John Cooper Works Tuning.
Installation Instructions.

Retrofit Tuning Kit
MINI Cooper S (R56)

Retrofit kit no.: 11 12 0 434 320 John Cooper Works Tuning Kit ECE
11 12 0 434 321 John Cooper Works Tuning Kit US

Installation time
The installation time of:
- **approx. 4 hours** for ECE vehicles
- **approx. 2 hours** for SAE vehicles
may vary depending on the condition of the car and the equipment in it.

The vehicle must be updated to the latest I-level status by flashing before installing the retrofit. Different programming times are necessary depending on the age of the vehicle and the work already performed on the vehicle so that no time requirements can be specified here. The installation time does not include the time required for programming/encoding which depends on the age of the vehicle and the equipment in it.

Important information
These installation instructions are primarily designed for use within the MINI dealership organisation as well as 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.

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.

In the event of installation or functional problems, **limit troubleshooting session to 0.5 hours for mechanical jobs and 1.0 hour for electrical jobs**.

To avoid unnecessary extra work and costs, send a corresponding enquiry via the Aftersales Assistance Portal (ASAP) using the technical parts support application.

Please quote the following:
- vehicle identification number,
- part number of the retrofit kit,
- exact description of the problem,
- work already carried out.

Do not archive the hard copy of these installation instructions since daily updates are made by ASAP!

All pictures show LHD cars; proceed accordingly on RHD cars.
Pictograms

Denotes instructions that draw your attention to special features.

Denotes the end of the instruction or other text.

Installation Information

If the spark plugs were last changed 10,000 km ago at the time the John Cooper Works tuning kit is installed, the spark plugs should be changed in addition as part of the tuning kit installation (for part number and designation of spark plugs, refer to the electronic parts catalogue).

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

The spark plugs must be replaced at each oil change after installation of the John Cooper Works tuning kit.

Special tools required

00 2 270, Locating device
17 2 050, Set of pliers
00 9 322, Installation wedge
11 7 020, SW 22 socket wrench insert
00 2 210, Exhaust pipe cutter
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parts overview</td>
<td>4</td>
</tr>
<tr>
<td>2. Parts overview (additionally for ECE vehicles)</td>
<td>5</td>
</tr>
<tr>
<td>3. Preparatory work</td>
<td>6</td>
</tr>
<tr>
<td>4. Installing John Cooper Works Tuning Kit</td>
<td>7</td>
</tr>
<tr>
<td>4.1 Installing exhaust</td>
<td>7</td>
</tr>
<tr>
<td>4.2 Installing air filter</td>
<td>9</td>
</tr>
<tr>
<td>4.3 Installing emblems</td>
<td>11</td>
</tr>
<tr>
<td>4.4 Affixing label</td>
<td>12</td>
</tr>
<tr>
<td>4.5 Programming and coding the Digital Motor Electronics (DME)</td>
<td>13</td>
</tr>
<tr>
<td>5. Workshop certificate</td>
<td>14</td>
</tr>
<tr>
<td>6. Concluding work</td>
<td>15</td>
</tr>
<tr>
<td>7. Workshop certificate form</td>
<td>16</td>
</tr>
</tbody>
</table>
1. Parts overview

Legend

A Exhaust
B Exhaust embellisher (2x)
C Air filter
D Air filter seal
E Emblem, front
F Emblem, rear
G Type plate holder
H Type plate
I Stud
AA Clip
AB Hose clip, air filter
AC Control unit label
AD CD with activation code
AE Service sticker
2. Parts overview (additionally for ECE vehicles)

Legend

J Screw, connecting piece (2x)  
K Exhaust manifold  
L Bellows  
M Connecting piece  
N Hose clip, bellows  
O Heat shield  
P Seal, turbocharger  
Q Seal  
R Gasket  
S Hexagon nut (3x)
# 3. Preparatory work

<table>
<thead>
<tr>
<th>Conduct a brief test</th>
<th>TIS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnect the negative terminal of the battery</td>
<td>12 00 ...</td>
</tr>
</tbody>
</table>

**The following components must be removed beforehand on ECE vehicles**

<table>
<thead>
<tr>
<th>Component</th>
<th>TIS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor sensor</td>
<td>11 78 545</td>
</tr>
<tr>
<td>Control sensor</td>
<td>11 78 510</td>
</tr>
<tr>
<td>Wheel arch trim, front</td>
<td>51 13 102</td>
</tr>
<tr>
<td>Bumper panel trim</td>
<td>51 11 164</td>
</tr>
<tr>
<td>Trim cover on front grille</td>
<td>51 13 003</td>
</tr>
<tr>
<td>Set front panel in assembly position</td>
<td>41 33 600</td>
</tr>
<tr>
<td>Exhaust catalytic converter</td>
<td>18 32 005</td>
</tr>
<tr>
<td>Coolant expansion tank</td>
<td>17 11 100</td>
</tr>
<tr>
<td>Exhaust manifold</td>
<td>18 40 040</td>
</tr>
</tbody>
</table>
4. Installing John Cooper Works Tuning Kit

4.1 Installing exhaust

**Only on ECE vehicles:**
Secure turbocharger with seal P to exhaust manifold K as per TIS No. 18 40 040.
Install exhaust manifold K together with heat shield O as per TIS No. 18 40 040.
Now install existing exhaust catalytic converter with seal R and nuts S as per TIS No. 18 32 005.

**For all vehicles:**
The cutting point (1) for the rear silencer is marked with a notch on the pipe.
Use special tool (00 2 210) to cut exhaust pipe (2) at the marked point and deburr.

Secure pipe (1) of exhaust A with clip AA to primary silencer (2) and tighten to 55 Nm +/- 5 Nm.
Mount exhaust A in the rubber mounts as per TIS No. 18 12 030.
4. Installing John Cooper Works Tuning Kit

4.1 Installing exhaust

Centre the exhaust embellisher B and align parallel. The exhaust pipe embellisher B must not protrude beyond the section of body above them. Install exhaust pipe embellisher B flush with the section of body above them. 

Fit exhaust pipe embellisher B onto pipe (1) of exhaust A and firmly tighten.
4. Installing John Cooper Works Tuning Kit

4.2 Installing air filter

Remove the upper section of air filter housing (1) and remove filter element (2). The bottom section of the air filter housing (3) remains in the vehicle.

- The upper section of the air filter housing (1) and filter element (2) are no longer required.

Fit seal D on bottom section of air filter housing (1).

Fit air filter C on bottom of housing and secure as per TIS No. 13 71 000.
4. Installing John Cooper Works Tuning Kit

4.2 Installing air filter

Only on ECE vehicles:
Fit seal Q onto connecting piece M.
Fit connecting piece M into air filter C and secure with screws J.

Remove the connector (1) from the connection between bellows L and hose (2) and replace by the connecting piece (3) originally installed in the vehicle.

Secure bellows L with hose clip N to the intake connection piece and hose clip AB on air filter C.
Connect hose (1) to cylinder head cover (2).

Only on SAE vehicles:
Secure existing bellows to air filter C with hose clip AB.
4. Installing John Cooper Works Tuning Kit

4.3 Installing emblems

Insert front emblem E through the fourth column in the grille as illustrated. Secure emblem E from behind with the plate, snap rings and nuts.

Adhere the double-sided adhesive tape to the back of rear emblem F. Use benzene to clean the adhesion surface. Align rear emblem F in position between the edge of the rear hatch and the recess for the number plate. If the "Cooper S" model badge is mounted, align and adhere rear emblem F on the same level.

a = 35 mm
b = 235 mm

Remove the protective film from the adhesive tape on the back of type plate holder G. There is a hole in the cylinder head cover (2) in the middle between the ignition leads (1). Secure the type plate holder G in this hole with stud I and press down.

Peel the protective film off the adhesive tape of type plate H and adhere type plate H in holder G.
4. Installing John Cooper Works Tuning Kit

4.4 Affixing label

Remove the engine control unit (1) according to TIS number 12 14 550. Do not unplug the cables. Enter the dealer’s name, date and software release before affixing sticker AC on the engine control unit (1). Use benzene to clean the adhesion surface (2). Affix sticker AC and install engine control unit (1) as per TIS number 12 14 550.

Use benzene to clean the adhesion surface (1) between the ignition cables (2) with petrol. Affix service sticker AE onto the cylinder head cover (3) centrally between the ignition cables (2).
4. Installing John Cooper Works Tuning Kit

4.5 Programming and coding the Digital Motor Electronics (DME)

A Software Service Station (SSS) is required for programming and coding the Digital Motor Electronics (DME).

John Cooper Works data are provided on Progman DVDs as of Version 26.0. Make sure that the battery is connected and charged, and that a battery charger is connected in the FSV mode. Make sure a connection is established between OP(P)S and SSS. Prior to programming, carry out a short test to make sure that the DME is working correctly.

Procedure

1. Start a Progman session, select the required interface (OP(P)S) and press "Next" to confirm selection.
2. Enter a unique name in the "Designation" box of the session and press "Next".
3. Select the model series R56 under MINI. Messages appear indicating that the session has started and the vehicle data are being determined.
4. Select "Load SW" and answer the question as to whether the control units have been replaced with "No".
5. If a routine for updating the vehicle software appears, completely work through this routine first. Follow the on-screen instructions. Then repeat points 1 to 4.
6. Select the "Modification" menu item in the navigation bar.
7. A submenu will appear. Select "JCW Tuning Kit".
8. Confirm the determined routine and the estimated execution time and follow the on-screen instructions. The DME will be programmed as part of the routine. If the code is requested in the instructions, insert the Tuning Kit CD supplied with activation code "AD" into the SSS.
9. A final report appears on completion of the routine. Other than undeletable fault code entries, this report should contain no error messages. If errors occurred, follow the instructions in the Progman user documentation.
10. Turn off the ignition, wait 15 seconds and switch on the ignition again.
11. Now check whether all systems are functioning correctly.

Reset in the same order as installation.
5. Workshop certificate

The workshop certificate (1) is an integral part of the installation instructions (see chapter 7, Form for workshop certificate).

Enter the last seven digits of the vehicle identification number plus the name and address of the vehicle owner in the box marked (2).

Enter the location, date and signature of the installer, company name and stamp of the specialist workshop in the box marked (3).

The workshop certificate (1) should be presented together with the certificate to the registration authority.
6. Concluding work

- Conduct a brief test
- Conduct a function test
- Reassemble the vehicle
Workshop certificate

This certificate confirms that the John Cooper Works Tuning Kit (11 12 0 434 320 or 11 12 0 434 321) has been installed in full on the vehicle specified below.

The following components have been modified:
1. Rear silencer
2. Air filter housing with filter element
3. Exhaust manifold (only for ECE vehicles)

Vehicle type: MINI Cooper S (R 56)

Vehicle ident. no.: _____________________________________________________________

Vehicle owner: Name and address: ________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Place, date

__________________________
Signature of the person responsible