



Parts and Accessories Installation Instructions

John Cooper Works Tuning Kit MINI Cooper (R 50)

Retrofit kit - part number: 11 12 0 302 672.




Installation time:

The installation time of approx. 5.0 hours can vary depending on the condition and equipment of the vehicle.

Important information:

- This retrofit kit is not suitable for automatic transmission vehicles.
- These installation instructions are mainly intended for use in the MINI dealership network as well as by authorised MINI Service Centres. The target group of these installation instructions are technical personnel trained on MINI vehicles with corresponding technical know-how.
- The BMW AG shall accept no liability for any damage caused by disregard of the specified working steps and information provided. In addition inappropriate installation and handling deviating from the installation instructions shall invalidate warranty claims made against the BMW AG.
- All work is to be carried out with the aid of currently valid repair instructions, maintenance manuals and working instructions in rational order with the specified tools (special tools) while paying particular attention to valid safety regulations.
- Particular care must be taken when fitting cables/wiring to ensure that they are not bent, kinked or damaged.
- All illustrations show LHD vehicles, the same procedure is to be followed analogously on RHD vehicles.
- Item numbers refer only to the overview and texts next to the respective graphic.
- Subject to technical modifications.

Important information that must be observed after installing the John Cooper Works tuning kit and to which the customer's attention should be drawn:

-  It is recommended to use 98 RON (octane) fuel or fuel with the highest available octane number. (95 RON fuel 91 AKI minimum) ◀
-  The service and maintenance intervals are the same as for the standard Cooper (R 50). ◀
-  A John Cooper Works air cleaner element is used and should be fitted at each subsequent service and maintenance interval. ◀

**Running-in:**

Please pay attention to the following information in order to achieve the optimum service life and efficiency of your vehicle.

Engine:**For the first 2000 km:**

Drive at various engine speeds and road speeds. Do not exceed an engine speed of 4500 rpm and a road speed of 150 km/h.

After 2000 km:

Engine speed and road speed can be increased gradually.

Also observe the running-in instructions if it was necessary to replace the engine. ◀



- For explanations of pictographs see EBA-CD or ASAP (Aftersales Assistance Portal).
- Do not archive the printout of these installation instructions as daily updates are conducted through ASAP!

Required special tools:

See TIS No. 11 12 100

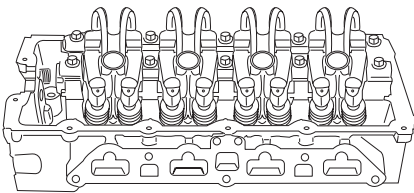
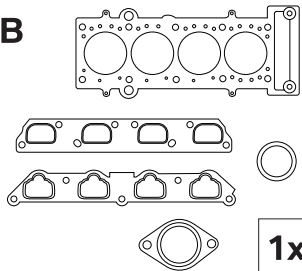
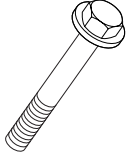
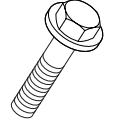
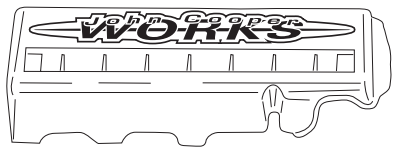
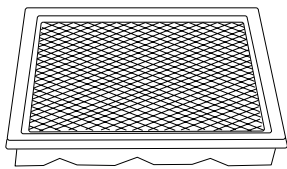
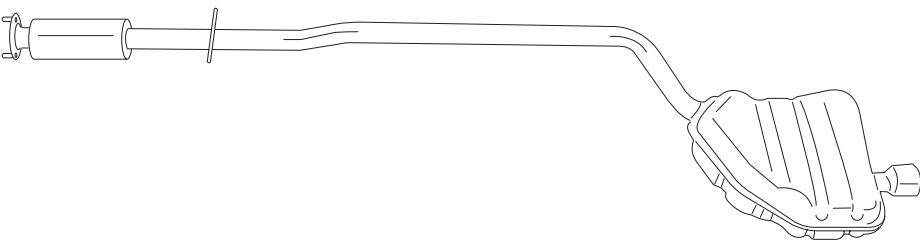
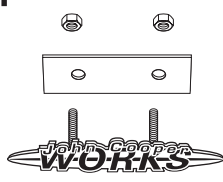

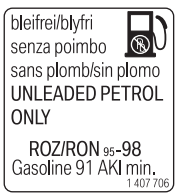
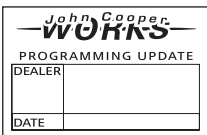

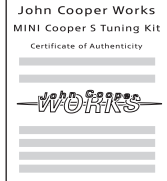

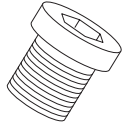


- 00 9 120
- 11 8 200
- 11 8 250
- 11 8 370
- 13 5 280
- 33 2 140

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1. Parts overview

<p>A</p>  <p>1x</p>	<p>B</p>  <p>1x</p>	<p>C</p>  <p>M10 x 150 mm 10x</p>	<p>D</p>  <p>M8 x 45 mm 2x</p>
<p>E</p>  <p>1x</p>	<p>F</p>  <p>1x</p>		
<p>G</p>  <p>1x</p>			
<p>H</p>  <p>2x</p>	<p>I</p>  <p>1x</p>	<p>J</p>  <p>1x</p>	
<p>K</p>  <p>1x</p>	<p>L</p>  <p>1x</p>	<p>M</p>  <p>2x</p>	
<p>N</p>  <p>1x</p>	<p>O</p>  <p>1x</p>	<p>050 0404 B</p>	

1. Parts Overview

Key

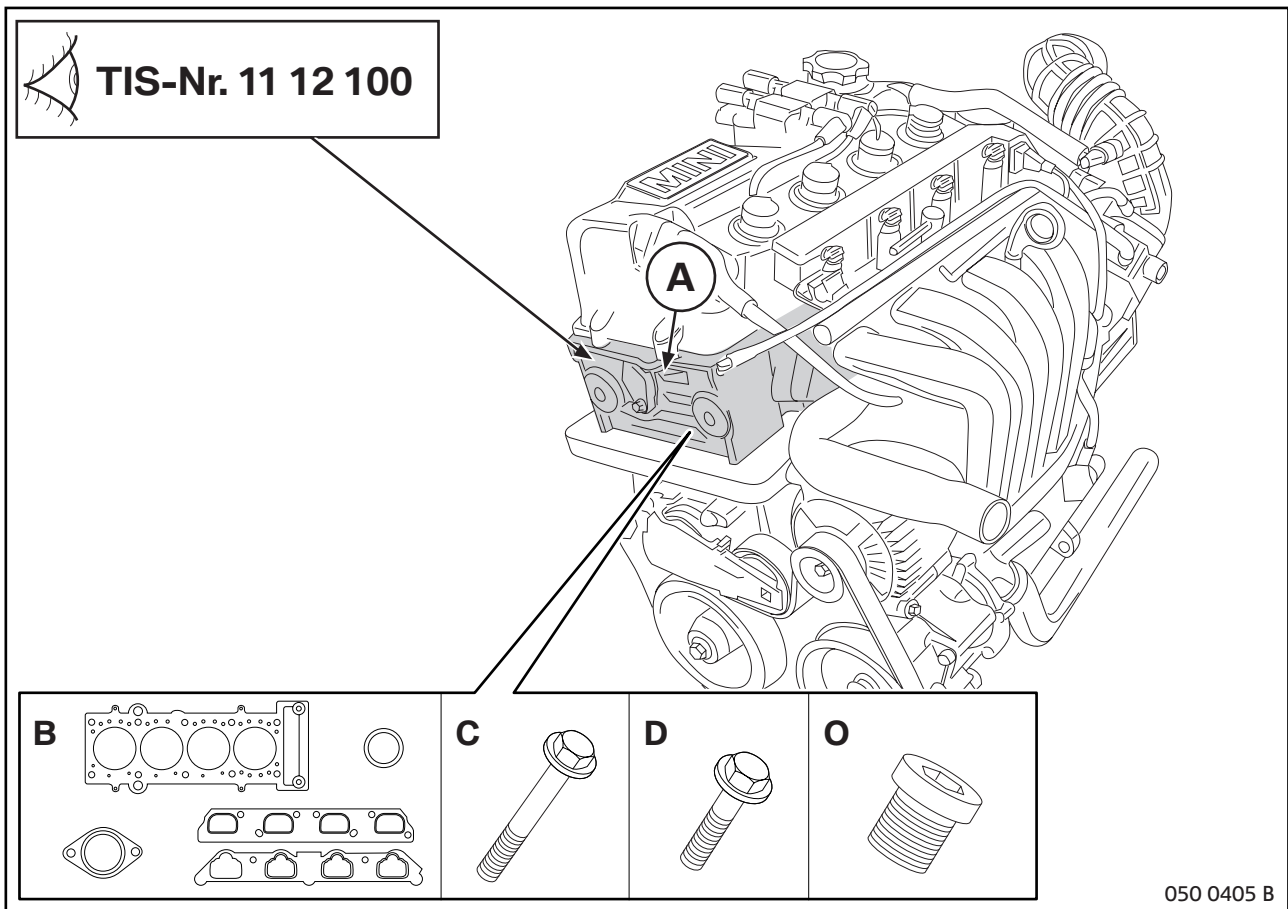
- A Supercharger
- B Set of gaskets consisting of:
 - Exhaust manifold gasket
 - Gasket between catalytic converter and intermediate silencer
 - Intake manifold gasket
 - O-ring for water pump
 - Cylinder head gasket (0.65 mm)
- C Cylinder head bolt (M10 x 150 mm)
- D Hexagon bolt with washer (M8 x 45 mm)
- E Valve cover
- F Air cleaner
- G Sports exhaust
- H John Cooper Works emblem for turn signal repeater trim
- I John Cooper Works emblem for rear hatch
- J Sticker for fuel filler cap
- K Sticker for engine control unit
- L John Cooper Works emblem for valve cover
- M John Cooper Works "Certificate of Authenticity"
- N Workshop certificate
- O Screw plug with seal

2. Preparation

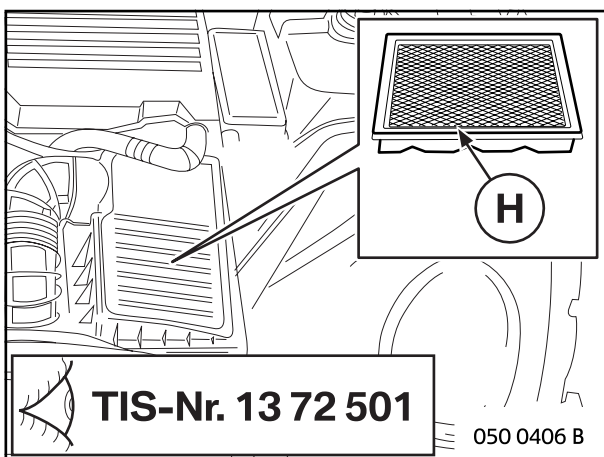
	TIS No.
Read out fault code memories	---
Disconnect battery	12 00 ...

3. Installing John Cooper Works tuning kit

3.1 Installing cylinder head and air cleaner of John Cooper Works tuning kit



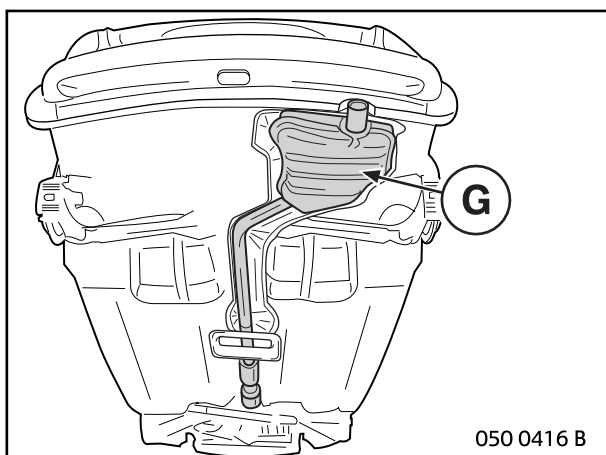
- ▶ Particular care must be taken when installing the John Cooper Works cylinder head **A** to ensure the spark plugs from the old, removed standard cylinder head are reused. ◀
- ▶ When installing the John Cooper Works cylinder head **A**, the parts: set of gaskets **B**, cylinder head bolt **C**, cylinder head bolt **D** and screw plug with seal **O** must be fitted as illustrated in **3.1.** ◀



Remove standard air cleaner element and replace by John Cooper Works air cleaner element **H**.

3. Installing John Cooper Works tuning kit

3.2 Installing John Cooper Works exhaust system



Completely remove the standard exhaust system

TIS No. 18 00 520

Install the John Cooper Works exhaust system **G** accordingly.

3. Installing John Cooper Works tuning kit

3.3 Programming and encoding engine control unit ECU (DME or EMS2K)



A DISplus or GT1 is necessary to program the engine control unit (DME). The John Cooper Works data is provided on the CDs as from the 1st update CD32. Make sure that a battery charger is connected and there is a hard-wired connection between the wireless head and tester.

Prior to programming, carry out a quick test and make sure there are no defects in the DME. ◀

1. As the tester is already connected, you can directly select "Encoding/Programming".
2. Select option "5. DME Programming" in the "Encoding/Programming" menu.
3. Select "3. DME Programming".
4. Select "2. Replace Control Unit".
5. Select "1. Determine Control Unit".
6. The question as to whether the original DME is still installed in the vehicle now appears. Answer this question with "NO".
7. Enter the "control unit number" of the DME (e.g. 7520019) via the user-prompted interface of the tester.
8. Enter the complete vehicle identification number (17 characters from the DME identification page).
9. Enter the assembly number (programmed control module number) for the John Cooper Works tuning kit (**Europe: 7 528 430, Japan: 7 528 432; North America: 7 530 834**).
10. Ignore the list of alternative numbers. The definition stage is now completed and all necessary data have been saved in the tester. Now press the arrow keys to exit this section.
11. Select "2. Program Basic Control Unit".
12. Enter the last 7 characters (2 letters, 5 digits) of the vehicle identification number in order to identify the correct data.
13. The message indicating that programming may take 4 – 12 minutes now appears. Press arrow keys to continue.
14. Enter the current kilometre reading of the car.
15. Start the automatic programming procedure.
16. After programming, the tester will automatically set the DME to the electronic vehicle immobilizer (EWS).



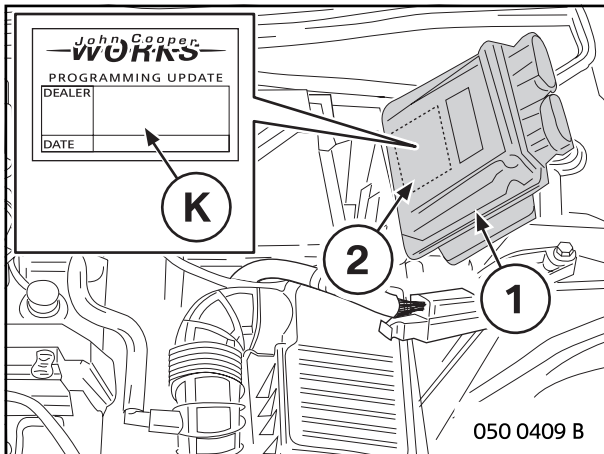
If the system informs you at this point that the EWS control unit requires encoding, proceed as described in the following.

- A. Turn terminal 15 to OFF and disconnect the battery for 3 minutes.
- B. Reconnect the battery and turn terminal 15 to ON. ◀

17. Select ZCS/FA encoding.
18. Select "New Coding" followed by "Motronic" and carry out renewed encoding of the Motronic (DME). In this way, the systems (e.g. air conditioning) installed in the vehicle are identified so that they can be controlled via the DME.
19. After the prompt to do so, turn off the ignition and wait until the specified time interval has elapsed. Restart the car.
20. Now perform a quick test and clear the fault codes logged as the result of the programming procedure.
21. Affix a new label on the DME to identify the John Cooper Works update.
22. Finally check whether all systems such as the air conditioning for instance and the cruise control (Tempomat) if fitted are fully operational.

3. Installing John Cooper Works tuning kit

3.4 Affixing sticker on engine control unit ECU (DME or EMS2K)

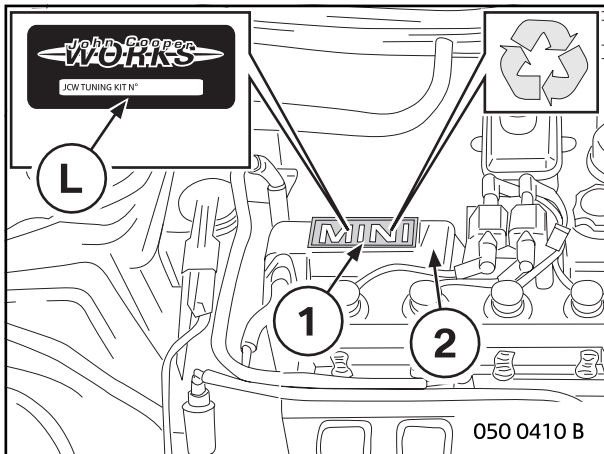


Enter the dealer's name, date and software status before affixing the sticker **K** on the engine control unit (1).

Use benzene to clean the adhesion surface (2). Affix sticker **K** and install engine control unit (1).

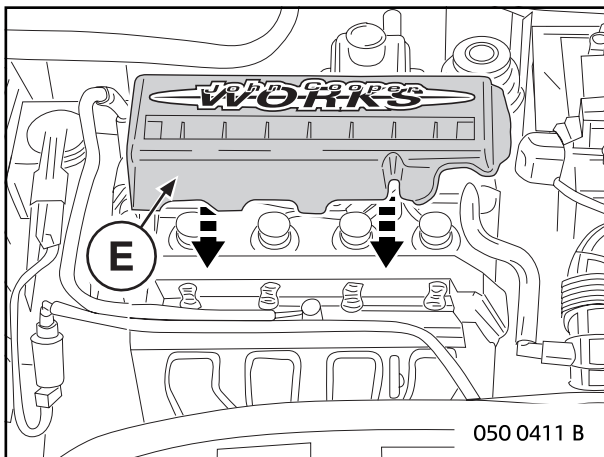
4. Attaching John Cooper Works emblems, stickers and injection pipe cover

4.1 Attaching John Cooper Works emblem on valve cover



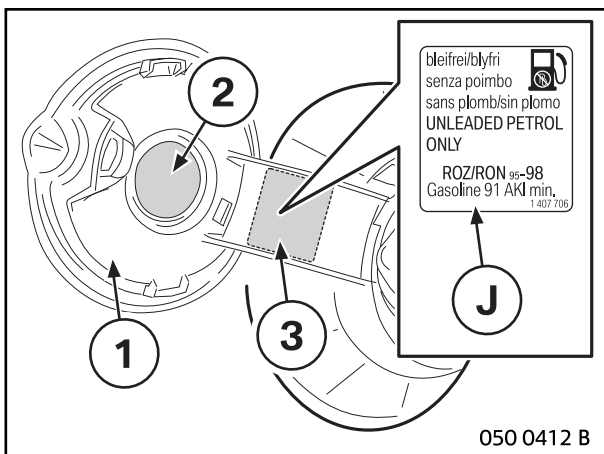
Remove original MINI emblem (1) from valve cover (2) and clean adhesion area with benzine.
Attach John Cooper Works emblem L to valve cover.

4.2 Installing John Cooper Works injection pipe cover



The John Cooper Works injection pipe cover E is to be fitted instead of the standard cover.

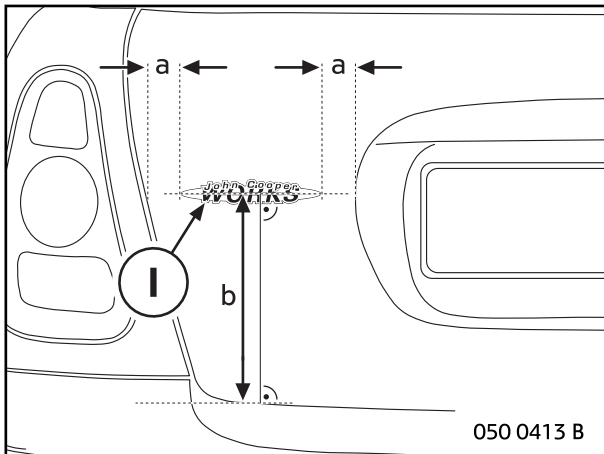
4.3 Affixing John Cooper Works sticker on fuel filler cap



Remove the existing sticker (2) from the fuel filler cap (1). Clean the adhesion surface (3) with benzine.
Affix sticker J to marked area (3).

4. Attaching John Cooper Works emblems, stickers and injection pipe cover

4.4 Attaching John Cooper Works emblem on hatch



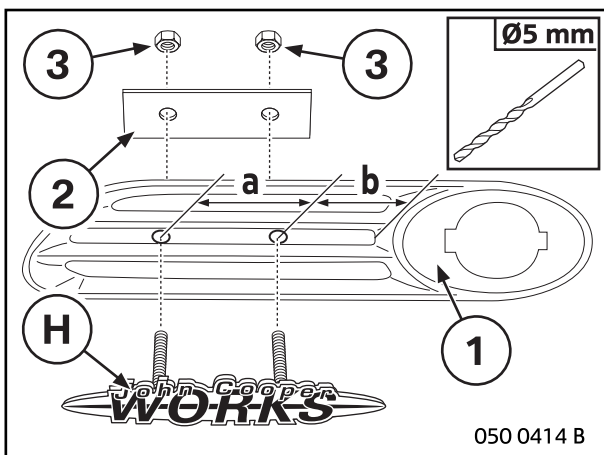
Adhere the double-sided adhesive tape to the back of the John Cooper Works emblem **I**. Use benzine to clean the adhesion surface. Determine the position of the John Cooper Works emblem between the hatch and licence plate mounting.

If the model name "Cooper" is fitted, the level of the John Cooper Works emblem should be aligned accordingly.

a = 50 mm

b = 210 mm

4.5 Attaching John Cooper Works emblem to cover for turn signal repeater

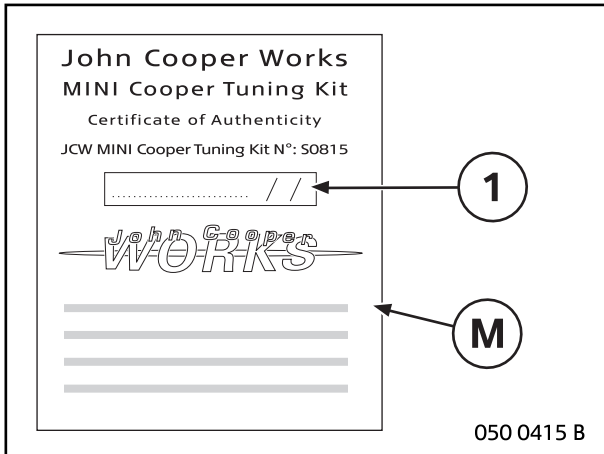


Use a 5 mm Ø drill to make holes in the cover of the turn signal repeater (1). Now fit the John Cooper Works emblem **H** together with the plate (2) and hexagon nuts (3).

a = 45 mm

b = 30 mm

5. John Cooper Works "Certificate of Authenticity"



The BMW AG must be notified of the conversion with the John Cooper Works tuning kit. Disregard of this requirement shall invalidate warranty claims against the BMW AG. ◀

Enter the last seven digits of the vehicle identification number, the kilometre reading (mileage) and date in the box marked with (1).

One of the two certificates **M** should then be sent to the BMW AG.

For further details please contact the parts manager of your national BMW subsidiary.



The other certificate **M** should be handed over to the customer. ◀

6. Workshop certificate

The image shows a workshop certificate form with the following content:

Werkstatt-Bescheinigung

Hiermit wird bescheinigt, dass an dem nachfolgend genannten Fahrzeug der John Cooper Works Tuningkit (TI 12 B 302 673) komplett verbaut wurde. In einzelnen wurden folgende Komponenten umgesetzt:

1. Steuertag mit Softwarezustand JCW
2. Kompressor (1 60 0 30 344)
3. Luftschlauch JCW (34020)
4. Endschlehdrehmomte JCW (030 187473)
5. Zahnkranz Nockenregler

Fahrzeugtyp: MINI Cooper S (R53)
Fahrzeugkennzeichen:
Fahrzeughalter (Name u. Anschrift):

Ort, Datum:

Unterschrift der verantwortlichen Person:
Kfz-Betrieb (Stempel):

Annotations:

- N**: Points to the logo at the top of the certificate.
- 1**: Points to the vehicle type and registration information.
- 2**: Points to the signature and stamp area.

050 0426 B

Enter the last seven digits of the vehicle identification number, the name and address of the vehicle owner in the box marked (1).

Enter the place, date and signature of the installer, company name and stamp of the specialist workshop in the box marked (2).



The workshop certificate **N** should be presented together with the certificate of the registration authority. ◀

7. Concluding operations

Reconnect all connectors and plug connections.
Reassemble vehicle in reverse order of removal.



Werkstatt-Bescheinigung

Hiermit wird bestätigt, dass an dem nachfolgend genannten Fahrzeug der John Cooper Works Tuning Kit (11 12 0 302 672) komplett verbaut wurde.

Im Einzelnen wurden folgende Komponenten umgerüstet:

1. Steuergerät mit Softwarestand JCW
2. Zylinderkopf JCW (RA051)
3. Endschalldämpfer JCW (0 146 227)
4. Luftfiltereinsatz JCW (13 72 0 300 810)

Fahrzeugtyp: MINI Cooper (R50)

Fahrzeug-Ident.-Nr.: _____

Fahrzeughalter: Name und Anschrift: _____

Datum, Ort

Unterschrift der verantwortlichen Person

KFZ-Betrieb
(Firmenstempel)

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