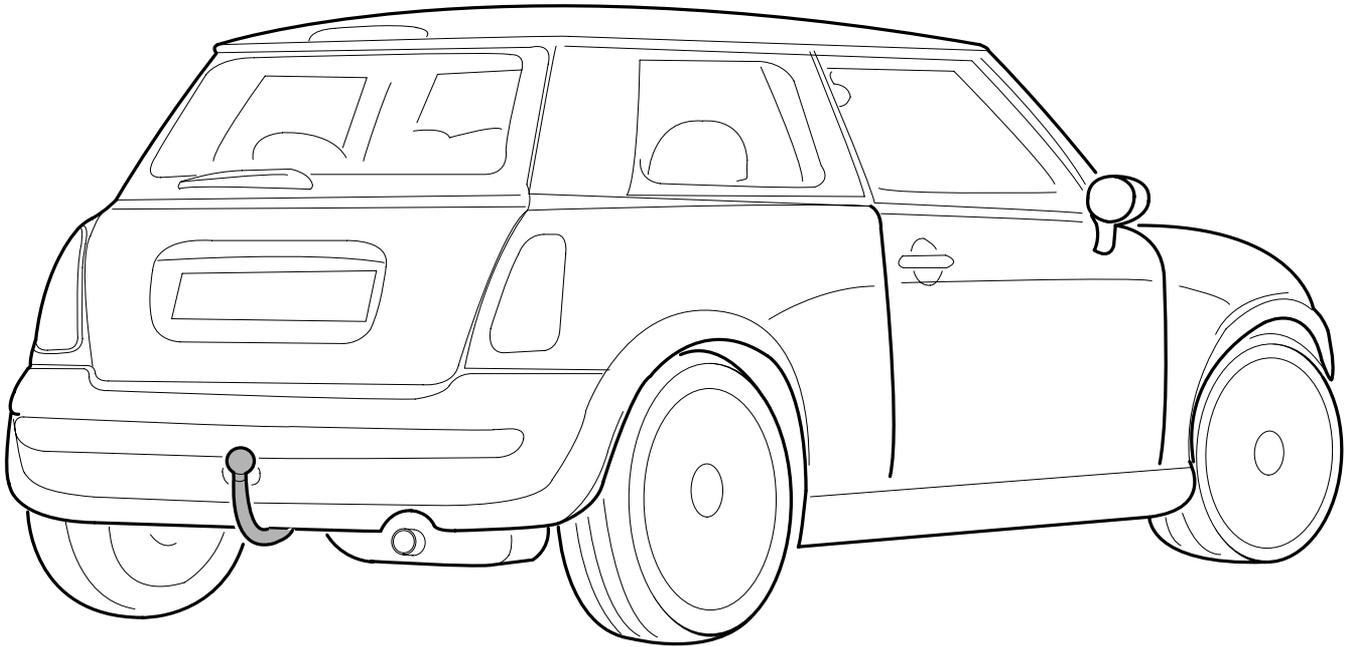




Parts and Accessories Installation Instructions



050 0001 WW

Removable towing hitch retrofit kit MINI R50

The installation time is approx. 3 -4 hours, but this may vary depending on the condition of the car and the equipment in it.

Retrofit / Installation kit No. 71 60 0 140 640

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Important information

These installation instructions describe the installation of the towing hitch on the MINI R50 and the installation of the additional wiring harness on a LHD car. They contain additional instructions for RHD cars.

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.

Notes on installation and operation

Remove the body sealant and the underseal from all the points at which the towing hitch is in contact with the body with a spatula. Then clean the areas with washing benzene. Coat bare metal body parts with anti-corrosion paint.

Care and maintenance instructions are set out in the supplementary owner's manual for the towing hitch.

For use the details of the car manufacturer relating to the trailer load and nose weight are binding and you must not exceed the tested values.

The weight data for the towing hitch set out in the EC licence are shown on the model plate. The trailer loads set out in the car documents apply to all types of trailers. Depending on the car model, however, higher trailer loads are possible with certain trailers (for example boat trailers, glider transport trailers, car transport trailers and horseboxes for sports purposes), these are available from the MINI After Sales Department.



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 by the BMW Group.

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

Required tools and equipment

Set of flat screwdrivers

Set of Philips screwdrivers

Set of Torx screwdrivers T20 and T55

Set of Allen keys

Reversible ratchet with hexagonal sockets 8 mm, 10 mm, 13 mm and 16 mm

Diode test lamp

Angle cutter

Drill

Set of twist drill bits

Flat pliers

Torque wrench

40 mm metal peeling drill

Cable threading coil

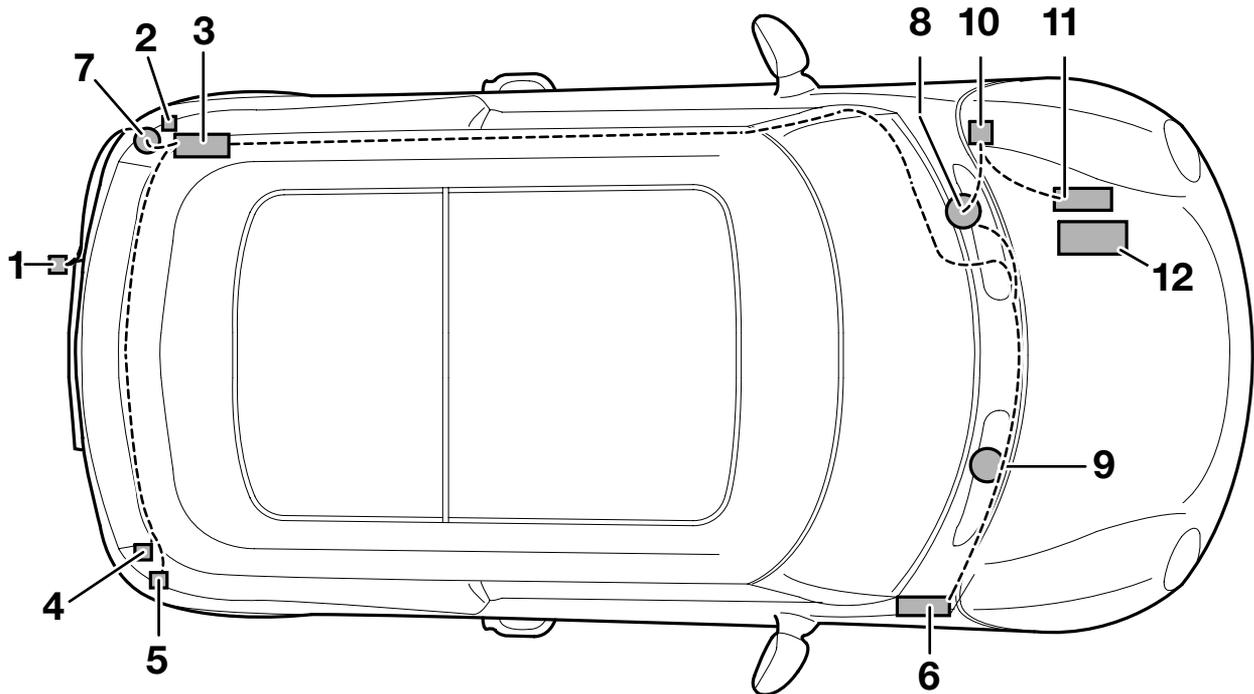
1. Parts list

Item	Description	Quantity
a	Base part of removal towing hitch for the Mini R50	1
b	Hexagonal screw M8x25-8.8	12
c	Washer 24x8.4x2	12
d	Ball rod	1
e	Ball protection cap	1
f	Stopper	1
g	Ball rod bag	1
h	Ball rod operation sticker	1
i	Nose weight sticker	1
k	Additional wiring harness	1
l	Control module	1
m	Socket	1
n	Fuse box	1
o	Holder for fuse box	1
p	Securing clip	1
q	Battery connection cable	1
r	Insulation-piercing connector	6
s	Cable tie	15
sl	Cable tie 300 mm	3
t	20 A fuse	2
u	Cover for fuse box	1
v	Velcro tape	4
w	Screw M5x35	3
x	Spring ring M5	3
y	Nut M5	3
z	Cable passage grommet (fuse box)	1
	Installation Instructions	1
	Supplementary owner's manual for removal ball rod	1

2. Preparations

	TIS instruction No.
Conduct a brief test	
Disconnect the negative pole of the battery	
The following components must be removed first of all:	
Remove the rear bumper	
Release the rear silencer	
Remove the heat shield	
Remove the bumper holder (no longer required)	
Remove the rear left wheel arch trim	
Release the spare wheel trim (plastic part) at the rear left under the car and fold it downwards	
Remove the rear boot trim	
Remove the rear window shelf, left backrest, side panel trim at the rear left and left door sill strip	
Remove the left tail light	
Release the front right footwell trim	

3. Installation and cabling diagram

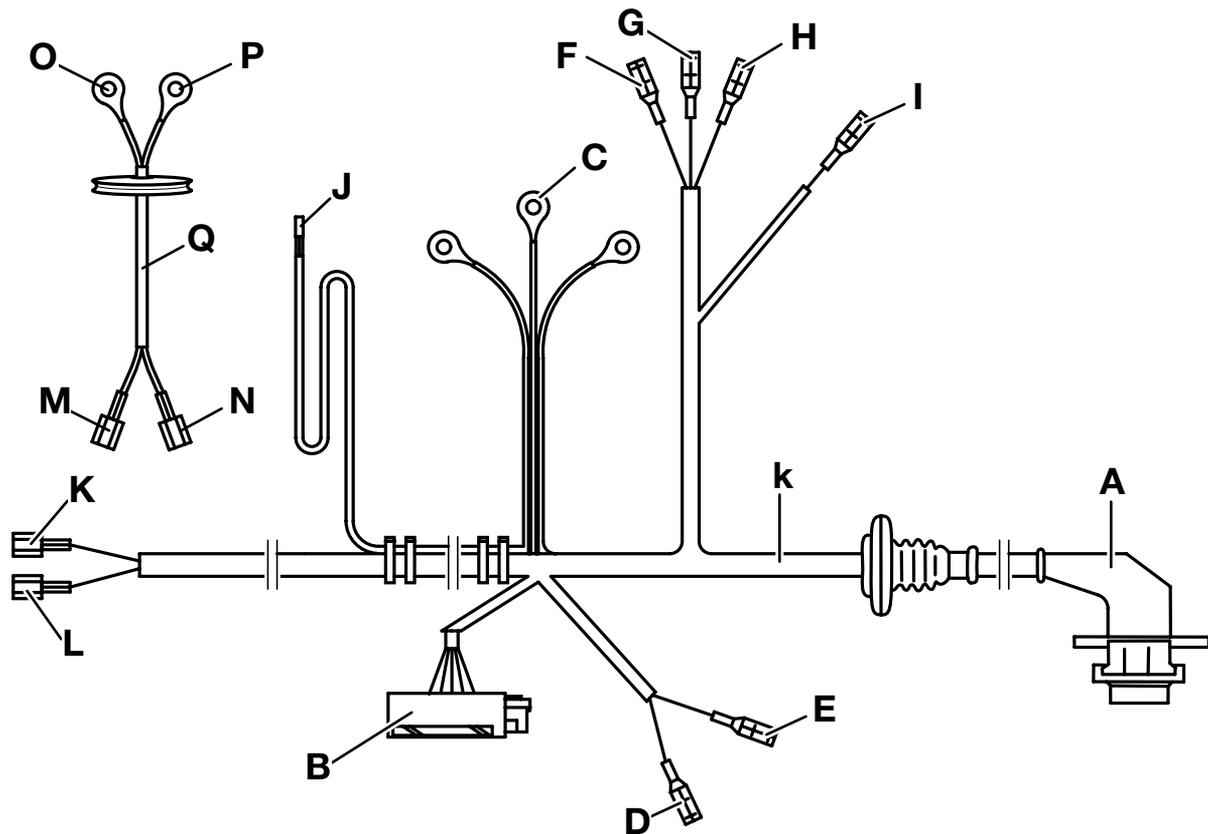


050 0002 WW

Legend

- 1 13-pin trailer socket
- 2 Connect of left tail light
- 3 15-pin connection plug and control module
- 4 Reversing light connector
- 5 Right tail light connector
- 6 Front right light module
- 7 Cable passage grommet, rear floor plate, 40 mm diameter
- 8 Cable passage grommet, left bulkhead (LHD car)
- 9 Cable passage grommet, right bulkhead (RHD car)
- 10 Fuse box
- 11 Connector on battery connection for the fuse box in the engine compartment
- 12 Battery

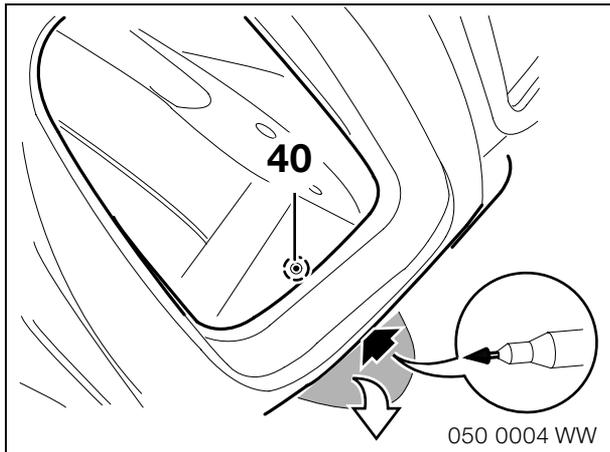
4. Wiring harness connection overview for the MINI R50



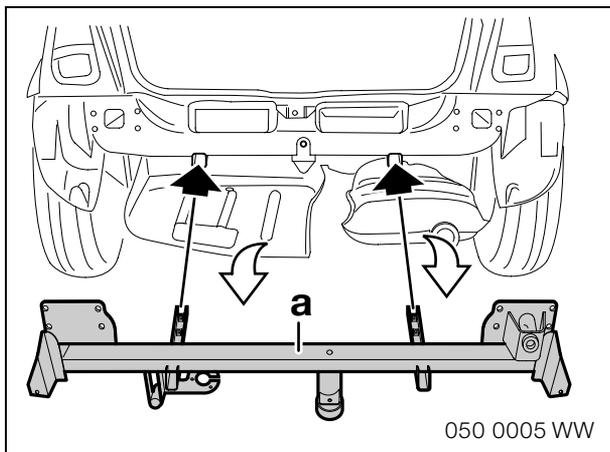
050 0003 WW

Item	Description	Signal	Cable colour / Cross-section in mm ²	Connection location in the car	Abbreviation / Slot
A	13-pin trailer socket			Trailer socket holder on the towing hitch	
B	15-pin connection plug			Trailer module	
C	Ring cable lug	Earth	brown 1,5; 2,5; 2,5	Earth connection point	Rear left wheel arch
D	Insulated blade terminal	Left indicator light	blue/green 0.75	Left tail light signal 49 HL	
E	Insulated blade terminal	Light, left	grey/violet 0.75	Left tail light signal 58 HL	
F	Insulated blade terminal	Right indicator light	blue/brown 0.75	Right tail light signal 49 HR	
G	Insulated blade terminal	Brake light	black 0.75	Right tail light signal 54	
H	Insulated blade terminal	Light, right	grey/yellow 0.75	Right tail light signal 58 HR	
I	Insulated blade terminal	Reversing light	yellow/blue 0.75	Wiring harness rear right signal RFS	
J	Blade terminal sleeve 1.5	Data cable	blue/brown 0.5	Front right light module signal NSL-Data cable (black plug)	Plug J4 Chamber 12
K	Blade terminal sleeve 6.3	Terminal 30	red/violet 4	Additional fuse box slot, e.g. F1	e.g. F1
L	Blade terminal sleeve 6.3	Terminal 30	red/blue 2.5	Additional fuse box slot, e.g. F2	e.g. F2
M	Blade terminal sleeve 6.3	Terminal 30	red/violet 4	Additional fuse box slot, e.g. F1	e.g. F1
N	Blade terminal sleeve 6.3	Terminal 30	red/blue 2.5	Additional fuse box slot, e.g. F2	e.g. F2
O	Ring cable lug	Terminal 30	red/violet 4	Continuous positive connector 30	Terminal 30
P	Ring cable lug	Terminal 30	red/blue 2.5	Continuous positive connector 30	Terminal 30
Q	Continuous position connection cable			Engine compartment fuse box	

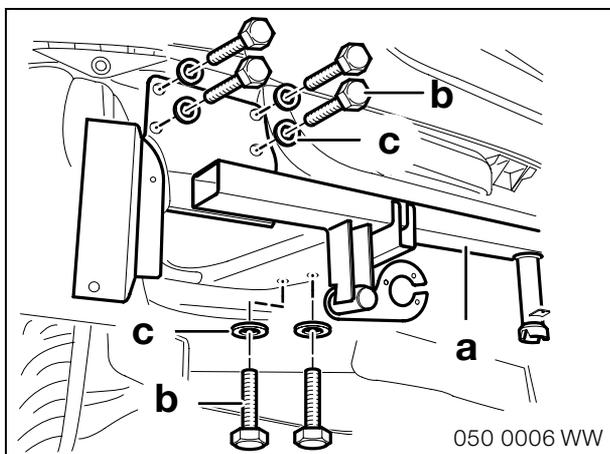
5. To install the removable towing hitch on the MINI R50



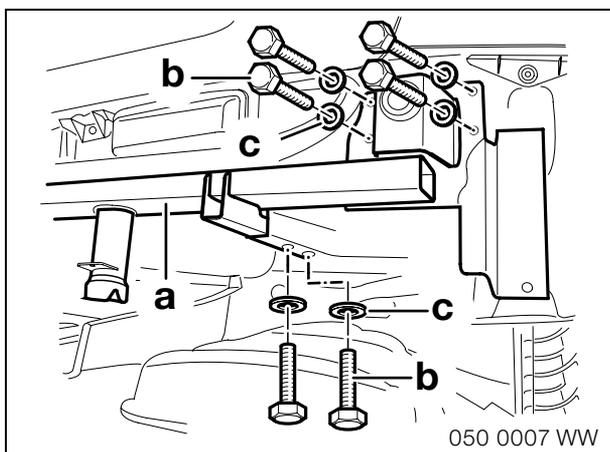
Drill the spot mark below the left tail light to a diameter of 40 mm, deburr it and treat it with anti-corrosion paint.



Push the base part (a) with the U-shaped sections into the side members of the car.

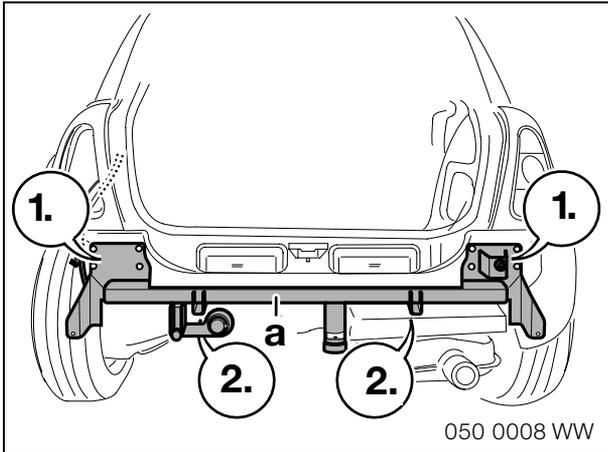


Screw the base part (a) loosely to the left-hand side of the car using screws (b) and washers (c).



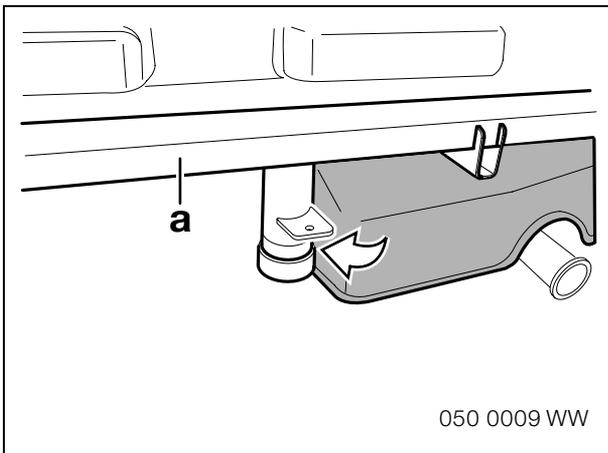
Screw the base part (a) loosely to the right-hand side of the car using screws (b) and washers (c).

5. To install the removable towing hitch on the MINI R50

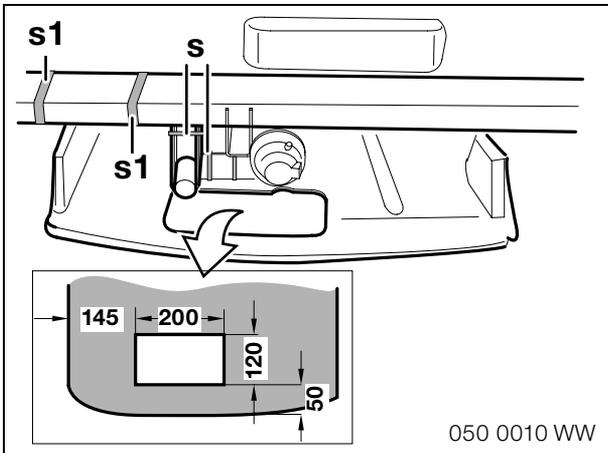


▶ Align base part (a) and first tighten the screws (b) at the rear with a torque of 23 Nm.

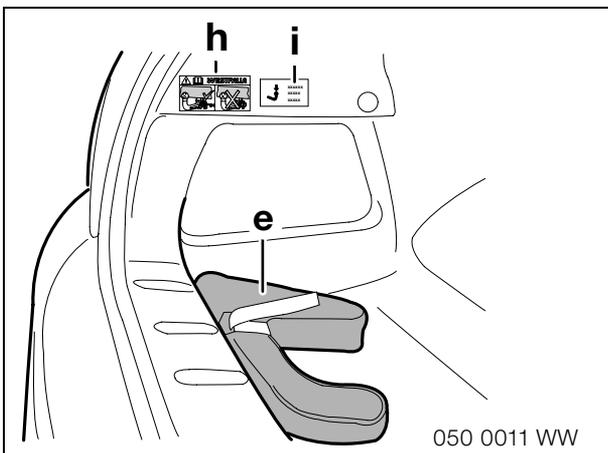
Finally tighten the bottom screws (b) with a torque of 23 Nm. ◀



Adjust the heat shield on the exhaust to allow the base part (a) to be mounted on the heat shield.

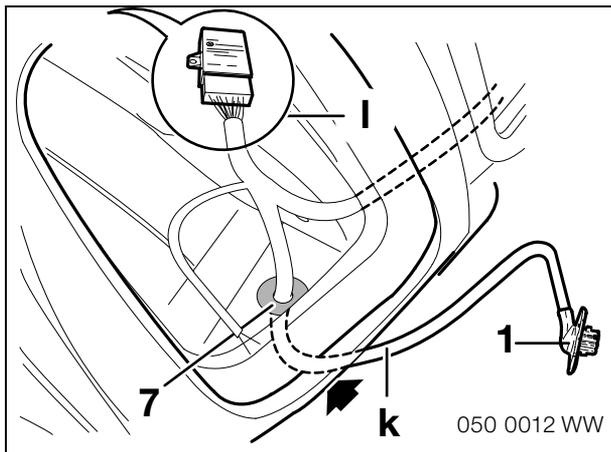


▶ On cars without an emergency wheel the underfloor cover is to be cut out as shown in the drawing. ◀



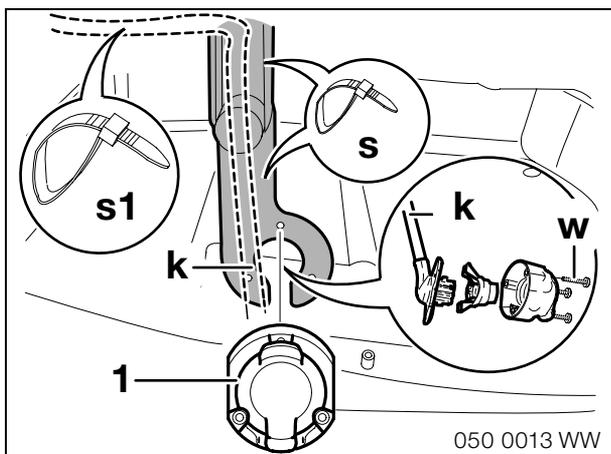
Affix the sticker (h) with details of how to use the ball rod (d) and the nose weight sticker (i) on the rear (degrease the adhesion areas). If the ball rod is not required it is to be placed in the bag provided for it. Close the ball bag and stow it in the boot. The bag must be fastened securely to the lashing eyelet.

6. To install the additional wiring harness in the MINI R50



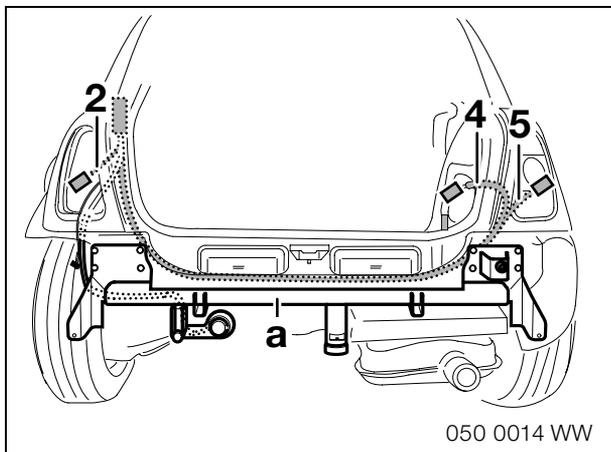
Connect the socket loom on the additional wiring harness (k) from the top through the drilled hole (40 mm in diameter). Fit the passage grommet (7) again.

Secure the control module (1) at a suitable point on the wheel arch using Velcro fastener (v) (decrease the area to which you wish to affix the Velcro fastener).



Fit the 13-pin socket (m) as shown.

Secure the cable loom with a cable tie (s) on the socket holder and on the base part with a cable tie (s1).

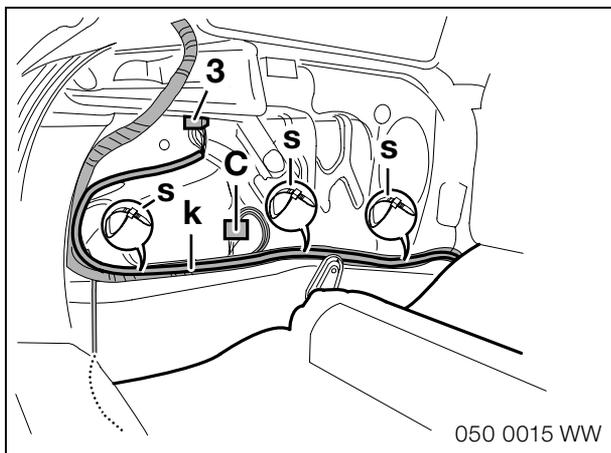


Lay the cable loom (4.5) with 4 plug-in connectors to the right-hand side of the car.

Connect the plug connector (l) to the cable set.

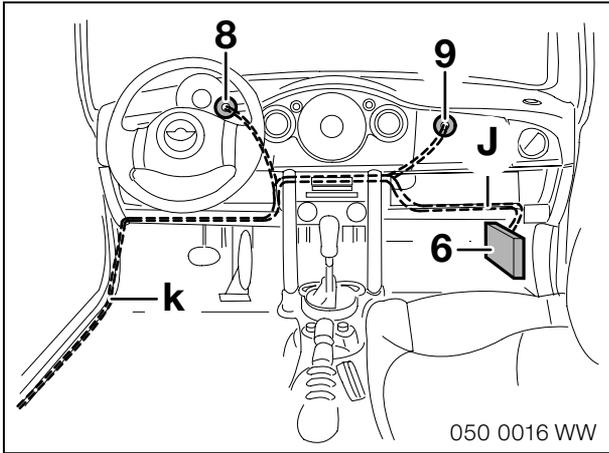
Connect the plug connectors (F, G and H) to the right tail light supply cable.

Connect the cable loom (2) plug connectors (D) and (E) to the left tail light supply cable (see wiring harness connection overview, section 4).



Lay the additional wiring harness (k) as shown along the existing wiring harness to the front underneath the instrument panel and secure it at suitable points with cable ties (s). Connect the earth connection (C) to the left earth point on the wheel arch.

6. To install the additional wiring harness in the MINI R50

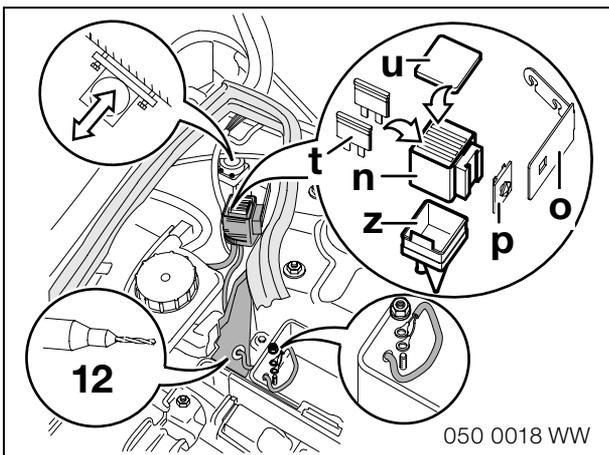
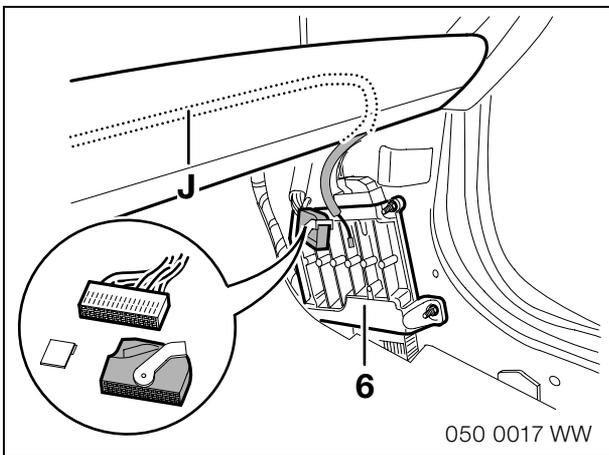


Lay the additional wiring harness (k) along the underside of the dashboard to the centre console and lay the cable (J) on to the light module (6) at the front right using a cable threading coil.

- ▶ On LHD cars thread the cable looms (K and L) through the existing cable passage grommet on the left (8) and lay it to the engine compartment to the fuse box (10). ◀
- ▶ On RHD cars thread the cable looms (K and L) through the existing cable passage grommet on the right (9) and lay it to the engine compartment to the fuse box (10). ◀

Tie back excess cable lengths at suitable points.

Connect the cable (J) laid to the light module (6) to the black plug (J4) in chamber 12.



- ▶ Drill a 12 mm hole in a suitable position in the plastic partition. ◀

Release the two mounting screws for the petrol pump emergency switch, place the holder for the fuse box (o) at the rear on to the mounting screws and tighten them again.

- ▶ Cars with additional headlights already have the fuse box (n), clip (p) and holder (o). ◀

Insert the cables from the additional wiring harness and the continuous positive connection cable through the cable grommet (z) into the fuse box (check assignment), lock the interior section, push in the clip (p) and secure it to the holder.

Lay the continuous positive cable through the 12 mm hole to the fuse box and connect it. Insert the grommet.

Insert the fuses (t) and fit the cover (u).

7. Function test



Refit all the parts following the instructions to dismantle them in reverse order. ◀



Fit the ball head as set out in the enclosed supplementary owner's manual and ensure that the head moves easily and is secure. ◀

Check the light signals on the trailer socket using a trailer or a tester with load resistors.

8. Circuit diagram for the MINI R50

Legend

A3	Light module BCU
A6	AHM trailer module
A	4-way fuse holder
E1	Left tail light
E2	Right tail light
E3	Reversing light
X	Earth

Cable colours

RT	Red
BL	Blue
GR	Grey
SW	Black
GN	Green
BR	Brown
GE	Yellow
WS	White
VIO	Violet