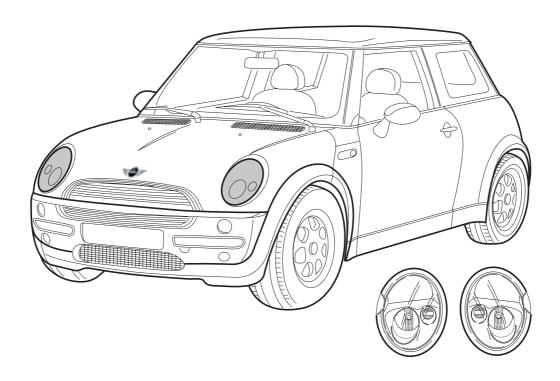


# Parts and Accessories Installation Instructions



050 0224 B

# Installation Kit Headlight Cleaning System Mini (R50/R53) LHD and RHD

Installation time approx. 1.5 -2 hours, which can vary according to the condition of the car and the equipment in it.

Issue date: 02.2003

Retrofit kit No. 61 61 0 029 748

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#### 1. Important information

These installation instructions are primarily designed for use within the MINI dealership organisation and by authorised MINI service companies. In any event the target group for these installation instructions is specialist personnel trained on MINI cars with the appropriate specialist knowledge.

The headlight cleaning system wiring harness may only be installed by a specialist workshop that has the required special tools and manuals (servicing, repair, diagnostics, etc.).

Ensure that the cables/lines are not kinked or damaged as you install them in the car. Additional cables/lines that you install must be secured with cable ties/textile adhesive tape.

Item names refer only to the overview drawings and to the texts next to the appropriate figure.

#### Subject to technical modifications

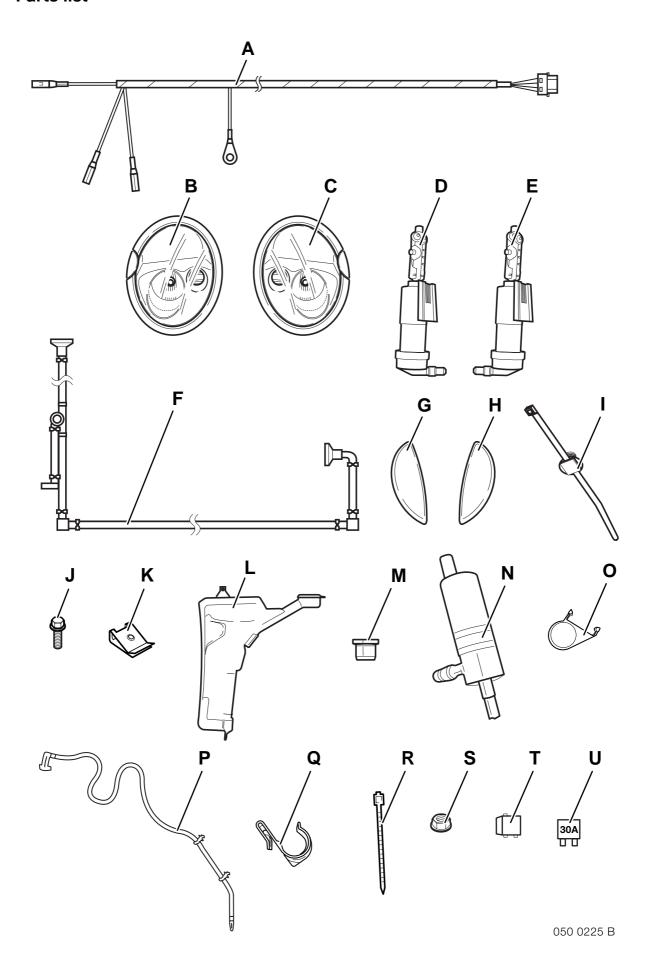
#### Special tool

MoDiC

# 2. Preparations

	TIS instruction No.
Disconnect the battery	12 00
Remove the left oddments box	51 16 392
Remove the door sill strips left and right	51 47 000
Remove the wheel arch trim left	
Remove the headlights on both sides	63 12 008
Remove the bonnet trim	
Remove the left indicator light	63 13 200
Remove the bonnet guide rail on the left side panel	
Unfasten the fuse box	
Unfasten base module C	
Remove the top instrument panel trim	51 45 051
RHD cars only	
Remove the cover behind the hydraulic unit	

#### 3. Parts list

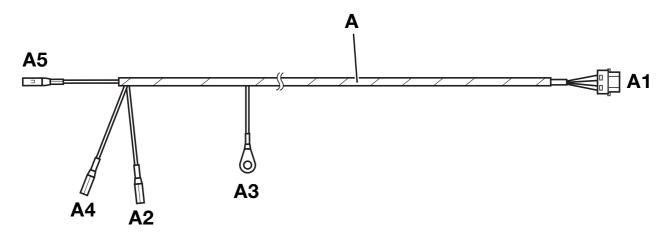


#### 3. Parts list

#### Legend

- **A** Headlight cleaning system wiring harness
- **B** Right headlight
- C Left headlight
- **D** High-pressure jet left
- **E** High-pressure jet right
- F Hose line
- **G** Cover left
- **H** Cover right
- I Cable tie with clip (3x)
- J Hexagonal screw M6x16 (2x)
- K Speed nut
- **L** Headlight cleaning system reservoir (SRA)
- M Seal
- N High-pressure pump
- O Attachment bracket
- P Water hose
- **Q** Hose holder
- R Cable tie (10x)
- **S** Nut
- T Relay
- U 30 A fuse

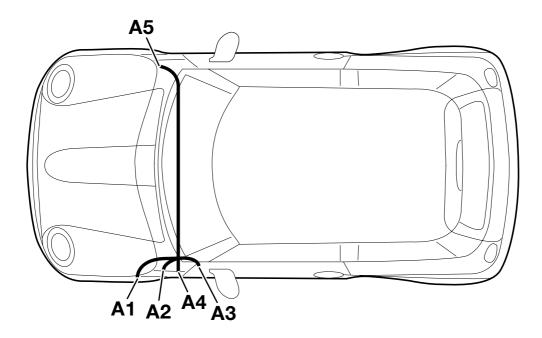
#### 4. Connection overview



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Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
А	Headlight cleaning system wiring harness				
A1	SW 2-pin socket casing			To high-pressure pump of headlight cleaning system	X1011
A2	Blade terminal contact	TI. MPW	GN/RT	To fuse holder of WS 6-pin socket casing	X10202, PIN1
А3	Cable eyelet, 6 mm in diameter	Terminal 31	BR	To earth post left	X1108
A4	Blade terminal contact	Terminal 30	BR/OR	To fuse holder of BL 12-pin socket casing	X10205, PIN1
A5	Blade terminal contact	TI. SRA	BR/OR	To base module C	X254, PIN4

#### 5. Installation and cabling diagram



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All the wiring harnesses are to be laid along the main wiring harness as shown in the figure and secured with cable ties.

#### Headlight cleaning system wiring harness

A1 to high-pressure pump of headlight cleaning system X1011

A2 to fuse holder X10202, PIN1

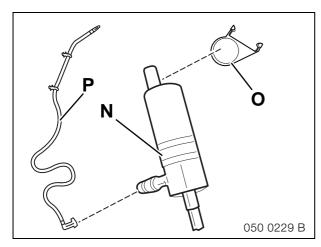
A3 to earth post connection left X1108

A4 to fuse holder X10205, PIN1

A5 to base module X254, PIN4

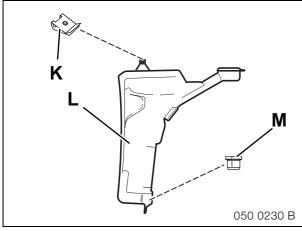
Tie back any excess lengths.

#### 6. To install the headlight cleaning system reservoir



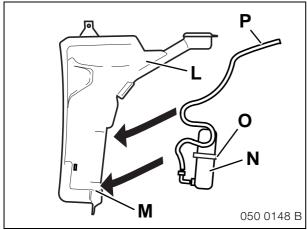
Connect the water hose  ${\bf P}$  to the high-pressure pump  ${\bf N}$ .

Push the attachment bracket **O** onto the high-pressure pump **N**.



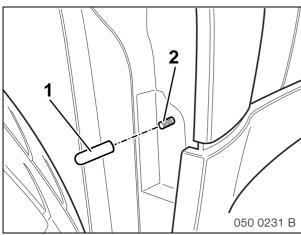
Insert the seal  $\mathbf{M}$  into the headlight cleaning system reservoir  $\mathbf{L}$ .

Put the speed nut  ${\bf K}$  onto the headlight cleaning system reservoir  ${\bf L}$ .



Push the high-pressure pump **N**, attachment bracket **O** and water hose **P** into the seal **M**. Clip the attachment bracket **O** into the headlight cleaning system reservoir **L**.

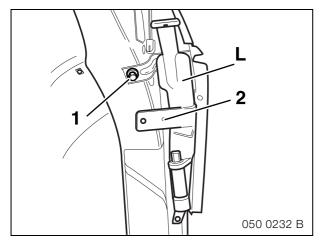
The hose must be glued.



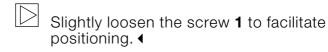
Wheel arch trim left at side skirt. ◀

Remove the protective cap **1** from the grub screw **2**.

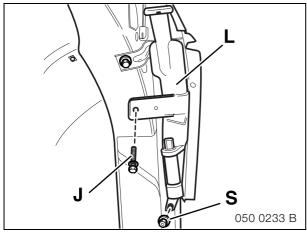
#### 6. To install the headlight cleaning system reservoir



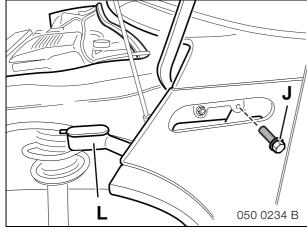
Position the headlight cleaning system reservoir **L** in the space provided.



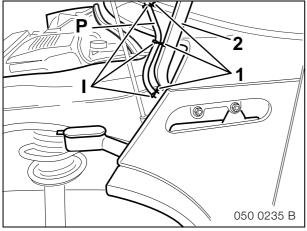
If hole **2** does not exist, drill it using a 4 mm



Attach the headlight cleaning system reservoir  ${\bf L}$  using a screw  ${\bf J}$  and nut  ${\bf S}$ .

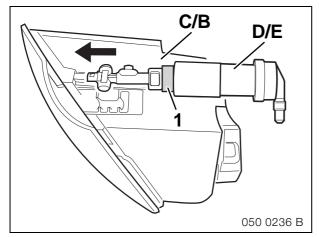


Attach the headlight cleaning system reservoir **L** using a screw **J**.



Clip water hose  ${\bf P}$  to the holes provided  ${\bf 1}$  in the bonnet hinge  ${\bf 2}$  using three cable ties with clips  ${\bf I}$ .

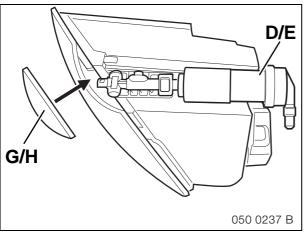
### 7. To install the high-pressure jets with cover



Clip high-pressure jet **D/E** into the headlight **C/B**.

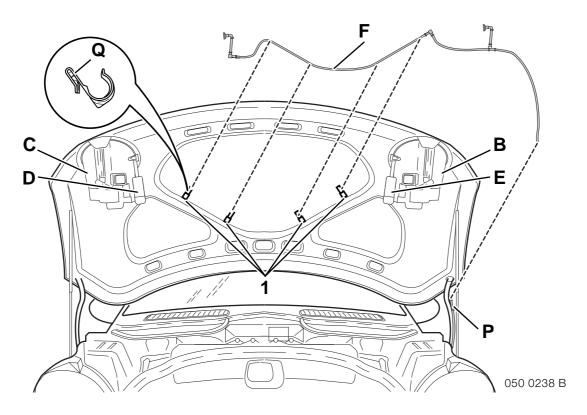


Remove the transport safety device **1** from the high pressure jet. **4** 



Clip cover **G/H** into high-pressure jet **D/E**.

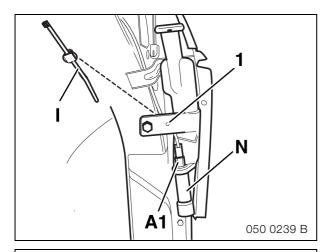
#### 8. To install the hose line



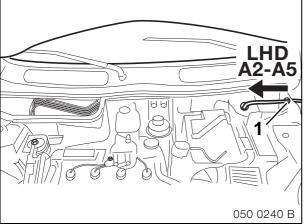
Install headlights  $\mathbf{C/B}$  with high-pressure jets  $\mathbf{D/E}$ , clip four hose holders  $\mathbf{Q}$  for hose line  $\mathbf{F}$  into the places  $\mathbf{1}$  provided.

Clip hose line **F** onto high-pressure jets **D/E**, connect water hose **P** and clip it into the hose holders **Q**.

#### 9. To install the headlight cleaning system wiring harness



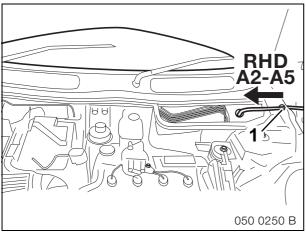
Connect **A1** to high-pressure pump **N**. From the back, clip a cable tie **I** in at the place **1** provided and attach the cable.



D LHD. ◀

**Lay A2-A5** along the cable for the left indicator and through the grommet (1) and rubber grommet behind the brake booster.

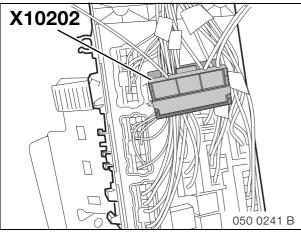
Cut open and seal off the rubber grommet if necessary.



RHD. ◀

**Lay A2-A5** along the cable for the left indicator and through the grommet (1) and rubber grommet behind the ABS hydraulic unit.

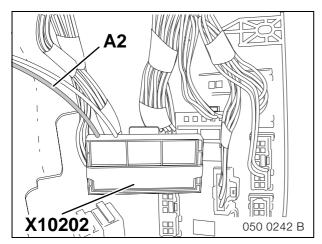
Cut open and seal off the rubber grommet if necessary.



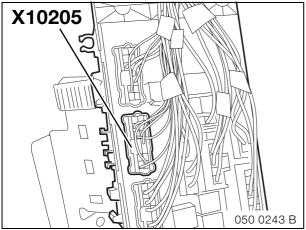
Fuse box. ◀

Disconnect WS socket casing X10202.

#### 9. To install the headlight cleaning system wiring harness

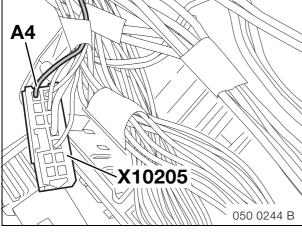


Connect **A2** to the WS socket casing **X10202** fuse box **PIN1**.

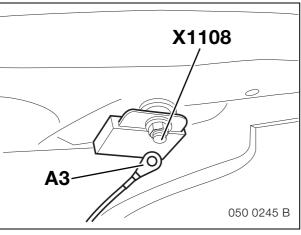


Fuse box. •

Disconnect BL socket casing X10205.



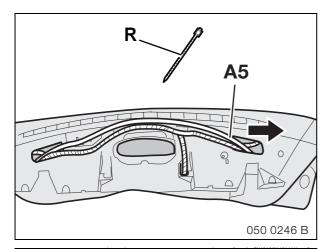
Connect **A4** to the BL socket casing **X10205** fuse box **PIN1**.

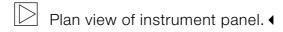


Left side skirt. ◀

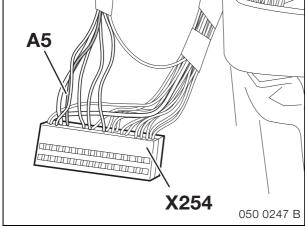
Connect A3 to earth post connection X1108.

#### 9. To install the headlight cleaning system wiring harness

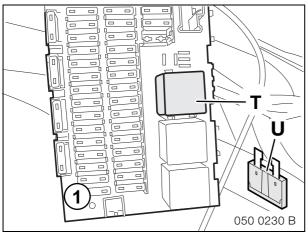




Route  ${\bf A5}$  above the instrument panel to the right to the base module. Attach with cable ties  ${\bf R}$ .



Connect **A5** to the WS socket casing **X254** base module **PIN4**.



Connect relay **T** to fuse holder **1** relay slot **RL3**.

Connect fuse **U** to fuse slot F25 if there is no fuse. ◀

#### 10. Coding and concluding work

Connect the battery. ◀

This system requires coding.

To ensure that the retrofit system:

- is fully functional and
- prevents malfunctions and errors when combined with other electrical systems in the car, this retrofit system and, possibly, other components must be coded and saved in the central code of the IKE.

This coding process is automatic using the current coding program in the "Retrofit" path. The procedure is user-guided, follow the text instructions for completing each individual step.

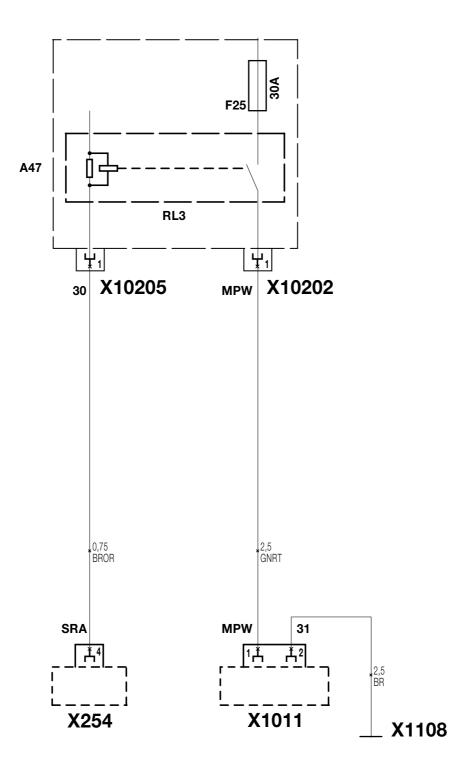
#### **Procedure**

- Connect DIS/MoDiC to the car
- Ignition "ON"
- Select "Coding ZCS"
- Confirm the date by pressing "Y" (MoDiC only)
- Series: "R50" - Path: "2 Retrofit"
- System: "Headlight cleaning system"

#### **Concluding work**

Fill the additional washer reservoir and check the system for leaks. Cut away the engine compartment insulating mat on the right hand side if necessary so it does not interfere with the spray jet.

## 11. Circuit diagram



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#### 11. Circuit diagram

#### Legend

F25 Fuse 30A SRA
A47 Fuse holder II
X254 Base module
X1011 Washing water

**X1011** Washing water pump (high-pressure pump)

X1108 Earth post

X10202 Fuse holder input XIIX10205 Fuse holder input XV

RL3 Relay SRA

#### Cable/socket and plug casing colours

RT red SW black GN green BR brown GΕ yellow WS white VI violet GR grey BL blue OR orange