

#### Kit Contents

Description	Part No	Pcs
Shock absorber	BM642	1
Sticker Memo notes	01180-01	1
Sticker set Öhlins		1
Sticker Öhlins bl/tr	01185-04	2
Owner's manual	07241-02	1

#### 👁 Note!

Please note that there can be small differences between your product and the images in these instructions.

#### 👁 Note!

Please note that during storage and transport, especially at high ambient temperature, some of the oil and grease used for assembly may leak and stain the packaging. This will not cause damage to the product, wipe off the excessive oil or grease with a cloth.

#### 👁 Note!

Before you install this product, check the kit contents. If anything is missing, please contact an Öhlins dealer.

#### ⚠ Warning!

Before you install this product, read the Öhlins Owner's manual. This product is an important part of the vehicle and the vehicle stability.

## Shock absorber for BMW R nine T Scrambler

# **BM 642**

## Mounting Instructions

# MOUNTING INSTRUCTIONS

---

## **⚠ Warning!**

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

---

---

## **⚠ Warning!**

*If you work with a lifted vehicle, make sure that it is safely supported to prevent it from tipping over.*

---

---

## **👁 Note!**

*When you work with this product, see the vehicle service manual for vehicle specific procedures and important data.*

---

---

## **👁 Note!**

*Before you install this product clean the vehicle.*

---

**1**

Put the motorcycle on a work stand so that the rear wheel is off the ground.

**2**

If needed, remove the silencer to get access to the lower shock absorber mounting screw.

**3**

Remove the shock absorber mounting screws, start with the lower. You may need to move the swing arm slightly to be able to remove the shock absorber.

**4**

Install the öhlins shock absorber with the gas valve pointing forward and the pre-load adjuster on the left side.

**5**

Tighten the shock absorber mounting screws to the correct torque, refer to the vehicle work shop manual.

**6**

If removed, install the silencer.

---

## **👁 Note!**

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

---

---

## **👋 Caution!**

*Make sure that you tighten all screws 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.*

---

# MOUNTING INSTRUCTIONS

This page intentionally left blank

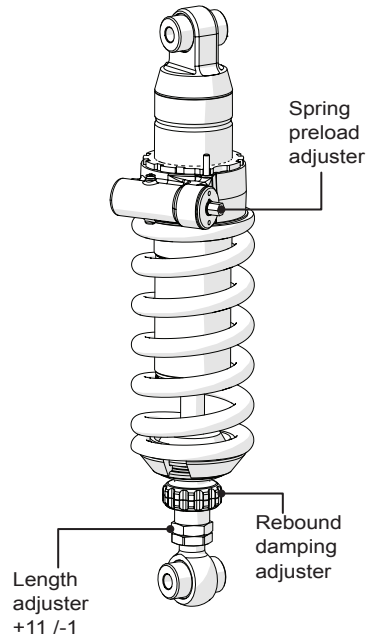
# ADJUSTMENTS

## ⚠ Warning!

Before you ride/drive, always make sure that the setup is according to the recommended setup 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.

## Adjust Length

We recommend to remove the shock absorber from the vehicle before adjusting the length. Use one 24 and one 27 mm wrenches. Hold the upper nut with one hand and at the same time loosen the lock nut (lower 27 mm nut). Turn the end eye/bracket to the desired length. One [1] turn is 1 mm of shock absorber length. Please make sure to measure the ride height before and after adjusting the length (see chapter Setting Up your Vehicle).  
Tightening torque: 27 mm wrench 40 Nm.



# SETUP DATA

Length	374 +11 /-1	mm
Stroke	52	mm
Spring part no	21102-54	
Spring rate	140	N/mm
Spring free length	170	mm
Spring preload	10	mm
Compression	-	clicks
Rebound	14	clicks

Recommended Free sag and Ride height		
R1-R2	15	mm
R1-R3	40	mm
F1-F2	30	mm
F1-F3	40	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.

Part no. MI\_BM642\_0  
Issued 2021-10-08

© Öhlins Racing AB. All rights reserved. Any reprinting or unauthorized use without the written permission of Öhlins Racing AB is prohibited.

Öhlins Racing AB  
Box 722  
S-194 27 Upplands Väsby, Sweden  
Phone +46 8 590 025 00  
fax +46 8 590 025 80



[www.ohlins.com](http://www.ohlins.com)