



#### Kit Contents

Description	Pcs
Shock absorber	2
Dust boot	2
Spring	2
Lock nut M14	2
Plastic spacer	2
Spacer	2
Height adjuster	2
<b>Used for front and rear</b>	
C-spanner	2
Sticker Öhlins	1
Owner's manual	1

#### **Note!**

*Please note that this image is a general representation of the product and may differ slightly from your product.*

#### **Note!**

*Please note that during storage and transportation, especially at high ambient temperature, some of the oil and grease used for assembling may leak and stain the packaging. This is in no way detrimental to the product, wipe off the excessive oil/grease with a cloth.*

#### **Note!**

*Before installing this product, check the contents of the kit. If anything is missing, please contact an Öhlins dealer.*

#### **Warning!**

*Before installing this product, read the Öhlins Owner's Manual. The shock absorber/front fork/steering damper is an important part of the vehicle and the vehicle stability.*

## Shock absorber for BMW 1M (E82) - front

# **BMZ MN01**

## Mounting Instructions

# MOUNTING INSTRUCTIONS

## **⚠ Warning!**

*We strongly recommend to have an Öhlins dealer install this product.*

## **⚠ Warning!**

*If working on a raised vehicle, ensure that it is securely supported to prevent it from tipping over.*

## **👁 Note!**

*When working on this product, see the Vehicle Service Manual for vehicle specific procedures and important data.*

**1**

Raise the vehicle, use jack stands.

**2**

Remove the front wheels.

## **👁 Note!**

*Support the wheel hubs on each side of the vehicle not to damage the brake hoses.*

**3**

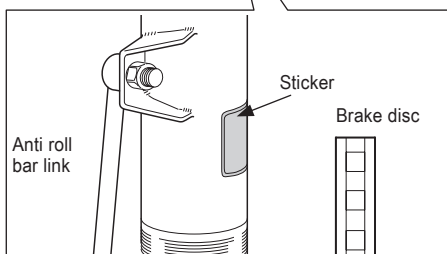
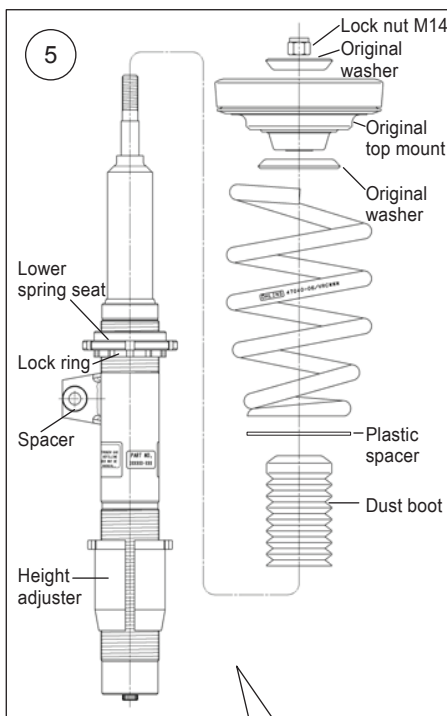
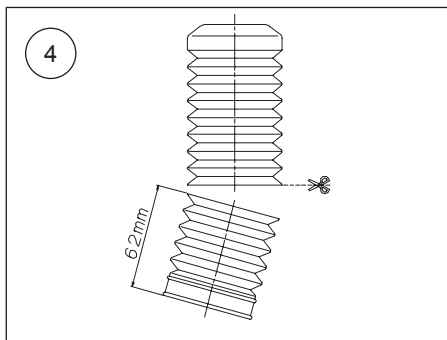
Loosen the lower and the upper strut attachment bolts. Remove the original struts from the vehicle. Note the anti roll bar bracket position.

**4**

Cut the dust boot 62 mm from the lower end according to the figure.

**5**

Assemble the shock absorber according to the figure. Install the Öhlins McPherson struts on the vehicle according to the vehicle service manual. Install the strut with the sticker facing the wheel to achieve correct position of the anti roll bar link, see note in step 3.



# MOUNTING INSTRUCTIONS

**6**

Install the stabilizer link.

**Note!**

*Use an Allen key to hold the shock absorber in position when tightening the top mount nut.*

**7**

Raise the wheel hub with a jack to ensure that the height adjuster is correctly seated on top of the hub carrier/upright.

**8**

Tighten:

Lower spring seat and lock ring: 50-60 Nm

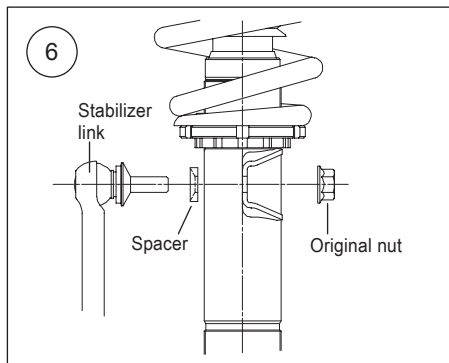
Lock nut: 35-40 Nm

**9**

Make sure that all removed parts are reinstalled in the same way as they were before the installation of the Öhlins shock absorbers.

**Caution!**

*Ensure that all screws are tightened to the correct torque and that nothing fouls or restricts movement of the shock absorber/front fork/steering damper when the suspension is fully compressed or extended.*



# ADJUSTMENTS

## ⚠ Warning!

Before riding, always make sure that the basic settings made by Öhlins are according to recommended Set-up Data. Read about adjustments and setting up in the Öhlins Owner's Manual before you make any adjustments. Contact an Öhlins dealer if you have any questions about setting up.

## SETUP DATA

### Rebound setting

Track	3	clicks
Winding road	7	clicks
Street	12	clicks
Spring preload	6	mm

### Spring

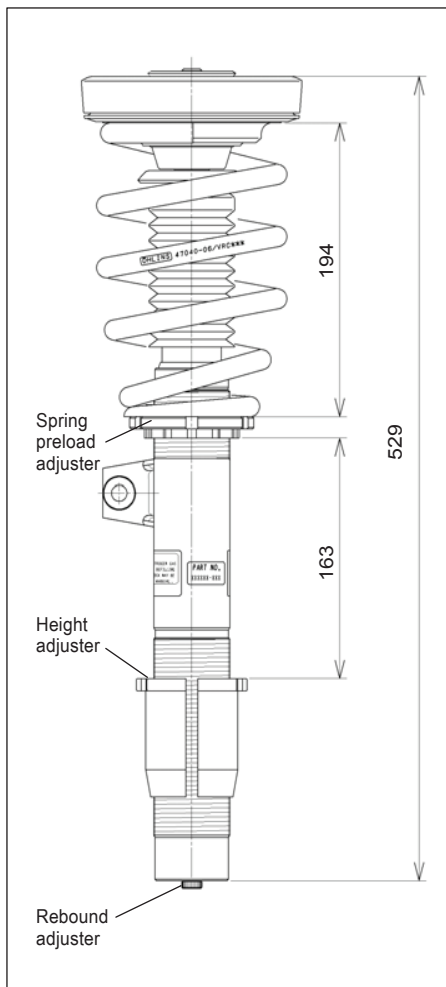
Free length	200	mm
Installed length	194	mm
Spec H200/ 65	60	N/mm

### Vehicle Height

With the preload and height adjustments in standard positions, the vehicle is lowered approximately 15 mm compared to the original suspension.

Height adjustment range:

Standard position  $\pm 15$  mm.



Öhlins products are subject to continuous improvement and development, therefore, although these instructions include the most up-to-date information available at the time of printing, minor updates may occur.

To find the latest information contact an Öhlins distributor. Please contact Öhlins if you have any questions regarding the contents in this document.

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#### Kit Contents

Description	Pcs
Shock absorber	2
Spacer	2
Lock nut M10	2
Bushing spacer	4
Dust boot	2
Spring	2
Spring preload adjuster	2
Rubber seat	2
Adjuster cable	2
Adjuster knob	2
Adjuster screw	2
Flexibel spacer	2
Washer	2
Lower plastic seat	2
Spring seat	2
Lock nut	4
Allen key	1

#### **Note!**

*Please note that this image is a general representation of the product and may differ slightly from your product.*

#### **Note!**

*Please note that during storage and transportation, especially at high ambient temperature, some of the oil and grease used for assembling may leak and stain the packaging. This is in no way detrimental to the product, wipe off the excessive oil/grease with a cloth.*

#### **Note!**

*Before installing this product, check the contents of the kit. If anything is missing, please contact an Öhlins dealer.*

#### **Warning!**

*Before installing this product, read the Öhlins Owner's Manual. The shock absorber/front fork/steering damper is an important part of the vehicle and the vehicle stability.*

## Shock absorber for BMW 1M (E82) - rear

# **BMZ MN01**

## Mounting Instructions

# MOUNTING INSTRUCTIONS

## **⚠ Warning!**

We strongly recommend to have an Öhlins dealer install this product.

## **⚠ Warning!**

If working on a raised vehicle, ensure that it is securely supported to prevent it from tipping over.

## **👁 Note!**

When working on this product, see the Vehicle Service Manual for vehicle specific procedures and important data.

**1**

Raise the vehicle, use jack stands.

**2**

Remove the rear wheels.

**3**

Remove the lower and the upper attachments and remove the original shock absorbers.

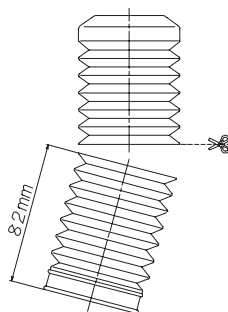
**4**

Cut the dust boot 82 mm from the lower end according to the figure.

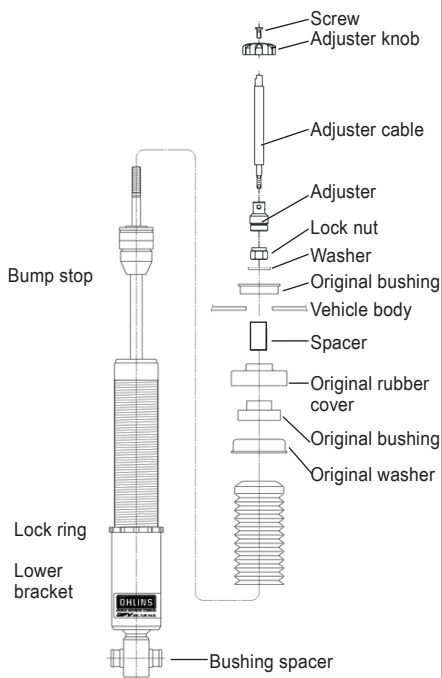
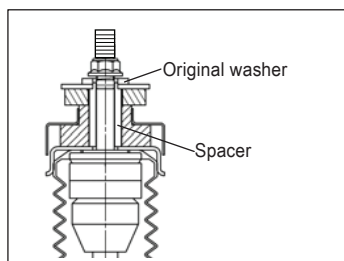
**5**

Assemble the shock absorber according to the figure. Do not install the adjuster knob and screw yet.

**4**



**5**



# MOUNTING INSTRUCTIONS

**6**

Install the Öhlins spring and the spring preload adjuster according to the figure.

**7**

Install the Öhlins shock absorbers on the vehicle according to the vehicle service manual.

**8**

Cut a 12-25 mm hole for the control wire and adjustment knob in the side panel according to the figure.

## **Note!**

*When tightening the top mount nut, the shock absorber shaft must be held in position with a flat screwdriver.*

**9**

Tighten:

Lower spring seat and lock ring: 50-60 Nm

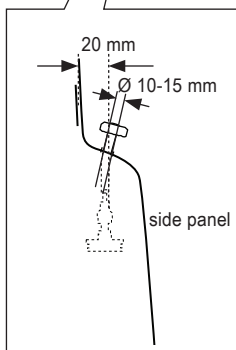
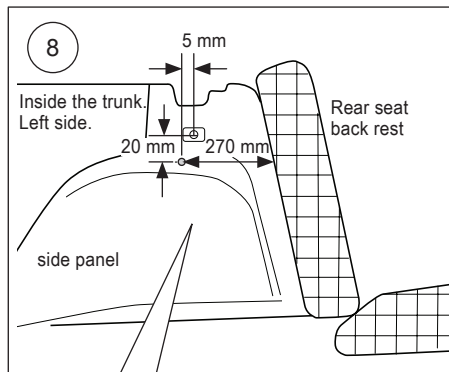
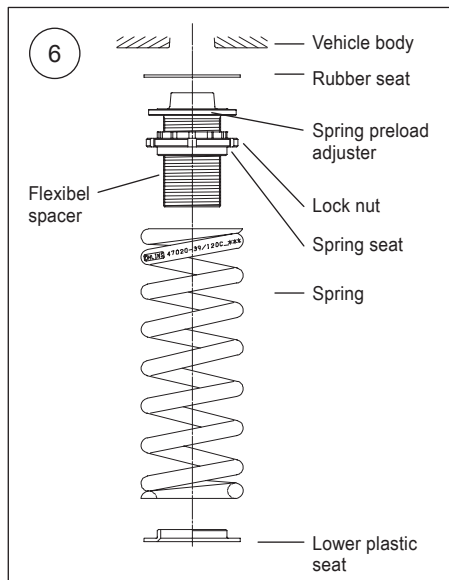
Lock nut: 30 Nm

## **Note!**

*Lower the vehicle so that the suspension is slightly compressed before tightening the screws.*

## **Caution!**

*Ensure that all screws are tightened to the correct torque and that nothing fouls or restricts movement of the shock absorber/front fork/steering damper when the suspension is fully compressed or extended.*



# ADJUSTMENTS

## **⚠ Warning!**

*Before riding, always make sure that the basic settings made by Öhlins are according to recommended Set-up Data. Read about adjustments and setting up in the Öhlins Owner's Manual before you make any adjustments. Contact an Öhlins dealer if you have any questions about setting up.*

## SETUP DATA

### Rebound setting

Track	3	clicks
Winding road	7	clicks
Street	12	clicks
Spring preload adjuster height	37	mm

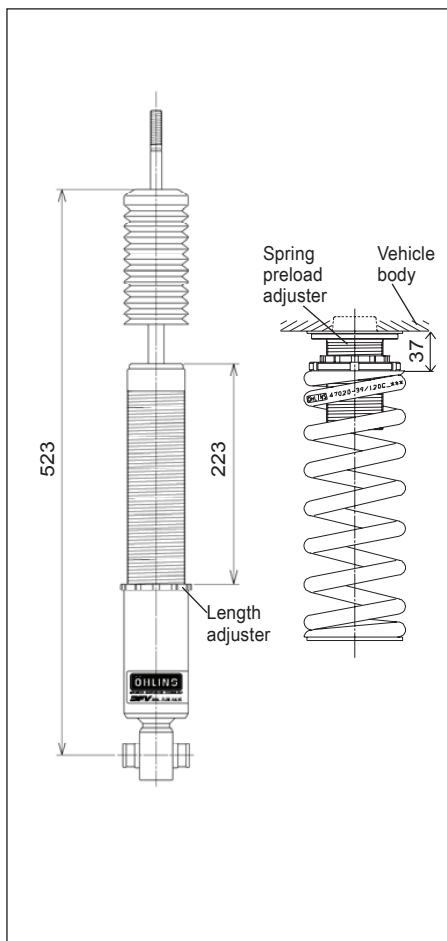
### Spring

Spec H250/ ID65	110	N/mm
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### Vehicle Height

With the preload and height adjustments in standard positions, the vehicle is lowered approximately 5 mm compared to the original suspension.

1 turn on the height adjuster moves the position 1,5 mm.



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