

Original MINI Accessories. Installation Instructions.



Gear Shift Indicator Retrofit

MINI ONE (R50)

MINI COOPER (R50)

MINI COOPER S (R53)

MINI COOPER Convertible (R52)

Retrofit kit No. 62 13 0 410 113
 62 13 0 410 114

Installation time

The installation time is 1.0 hour, but this may vary depending on the condition of the car and the equipment in it.

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), contact the following:

- 1. Either your national subsidiary or your regional office**
- 2. Support via the Aftersales Assistance Portal (ASAP) using the optional “Technical Parts Support” application.**

Specify the chassis number and the part number of the installed retrofit kit and give 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.

Installation information

All the figures show LHD cars, proceed in exactly the same way on RHD cars.

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.

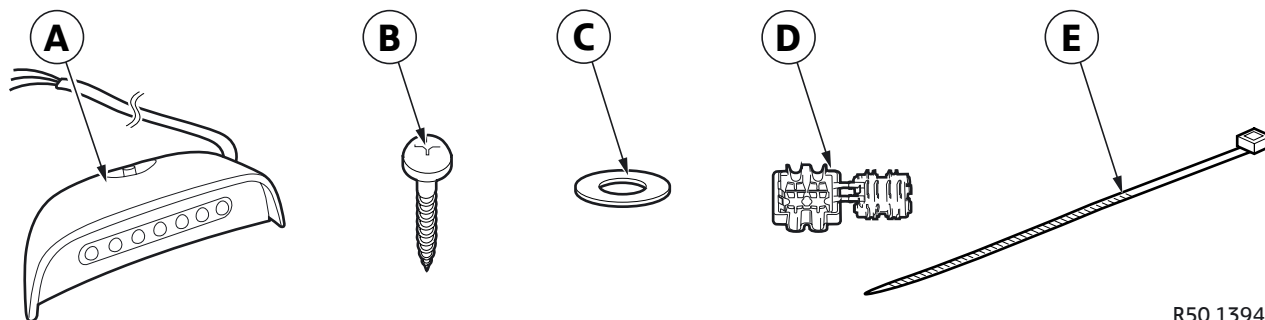
Special tools required

None

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1. Parts list



R50 1394 Z

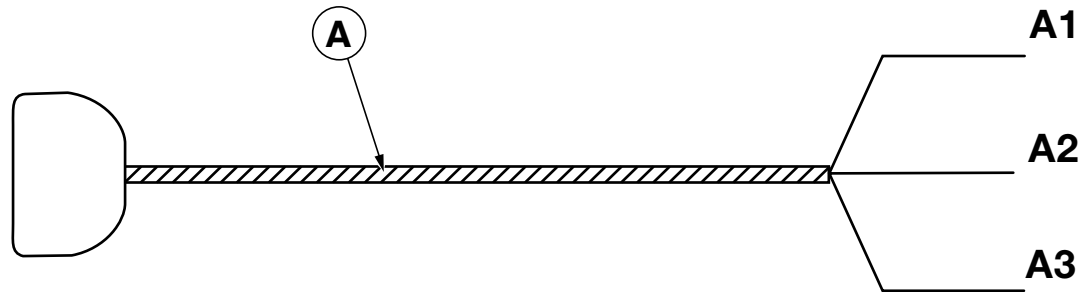
Legend

- A Gear shift indicator
- B Screw 2.9 x 19 mm (2x)
- C Washer (2x)
- D Miniature connector (3x)
- E Cable tie (5x)

2. Preparations

	TIS No.
Conduct a brief test	---
Disconnect negative pole of battery	12 00 ...
The following components must be removed first of all	
Oddments box in instrument panel trim on driver's side	51 16 392
For vehicles before 07/04 only, except for MINI Convertible	
Top instrument panel trim part	51 45 050
For vehicles after 07/04 and MINI Convertible only	
Central instrument panel decorative trim	51 45 060
Instrument carrier	62 21 ...

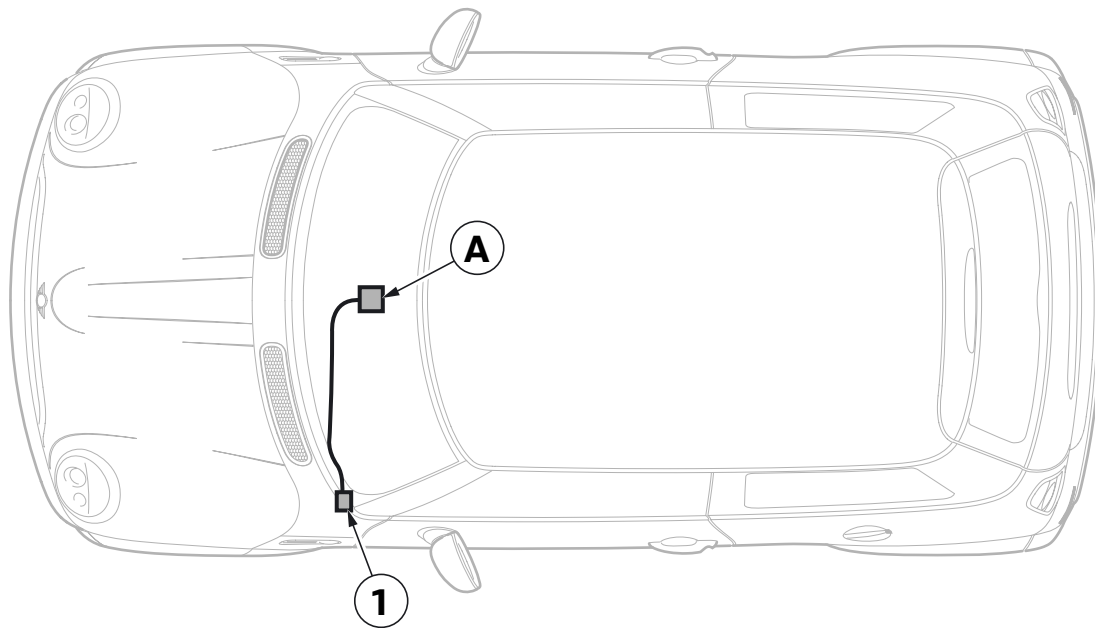
3. Connection diagram



R50 1401 Z

Item	Designation	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Gear shift indicator	---	---	---	---
A1	Cable end open	Terminal 15	GN 0.35 mm ²	With miniature connector D on green/blue cable on OBD socket	X19527 PIN 1
A2	Cable end open	Terminal 31	BR 0.35 mm ²	With miniature connector D on brown cable on OBD socket	X19527 PIN 4
A3	Cable end open	Engine speed	WS 0.35 mm ²	With miniature connector D on white/red cable on OBD socket	X19527 PIN 9

4. Installation and cabling diagram



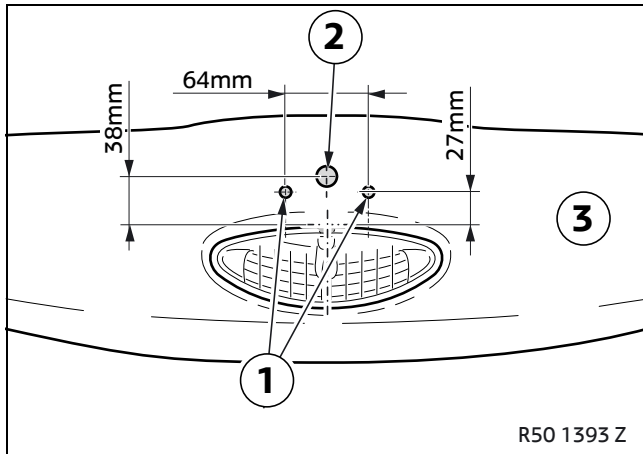
R50 1399 Z

Legend

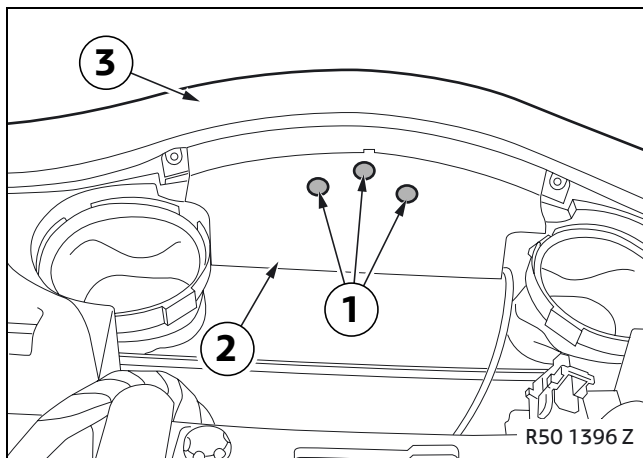
A Gear shift indicator

1 OBD socket, plug **X19527**

5. To install and connect the gear shift indicator



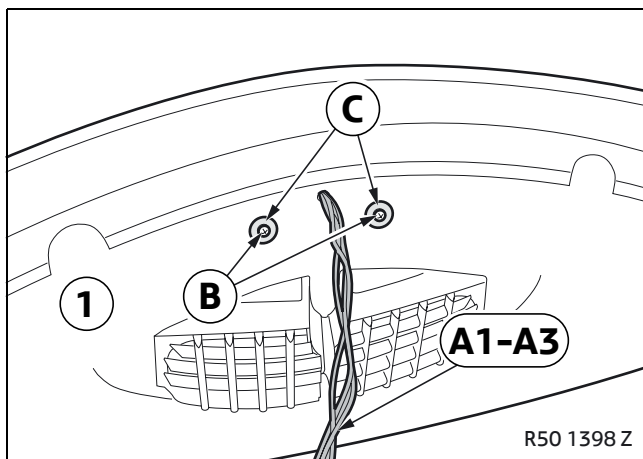
Mark the holes (1) 5.5 mm in diameter and the hole (2) 10 mm in diameter on the top instrument panel part (3) using the specified dimensions and drill them.



For vehicles after 07/04 and MINI Convertible only

! Use a depth stop to avoid drilling through the top instrument panel part (3). ◀

Drill out the holes (1) on the inside of the instrument panel (2) to 12 mm.

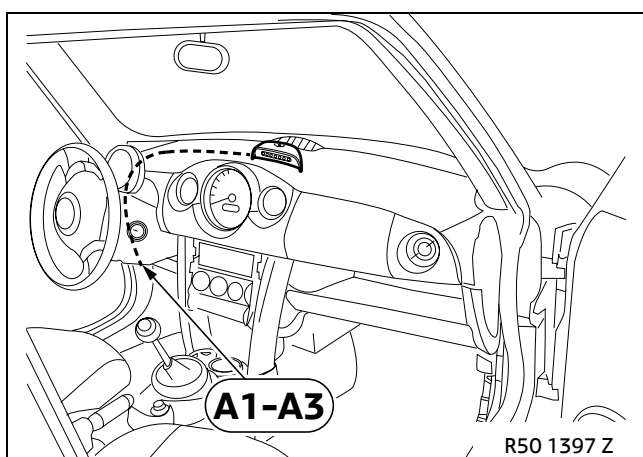


All cars

Set the engine type and maximum engine speed (see **DIP switch settings**, section 7).

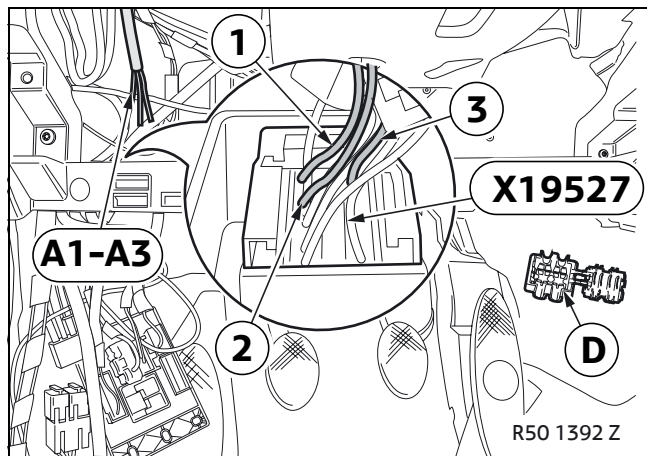
Thread branches **A1** to **A3** through the middle hole.

Align the gear shift indicator and use screws **B** and washers **C** to screw it onto the top instrument panel part (1).



Route branches **A1** to **A3** along the standard wiring harness to the OBD socket plug in the footwell on the left.

5. To install and connect the gear shift indicator



Connect branches **A1** to **A3** with miniature connectors **D** to the cables leading to the OBD socket **X19527** as follows.

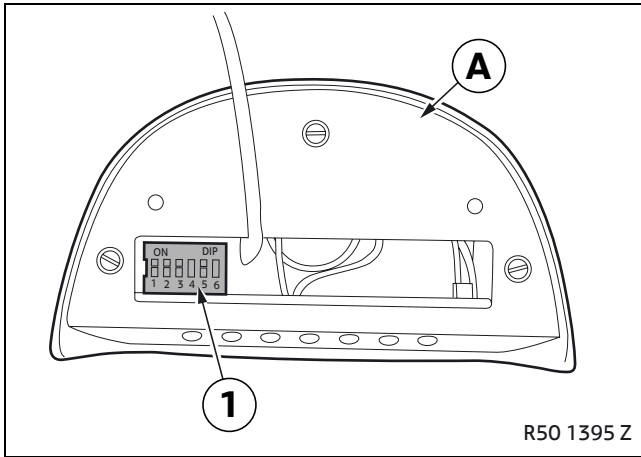
- Branch **A1**, green cable, to cable (1) on PIN 1, green/blue cable
- Branch **A2**, brown cable, to cable (2) on PIN 4, brown cable
- Branch **A3**, white cable, to cable (3) on PIN 9, white/red cable

6. Concluding work and coding

This retrofit system does not require coding.

- Connect the battery
- Conduct a brief test
- Conduct a function test
- Re-assemble the car
- Print out sections 7 and 8 give them to the customer.

7. DIP switch settings



The following settings can be made on the switch unit (1) of gear shift indicator **A**.

Recommended maximum engine revs:

MINI ONE	6500 rpm
MINI COOPER	6500 rpm
MINI COOPER S	6750 rpm
MINI Diesel	4250 rpm

Switches 1 and 2 (engine type)

DIP		Number of cylinders
■	■	4-cylinder
■	■	6-cylinder
■	■	8-cylinder
■	■	Test mode (for internal use only)

Switches 3 to 6 (maximum engine revs)

DIP				Engine revs (rpm)
■	■	■	■	3500
■	■	■	■	3750
■	■	■	■	4000
■	■	■	■	4250
■	■	■	■	4500
■	■	■	■	4750
■	■	■	■	5000
■	■	■	■	5250
■	■	■	■	5500
■	■	■	■	5750
■	■	■	■	6000
■	■	■	■	6250
■	■	■	■	6500
■	■	■	■	6750
■	■	■	■	7000
■	■	■	■	7250

8. Operation

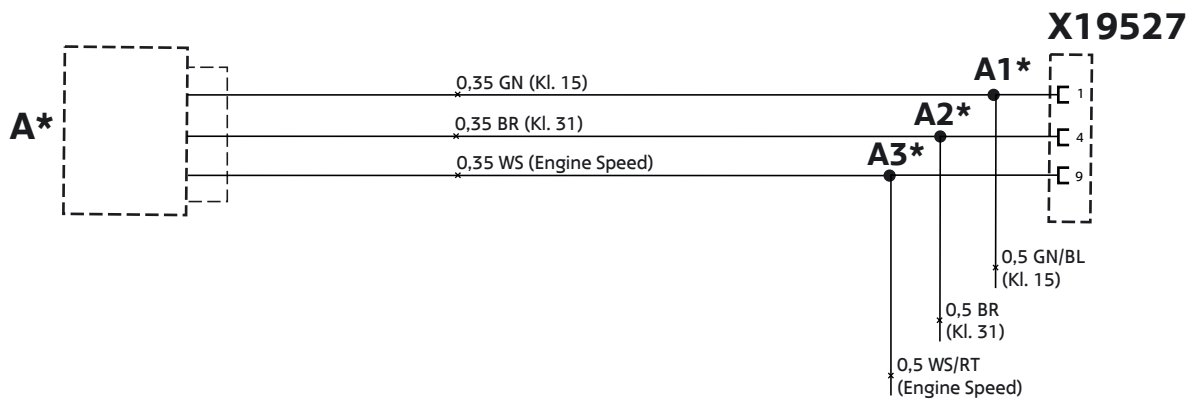
The gear shift indicator is switched on automatically when the ignition is switched on. It is ready to operate after a self-test (all diodes switch on one after the other).

The gear shift indicator can be deactivated at any time using the button on the top of the housing.

Switching thresholds

Status	Description	Engine revs
0	All off	Engine stopped
1	LED 1 on	0% to 55% of maximum engine revs
2	LEDs 1 and 2 on	55% to 70% of maximum engine revs
3	LEDs 1 to 3 on	70% to 80% of maximum engine revs
4	LEDs 1 to 4 on	80% to 85% of maximum engine revs
5	LEDs 1 to 5 on	85% to 90% of maximum engine revs
6	LEDs 1 to 6 on	90% to 95% of maximum engine revs
7	LEDs 1 to 7 on	95% to 100% of maximum engine revs
8	LEDs 1 to 7 flashing	100% of maximum engine revs

9. Circuit diagram



R50 1400 Z

Legend

- A* Gear shift indicator
- A1* Open cable, terminal 15 tap on plug **X19527**, black 16-pin
- A2* Open cable, terminal 31 tap on plug **X19527**, black 16-pin
- A3* Open cable, engine revs pick-up on plug **X19527**, black 16-pin

X19527 Black 16-pin plug

All the designations marked with an asterisk (*) apply only to these installation instructions or this circuit diagram.

Cable colours

- BL Blue
- BR Brown
- GN Green
- RT Red
- WS White