructions are primarily intended for use in the MINI Sales Organization as well as in authorised MINI Service Shops.

The target group of these assembly instructions is qualified personnel who have been trained on MINI vehicles and have corresponding technical experience.

All work is to be performed using current MINI repair instructions, wiring diagrams, maintenance manuals and work instructions in a rational sequence with the prescribed tools (special tools) and taking into account the applicable safety regulations.

For assembly or functional problems, limit troubleshooting to approximately 0.5 hours for mechanical or 1.0 hours for electric work.
In order to prevent unnecessary work and costs, promptly send a request to the technical parts support using the Aftersales Assistance Portal (ASAP).
Specify the following:
- Chassis number,
- Part number of the retrofit set,
- Exact description of the problem,
- Work steps that have already been performed.

Pictograms
Denotes information regarding danger.

Denotes information that requires special attention.

◂ Denotes the end of the information or warning text.

Do not archive the print-out of this assembly instruction as it is updated daily over the ASAP!

Note for customers
The chapter "Customer Information" at the end of the assembly instructions is to be printed out and given to the customer.

Assembly notes
All illustrations show LHD vehicles, for RHD vehicles proceed accordingly.

When installing cables or lines, make sure that these are not kinked or damaged. Costs resulting thereby will not be compensated by BMW AG.

Additional installed cables or lines must be secured with cable ties.

Ordering notes
The following parts are not part of the retrofit set and must be ordered separately.
(Part number and designation, see ETK):

- A selection can be made from three different additional instruments (cooling water temperature, relative torque, lateral acceleration). Two instruments can be installed (to the right and left of the tachometer) or one instrument can be installed (to the right of the tachometer).

The following equipment is to be taken into account
- The instrument for displaying the lateral acceleration can only be installed for vehicles with **SA 210** (DSC).
- For vehicles R57 with **SA 6A1** (Always Open), only one instrument (to the right) can be installed.
- For LHD vehicles with **SA ZDQ** (Navigation Potable), only one instrument (to the right) can be installed.
- For RHD vehicles with **SA ZDQ** (Navigation Portable), no additional instruments can be installed.

Required special tools
None

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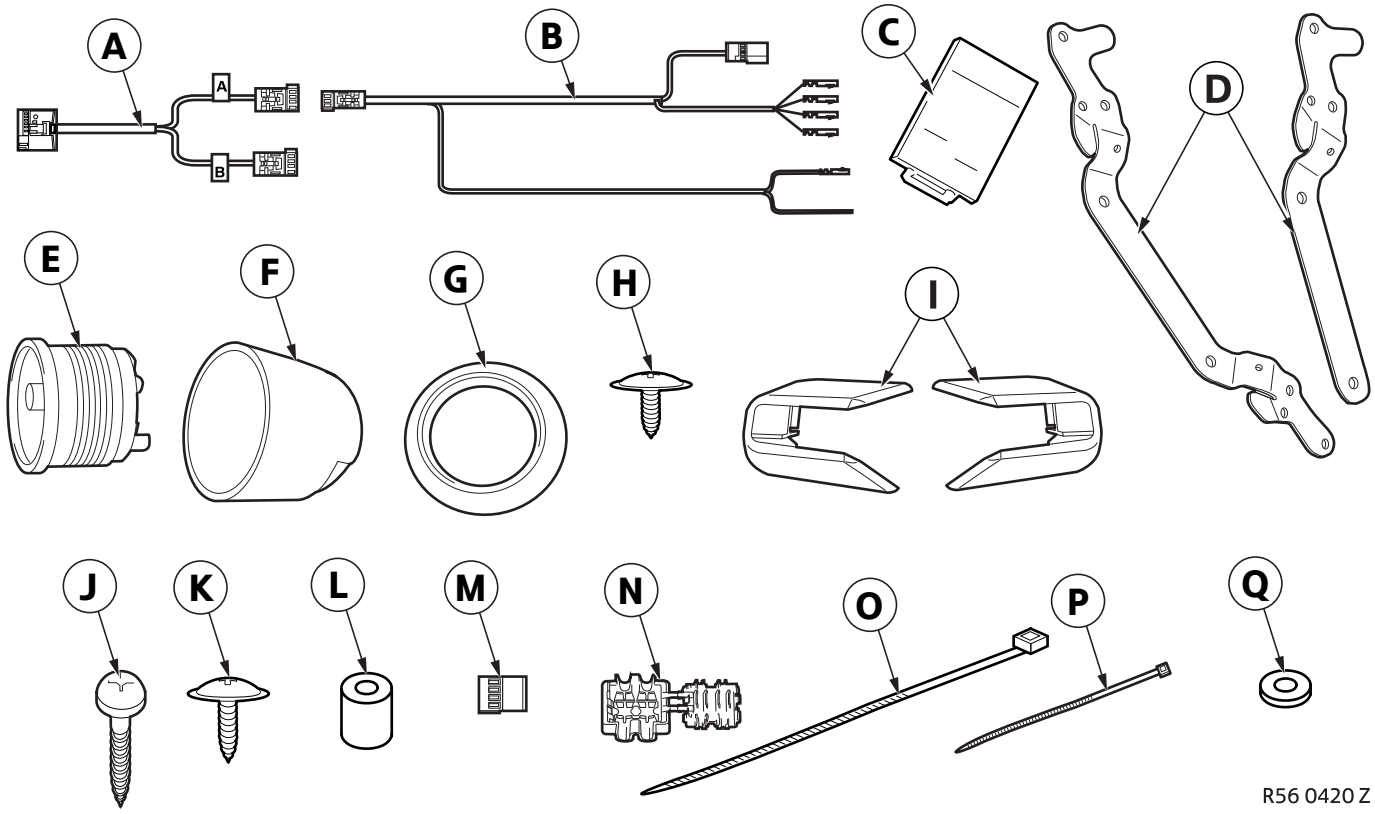
1. Overview of Parts



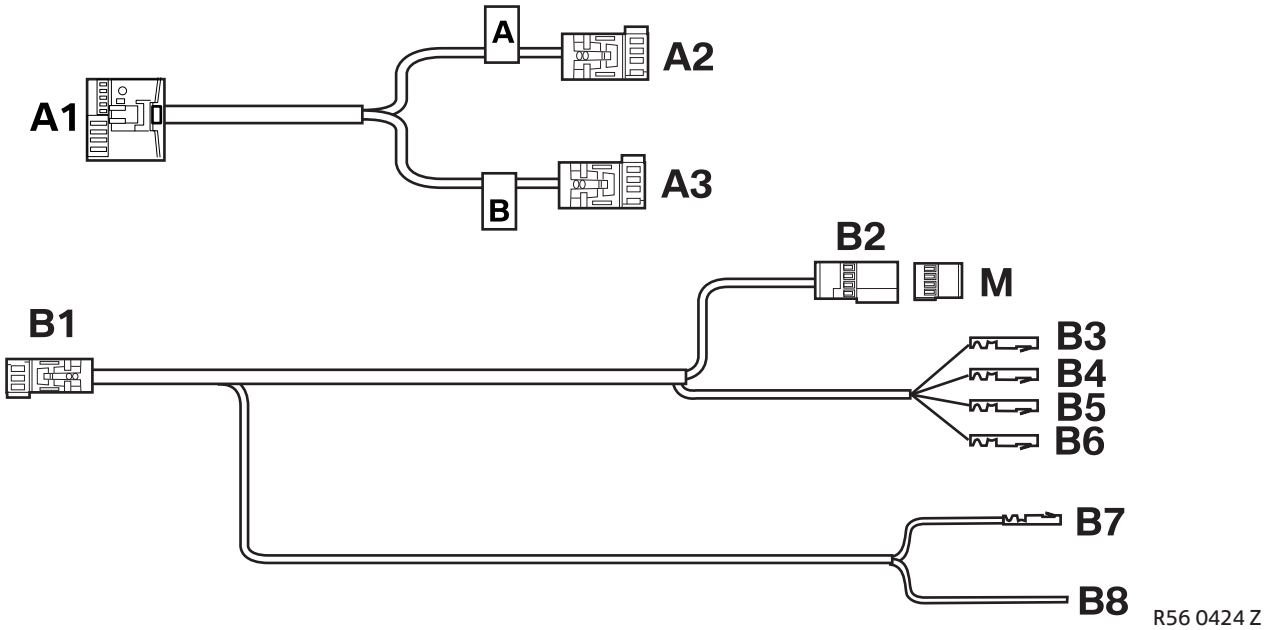
Legend

- **A** Retrofit cable
- **B** Retrofit cable
- **C** Control device
- **D** Additional instruments bracket (with 1 or 2 mounting options)
- **E** Additional instrument (1 or 2x, not part of the retrofit set)
- **F** Housing back part (1 or 2x)
- **G** Housing front part (1 or 2x)
- **H** Cross-head screwdriver 4.2 x 9.5 mm (1 or 2x)
- **I** Panel (1x right or 2x right and left)
- **J** Cross-head screwdriver 4 x 30 mm (2x)
- **K** Cross-head screwdriver 4 x 12 mm (2 or 4x)
- **L** Spacer (2x)
- **M** Socket housing, 4-pin BK
- **N** Mini-connector (2x)
- **O** Cable tape 292 x 4.8 mm (2x)
- **P** Cable tape 100 x 2.5 mm (15x)
- **Q** Disc 4.3 mm (2x)

2. Preparation

	ISTA no.
Perform short test	---
Remove minus terminal of the battery	12 00 ...
The following components are to be removed beforehand	
Tachometer	62 10 100
Steering column cover, upper part	32 31 004
Steering column cover, lower part	32 31 020
Cover for instrument panel, lower left	51 45 180
Entry cover strip, front left	51 47 000

3. Overview of Connections



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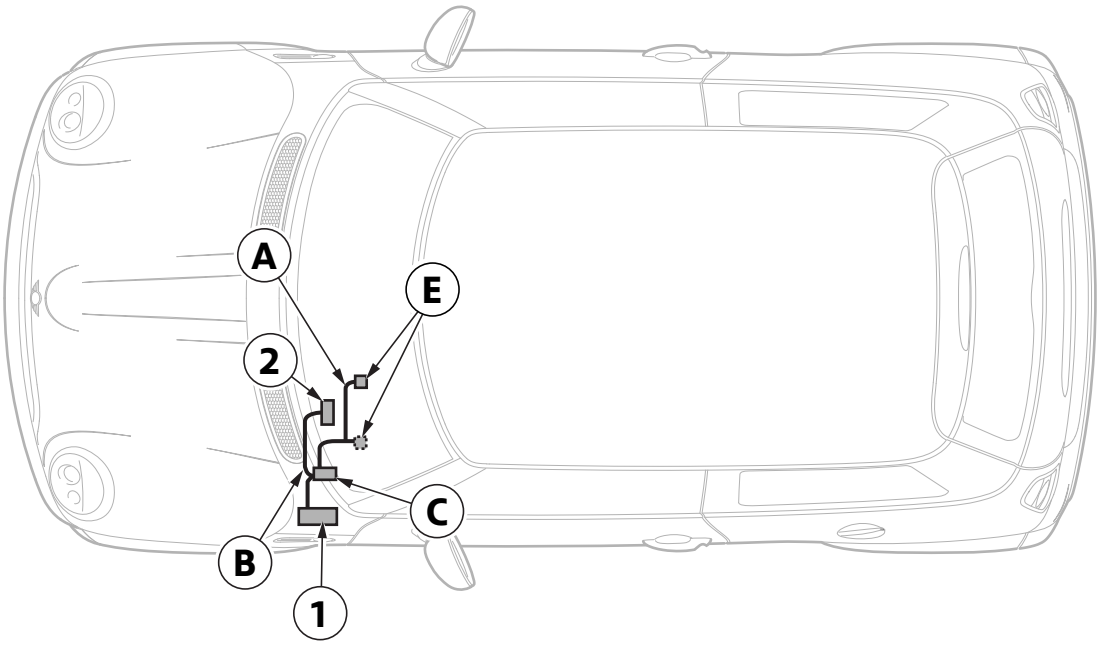
Position	Description	Signal	Cable colour / cross section	Location of connection in the vehicle	Short desc./ plug-in pos.
A	Retrofit cable	---	---	---	---
A1	Socket housing, 10+4-pin BK	---	---	On the control device **C**	---
A2	Socket housing, 8-pin BK Label **A**	---	---	On additional instrument **E** (see DIP switch settings)	---
A3	Socket housing, 8-pin BK Label **B**	---	---	On additional instrument **E** (see DIP switch settings)	---
B	Retrofit cable	---	---	---	---
B1	Socket housing, 6-pin BK	---	---	On the control device **C**	---
B2	Pin housing, 4-pin BK	---	---	With socket housing **M** on pinned out lines of the steering column switching center	---
B3	Socket contact	Kl. 30g	RD/YE 0.75 mm²	Pin in on steering column switching center	X1880 PIN 1
B4	Socket contact	Kl. 31	BR/BK 0.75 mm²	Pin in on steering column switching center	X1880 PIN 2
B5	Socket contact	PT-CAN H	YE/BK 0.5 mm²	Pin in on steering column switching center	X1880 PIN 3
B6	Socket contact	PT-CAN L	YE/BR 0.5 mm²	Pin in on steering column switching center	X1880 PIN 4
B7	Line open	Kl. 15	GY 0.5 mm²	With mini-connector **N** on cable GY of the foot space module	X14261 PIN 12
B8	Socket contact	Kl. 58g	GY/RD 0.5 mm²	Insert at the foot space module or with mini-connector **N** at the GY/RD cable of the foot space module	X14261 PIN 48

4. Installation and Wiring Scheme



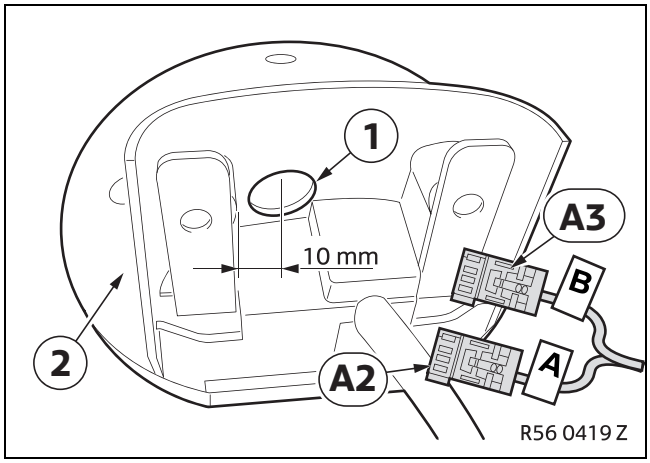
R56 0425 Z

Legend

A Retrofit cable
B Retrofit cable
C Control device
E Additional instrument (optionally an instrument to the right or two instruments)

1 Foot space module **X14261**
2 Steering column switching center **X1880**

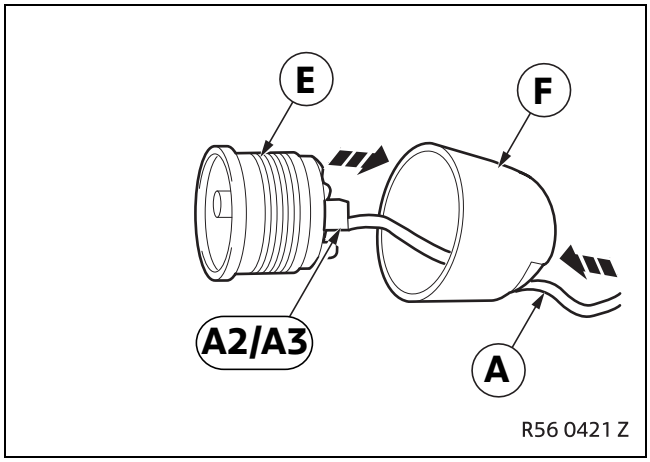
5. Assembly of the additional instruments



See Chapter 8 "DIP Switch Settings" for the assignment of the branches **A2** and **A3** of the instruments.

Hole (1), Ø 18 mm, drill out according to dimensioning on the tachometer (2).

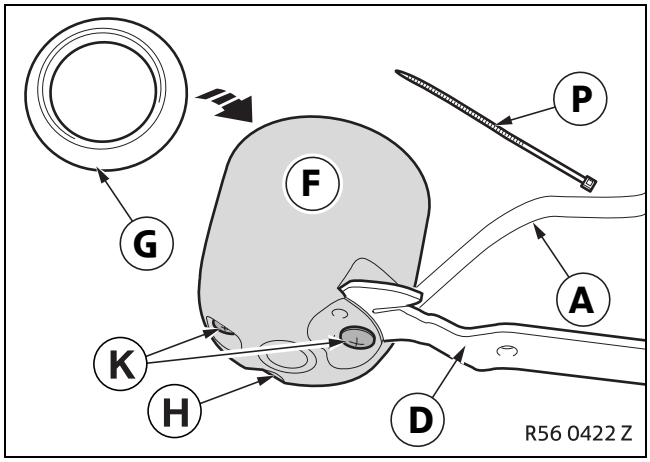
Guide branch **A2** or **A3** (when installing one additional instrument) or branches **A2** and **A3** (when installing 2 additional instruments) from below through the hole (1).



The installation is shown for the additional instrument to the right. When installing 2 additional instruments, proceed in the same manner on the left side.

Guide branch **A2** or **A3** of the retrofit cable **A** through the back of the housing **F** and connect to the additional instrument **E**.

Insert additional instrument **E** into the housing back **F** according to the installation holes on the back side.

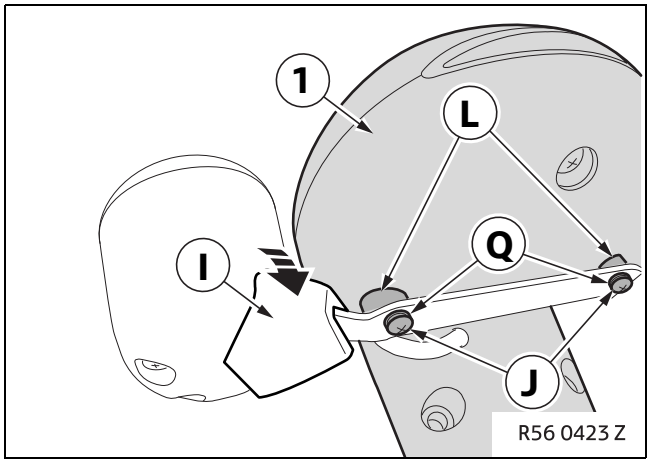


Use cross-head screw **H** (4.2 x 9.5 mm) at the lower attachment point.

Insert additional instrument bracket **D** into the housing back **F** according to the installation holes and screw together with cross-head screws **K** (4 x 12 mm) and **H** (4.2 x 9.5 mm).

Attach the front part of the housing **G** and close by turning.

Fix retrofit cable **A** with cable tape **P** to the additional instrument bracket **D**.

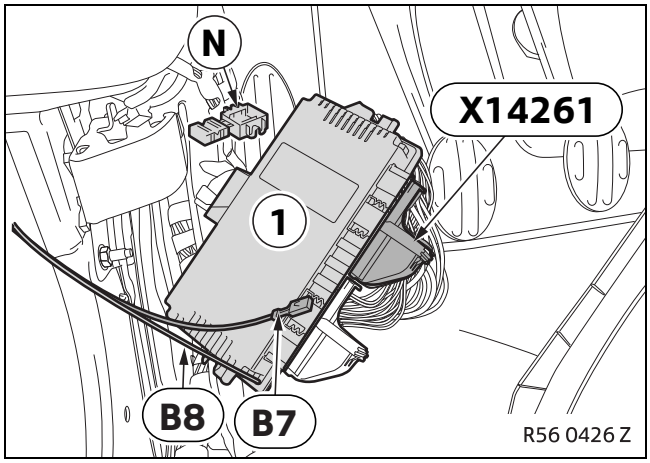


Attach panel **I** (right and left panels are not exchangeable).

Unscrew the lower two screws on the back of the tachometer (no longer needed).

Screw additional instrument bracket **D** in connection with spacers **L**, cross-head screws **J** (4 x 30 mm) and discs **Q** onto the tachometer (1)

6. Installing and Connecting the Retrofit Cables

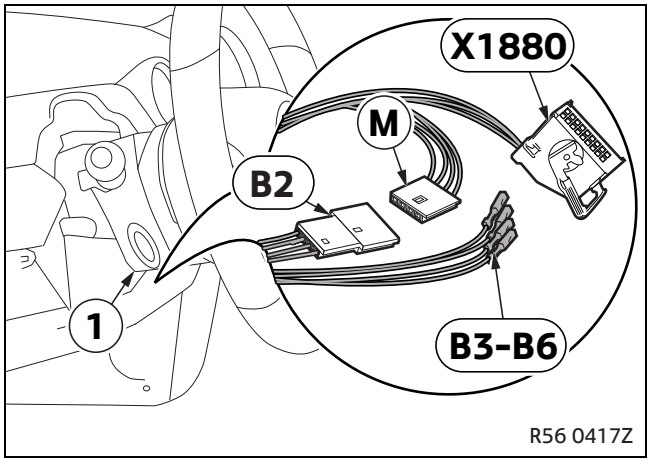


Loosen foot space module (1) and socket housing **X14261** (51-pin BK).

If PIN 48 is already occupied, connect branch **B8** with mini-connector **N**. ◂

Connect branches **B7** and **B8** as follows to the socket housing **X14261**:

- Branch **B7**, cable colour GY, with mini-connector **N** to the gray cable of PIN 12
- Insert branch **B8**, cable colour GY/RD, in PIN 48



Lay down branches **B2-B6** to the steering column switching center (1).

Remove and release plug **X1880**, 18-pin BK at the steering column switching center (1).

Remove the following cables from plug **X1880** and insert in the socket housing **M** with the same pins:

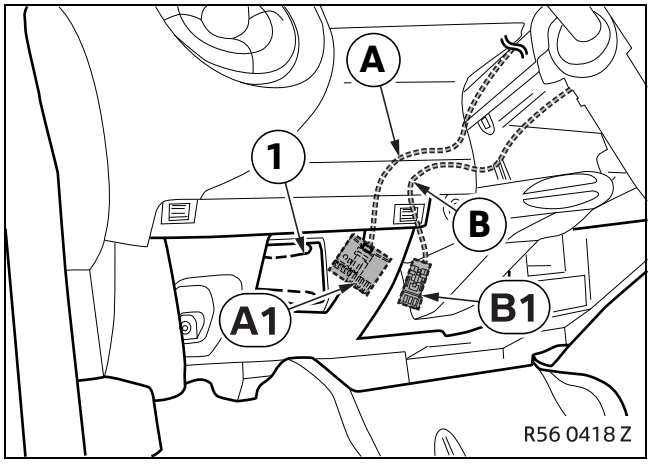
- Cable RD/YE from PIN 1 in PIN 1
- Cable BR/BK from PIN 2 in PIN 2
- Cable YE/BK from PIN 3 in PIN 3
- Cable YE/BR from PIN 4 in PIN 4

Connect branch **B2** to the socket housing **M**.

Connect branches **B3-B6** as follows in plug **X1880**:

- Branch **B3**, cable colour RD/YE, in PIN 1
- Branch **B4**, cable colour BR/BK, in PIN 2
- Branch **B5**, cable colour YE/BK, in PIN 3
- Branch **B6**, cable colour YE/BR, in PIN 4

Connect plug **X1880** to the steering column switching center (1).

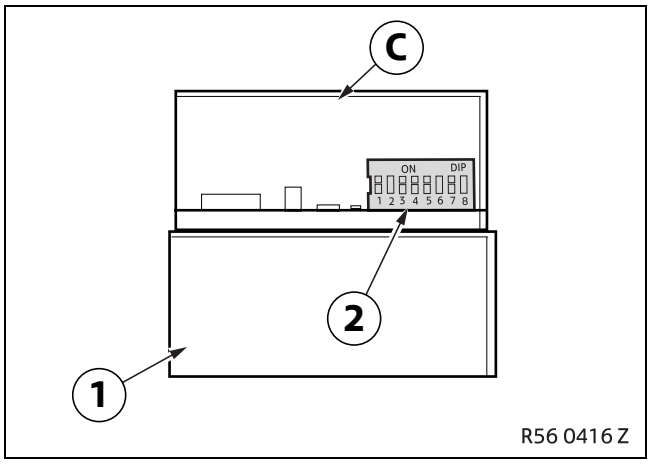


Pay attention to the cable layout in the steering column and if necessary protect against abrasion. ◂

Mount pre-assembled tachometer with additional instruments in the vehicle.

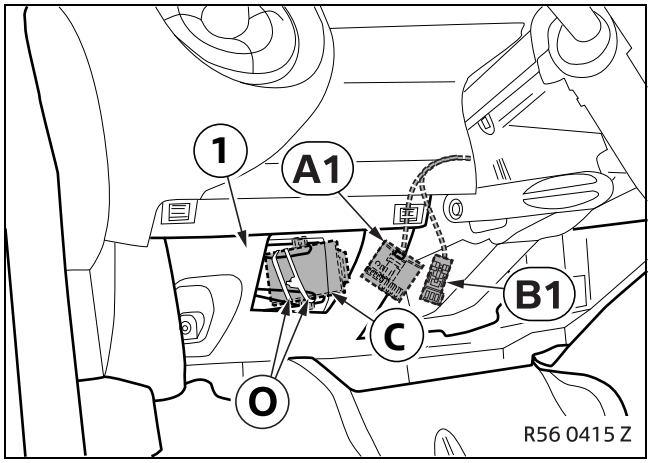
Lay down branches **A1** and **B1** of the retrofit cables **A** and **B** to the control device (1).

6. Installing and Connecting the Retrofit Cables



Open cover (1) of the control device **C**.

Set engine type/vehicle and installation additional instruments on the switch unit (2) (see DIP switch settings, Chapter 8).



Connect branch **A1** and **B1** to the control device **C**.

Secure control device **C** with to the instrument panel (1) with cable tape **O**.

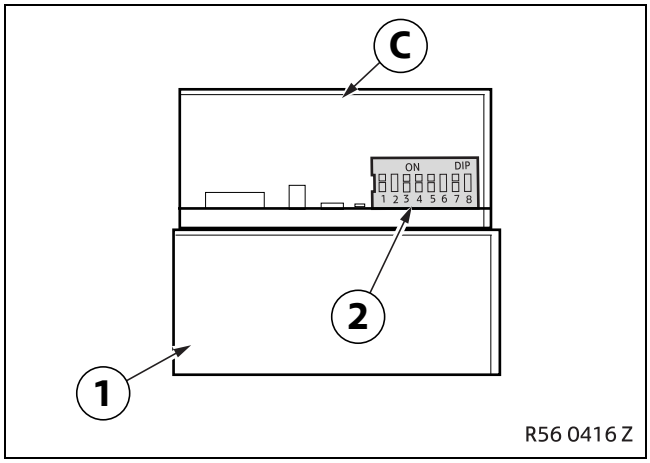
7. Final Work and Coding

The retrofit system is not coding-relevant.

- Attach vehicle battery
- Perform short test
- Perform function test
- Reassemble the vehicle

Print out the chapter "Customer Information" and give this to the customer.

8. DIP switch settings



Remove the connection plug of the control device **C** before opening the cover (1). ◂

Open cover (1) of the control device **C**.

The following settings can be made with the switch unit (2) of the control device **C**.

Switch 1 to 3:
Engine type and vehicle selection

Switch 4 to 8:
Selection of the additional instruments, that are connected to branch **A2** (label A) or **A3** (label B) of the retrofit cable **A**.

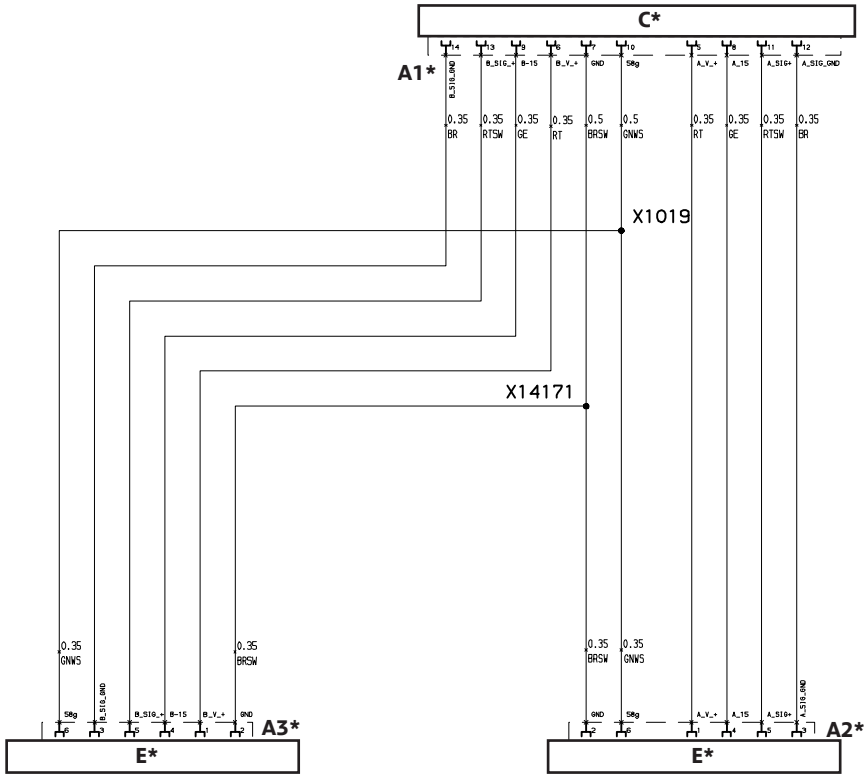
Switch 1 to 3 (engine type/vehicle)

DIP								Engine type/vehicle
■	■	■						One
■	■							Cooper
■		■						Cooper S
■								JCW
	■	■						JCW Tuning Kit
	■							Cooper D

Switch 4 to 8 (additional instruments)

DIP								Additional instruments
			■	■	■	■	■	**A2**: Water temperature **A3**: Torque
			■	■	■	■		**A2**: Water temperature **A3**: Lateral acceleration
			■	■		■	■	**A2**: Torque **A3**: Lateral acceleration

9. Wiring Diagram



R56 0428 Z

Legend

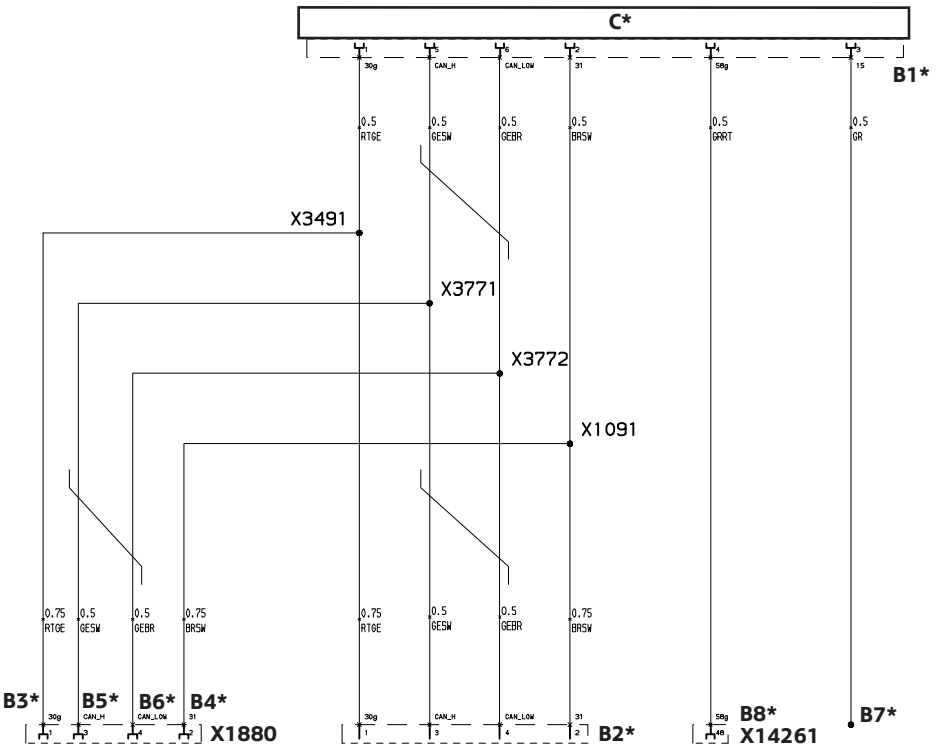
A1*	Socket housing, 10+4-pin BK
A2*	Socket housing, 8-pin BK (label A)
A3*	Socket housing, 8-pin BK (label B)
C*	Control device
E*	Additional instrument
X1019	Connector Kl. 58g
X14171	Connector ground

All entries labelled with * are only valid for these assembly instructions or this wiring diagram

Cable colours

BL	Blue
BR	Brown
YE	Yellow
GN	Green
GY	Gray
RD	Red
BK	Black
VI	Violet
WH	White

9. Wiring Diagram



R56 0427 Z

Legend

B1*	Socket housing, 6-pin BK
B2*	Pin housing, 4-pin BK
B3*	Socket contact in plug **X1880**
B4*	Socket contact in plug **X1880**
B5*	Socket contact in plug **X1880**
B5*	Socket contact in plug **X1880**
B7*	Line open
B8*	Socket contact in plug **X14261**
C*	Control device
X1091	Connector ground
X1880	Socket housing, 18-pin BK
X3491	Connector Kl. 30g
X3771	Connector CAN High
X3772	Connector CAN Low
X14261	Socket housing, 51-pin BK

All entries labelled with * are only valid for these assembly instructions or this wiring diagram

10. Customer Information

Pictograms

 Denotes information that requires special attention.

◂ Indicates the end of the information text.

Cooling water indicator.
The cooling water temperature is regulated with respect to the engine load. Depending on the operation of the engine, this can lead to a fluctuation in the cooling water temperature meter.

Relative torque meter
The meter displays how high the current torque on the crankshaft is — in relation to the maximum nominal torque.

For motors with turbochargers, you also are informed of use of the overboost function (relative torque is higher than 100% for a short time).

For travel at high altitudes the maximum power and the maximum torque are reduced and the maximum indication is also no longer achieved.

Lateral acceleration meter
The lateral acceleration meter becomes active only once several meters have been driven.

 The standard vehicle control and warning lights must still be observed. ◂