Installation kit for roof rack
MINI One, Cooper (R 50); MINI Cooper S (R 53)

The installation time is approx. 1.5 hours, which may vary depending on the condition of the car and the equipment in it.

Retrofit / Installation kit No. 82 79 0 136 426
82 79 0 139 366
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important information</td>
<td>3</td>
</tr>
<tr>
<td>1. Parts list</td>
<td>4</td>
</tr>
<tr>
<td>2. To affix the templates on to the exterior roof skin</td>
<td>5</td>
</tr>
<tr>
<td>3. To drill the holes</td>
<td>7</td>
</tr>
<tr>
<td>4. To install the stud bolts</td>
<td>9</td>
</tr>
<tr>
<td>5. To install the cover caps</td>
<td>11</td>
</tr>
</tbody>
</table>
**Important information**

The retrofit kit is for use within the MINI dealership organisation only.

**Target group**

The target group for these installation instructions is specialist staff trained on MINI cars. All servicing, repair, installation and adjustment work on cars is completed at your own risk.

All work is to be carried out using current MINI
- Repair manuals (see Technical Information System),
- Servicing handbooks,
- Work instructions,
in a rational sequence with the prescribed tools (special tools) and taking into account the relevant health and safety regulations.

**Safety instructions**

⚠ Keep to the specific tightening torque values for screw connections.

The roof rack must not be loaded for 12 hours after fitting the stud bolt.

**Drilling instructions**

Coat twist drills with grease before drilling the holes to prevent drill chips falling into the body cavities. Remove drill chips carefully, deburr holes and treat them with the usual MINI anti-corrosion coatings.

**Installation information**

The work on the car is only shown on one side. The work on the other side of the car is to be carried out in exactly the same way.

**Abbreviations**

HL / VL = Rear left / Front left
HR / VR = Rear right / Front right

**Tools required**

- Scissors
- Adhesive tape
- Tape measure
- Hammer
- Centrepunch
- Drill and 3 mm and 6 mm twist drill bits
- Step drill or peel drill up to 10 mm
- Deburring tool
- Zinc powder paint
- Flat screwdriver
- 8 mm Allen key
- Torque wrench
- Feeler gauge
- Plug gauge (Part No. 82 79 0 140 429)
- Cylindrical keyhole saw (Part No. 83 31 0 141 898)
- Adhesive and sealing compound (Part No. 81 22 9 407 526)
- Glass primer (Part No. 83 19 9 407 902)
1. Parts list

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Template VL</td>
<td>1</td>
</tr>
<tr>
<td>b</td>
<td>Template VR</td>
<td>1</td>
</tr>
<tr>
<td>c</td>
<td>Template HL</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>Template HR</td>
<td>1</td>
</tr>
<tr>
<td>e</td>
<td>Stud bolt</td>
<td>8</td>
</tr>
<tr>
<td>f</td>
<td>Cover caps (can be finished in body colour)</td>
<td>4</td>
</tr>
<tr>
<td>g</td>
<td>Spacer washers 0.5 mm</td>
<td>16</td>
</tr>
<tr>
<td>h</td>
<td>Spacer washers 1 mm</td>
<td>16</td>
</tr>
<tr>
<td>i</td>
<td>Centring bolt</td>
<td>1</td>
</tr>
</tbody>
</table>
2. To affix the templates on to the exterior roof skin

*Only use the templates from the original installation kit, in other words do not use copies.*

Cut out the VL, VR, HL and HR templates **precisely** along the marked lines.

Place the cut edge (A) of template HL on the roof strip (1) at the rear left of the roof.
Place cut edge (B) flush with the rear roof edge.
Secure the template with adhesive tape.

Affix template HR in the same way on the right-hand side of the roof.

Check that the distance between the HL and HR templates is **C = 996 mm**.
If this is not the distance between the two templates, correct the two templates uniformly sideways relative to the roof strips.

The templates must be affixed precisely symmetrically on the roof.

When the templates are positioned precisely, secure them with adhesive tape.

Place template VL at the marked distance **D = 715 mm** from template HL with the cut edge (A) on the roof strip (1) at the front left of the car.
Secure the template with adhesive tape.
Affix template VR in the same way on the right-hand side of the roof at the front.
2. To affix the templates on to the exterior roof skin

Check that the distance between the VL and VR templates is \( E = 997 \, \text{mm} \).
If this is not the distance between the two templates, correct the two templates uniformly sideways relative to the roof strips.

The templates must be affixed precisely symmetrically on the roof.

Check all the dimensions again.
When the templates are positioned precisely, secure them with adhesive tape.
3. To drill the holes

There is a total of eight threads M10 to take the stud bolts (e) in the side frame of the car under the exterior roof skin. The distance between the threads and the exterior roof skin is approx. 10 mm.

You must drill eight holes with a diameter of 15 mm in the exterior roof skin. The holes must be precisely central to the threads in the side frame.

To ensure that you do not damage the threads in the side frame the penetration depth of all the tools you use must not exceed 10 mm.

The 15 mm diameter of the holes must not be exceeded by more than 1 mm since otherwise the car roof may leak.

When you centrepunch, drill and deburr the holes, only press gently on the roof to prevent deformations in the exterior roof skin.

Gently centrepunch all eight holes through the templates. Remove the templates. Mask the working area to protect it.

When drilling neighbouring holes always drill one hole first until the position of the thread is visible. If the position of the thread has not been reached precisely with the template the position of the centrepunch mark for the second hole may be corrected if necessary.

The distance between the pairs of holes is precisely 90 mm.

Predrill the holes with a diameter of 3 mm.

Then check by hand with the drill bit whether the thread is below the hole. Insert the drill bit (1) into the exterior roof skin (2) vertically through the hole. It must be possible to insert the drill bit at least 20 mm into the hole. Otherwise locate the thread (3) in the side frame with the drill bit, centrepunch it again and predrill it.

Enlarge the hole to 6 mm.

The thread can be seen through the hole. Check whether the thread is located precisely centrally below the hole.

If the thread is not precisely central under the hole the hole must be carefully reworked with a round file until it is precisely central over the hole.

If necessary correct the centrepunch marking for the neighbouring hole in the same direction.
3. To drill the holes

Enlarge the hole (1) to 10 mm using a step drill or peeling drill bit.

- If the centring bolt (i) cannot be inserted easily and fully into the thread in the side frame the hole must be reworked.

Screw the centring bolt (i) into the thread in the side frame. Tighten it gently.

- The centring bolt (i) guides the cylindrical keyhole saw to ensure that the hole is precisely central and not too large.

- Only press the cylindrical keyhole saw gently to prevent deformations in the exterior roof skin.

Place the cylindrical keyhole saw (1) on the centring bolt (i) and drill the hole.

Deburr the edges of the hole.

- The stud bolts (e) have a micro-encapsulated screw locking device. This screw locking device must not be damaged until the stud bolts are installed in their final positions.

Screw in one stud bolt (e) through two turns and check that it moves easily.

It may be necessary to enlarge the hole (1) carefully with the deburring tool.

Carefully remove or extract all the chips.

Protect the holes from corrosion with zinc dust paint. Follow the instructions for use supplied with the zinc dust paint. Observe the drying time for the zinc powder paint.
4. To install the stud bolts

To ensure that the stud bolts are sealed well, the different distances to the exterior roof skin must be compensated with spacer washers.

The plug gauge (1) (Part No. 8279 0 140 429) is designed to check this distance. The scale on the plug gauge is adjusted such that the lowest scale mark defines the zero position of the thread distance. If the slide is flush with the lowest scale mark, no spacer washer is required. If the slide points to scale marks above this zero position, 0.5 mm or 1 mm spacer washers must be placed on the stud bolt for each scale mark.

Insert the plug gauge (1) with the closed side pointing downwards into the finished hole until it contacts the side frame. The slide (2) must be in full contact with the exterior roof skin. The required distance can be read off the scale (3) in mm.

If necessary remove and dispose of the foam seal.

Use rubber gloves to fit the stud bolts.

Clean the exterior skin of the roof and the stud bolts with glass primer 205/5. Leave to dry for 10 minutes.

Fit the stud bolts singly in sequence.

Place adhesive and sealant compound in a bead (1) with a diameter of 3 – 4 mm on the stud bolts.

Adjust the distance you found previously by combining the spacer washers (g, h). Secure the spacer washers (g, h) on the stud bolt using the adhesive and sealant compound to prevent the washers falling off as you install them.
4. To install the stud bolts

Screw in the stud bolts (e) with the appropriate spacer washers (g, h).

Ensure that the adhesive and sealant compound (1) seals the stud bolt evenly against the exterior roof skin. The height of the seal must not exceed 2 mm when it is installed.

Tighten with a torque of 10 Nm.

As you remove any dirt ensure that the adhesive and sealant compound under the bolt is not removed.

Any dirt can be removed using glass primer 205/5.

The roof rack must not be loaded for 12 hours after fitting.
5. To install the cover caps

Place the cover caps (1) on both stud bolts (e) and push them backwards until they engage.