

#### 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.

#### Kit Contents Pcs. Shock absorber 2 2 Upper spring seat Dust boot 2 Spring 2 ABS cord clamp 2 Nut frange (M8) 2 Bolt (M6) 2 2 Spacer (t10) Nut M12 2 2 Spacer Used for both front and rear C-spanner 1 C-spanner 1 Öhlins sticker 1 Öhlins Owner's Manual 1

#### Note!

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

#### A 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 Kit for Subaru BRZ (ZC6), Toyota GT86 (ZN6)

SUS MP20

## **Mounting Instructions**



front

## **Warning!**

It is advisable to have an Öhlins dealer install the shock absorber.

When installing, read your Vehicle Service Manual.

## 1

Raise the vehicle and put it on jack stands.

## A Warning!

Ensure that it is securely supported.

## 2

Remove the front wheels.

## 3

Loosen the bolts for the lower strut attachments.

## Caution!

Support the wheel hubs in an appropriate way on each side of the vehicle so that the brake hose and/or drive shaft joint can not be damaged.

## 4

Loosen the upper attachment. Remove the original struts from the car.

## 5

Remove the brake hose brackets from the standard struts.

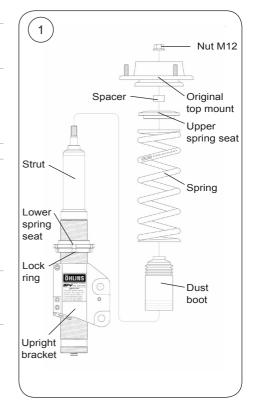
## 6

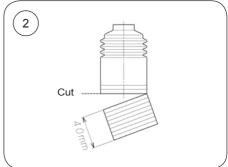
Cut the dust boot 40 mm from the lower end with a pair of scissors according to fig 2.

## 7

Tighten the lower spring seat and the lock ring to 50 - 60 Nm.

Fit the dust boot, the spring and the upper spring seat to the strut according to fig 1. Fit the bearing spacer, the top mount and the top nut. Tighten the top nut to 35 - 40 Nm. Solid top mount with camber adjustment is available as option (part number 25633-43 for left front and 25633-44 for right front (see fig 4). Note that the camber should be set at "0" for road use. Height of the vehicle is needed to be reset when changing to solid top mounts.





## Note!

When tightening the top mount nut, the shock absorber shaft must be held in position with a 5 mm Allen key.

## 8

Install the Öhlins McPherson struts on the vehicle.

## 9

Fasten the upper attachments.

## 10

Raise the wheel hub with a jack to remove the freeplay of the lower strut attachment bolts before tightening them.

## 11

Tighten the lower strut attachment bolts.

## 12

Mount the ABS cord clamp to the Öhlins struts. Tighten the M6 bolts to 6 Nm. Fix the ABS cord by bending the ABS cord clamp according to fig 3.

## 13

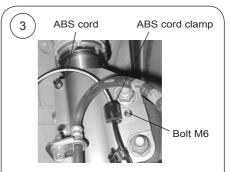
Mount the standard stabilizer links with the spacer (t10).

## Note!

Make sure that all bolts are tightened to the correct torque and that nothing fouls or restricts movement of the strut when it is being fully compressed or extended. Test this over the whole steering range from lock to lock.

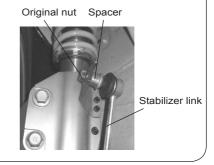
#### 14

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



## Caution!

Assemble this spacer (t10) between the bracket and the stabilizer link.





# 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.

The standard spring preload is 32 mm from a free length of 230 mm, giving 198 mm installed length, see fig 5.

## Note!

Installed spring length is measured length of the spring – the spring preload.

## SETUP DATA

#### Recommended set-up

#### Click setting

0	
Track	0-7 clicks
Winding road	5-10 clicks
Street	10-20 clicks
Spring preload	32 mm
Shock absorber length .	238 mm

## Spring

Spec ...... H230, ID65, 40N/mm

## The actual vehicle height

Target height at vehicle front 349 mm (measure B in figure 6). With both the preload and height adjustments in their standard positions, the vehicle is lowered approximately 20 mm when compared to the original suspension. As

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.

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ADVANCED SUSPENSION TECHNOLOGY



nstalled spring length Shock absorber length ÖHLINS 6 В C

the height adjuster is turned one rotation, the position moves 2.0 mm.

## **Warning!**

To find the latest information

contact an Öhlins distributor. Please contact Öhlins if you have

any questions regarding the

contents in this document.

5

The adjustment range is the standard position  $\pm 10$  mm. If the bracket is moved outside the adjustment range, it may come loose.

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## Note!

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## 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.

Kit Contents	Pcs.
Shock absorber	2
Dust boot	2
Spring	2
Lock nut M10	2
Bushing spacer	4
Spacer	4
Plastic seat	2
Mounted on shock absorber Adjuster	2
Used for both front and rear	
C-spanner	1
C-spanner	1
Öhlins sticker	1
Öhlins Owner's Manual	1

## Note!

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

## A 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 Kit for Subaru BRZ (ZC6), Toyota GT86 (ZN6)

SUS MP20 rear

## **Mounting Instructions**



## **Warning!**

It is advisable to have an Öhlins dealer install the shock absorber.

When installing, read your Vehicle Service Manual.

## 1

Raise the vehicle and put it on jack stands.

## A Warning!

Ensure that it is securely supported.

## 2

Remove the rear wheels.

## 3

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

## 4

Cut the dust boot 92 mm from the lower end with a pair of scissors according to fig 1.

#### 5

Tighten the lower spring seat and the lock ring to 50 - 60 Nm.

Fit the two bushing spacers, the dust boot, the spring, plastic seat, the top mount, the spacer and the Lock nut according to fig 2. Tighten the lock nut to 20 Nm. Fit the adjuster to the damper according to fig 2.

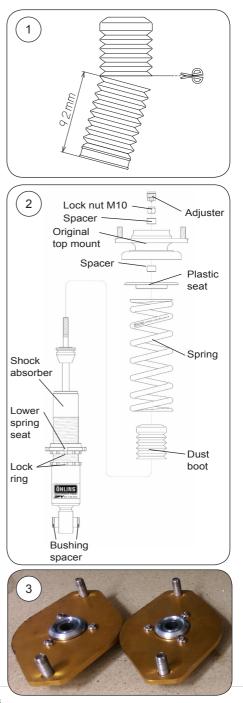
Solid top mount is available as option (part number 25633-45 see fig 3). Note that you need two pieces for one car. Height of the vehicle is needed to be reset when changing to solid top mounts.

## Note!

When tightening the top mount nut, the shock absorber shaft must be held in position with a 4 mm Allen key.

## Note!

For one kit you need two top mounts with bearings.



## 6

Install the Öhlins shock absorbers on the vehicle.

## 7

Fasten the upper attachments.

#### Note!

Make sure that all bolts are tightened to the correct torque and that nothing fouls or restricts movement of the absorber when it is being fully compressed or extended.

#### 8

Make a Ø20 hole in the side panel according to fig 4, and install the adjuster.

#### 9

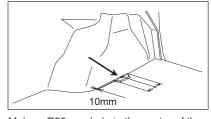
Make sure that all removed parts are reinstalled in the same way as they were before the installation of the Öhlins shock absorber.



Left side of vehicle body inside trunk room.



Make a Ø20 mm hole in the side panel in the shown position.



Make a Ø20 mm hole in the center of the lip.

# 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.

The standard spring preload is 28 mm from a free length of 230 mm, giving 192 mm installed length, see fig 5.

#### Note!

Installed spring length is measured length of the spring – the spring preload.

## SETUP DATA

#### Recommended set-up

Click setting

Track	0-7 clicks
Winding road	5-10 clicks
Street	10-20 clicks
Spring preload	28 mm
Shock absorber length	381,5 mm

## Spring

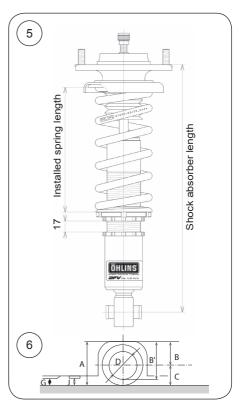
Spec ...... H230, ID65, 30N/mm

## The actual vehicle height

Target height at vehicle front 349 mm (measure B in figure 6). With both the preload and height adjustments in their standard positions, the vehicle is lowered approximately 15 mm

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when compared to the original suspension. As the height adjuster is turned one rotation, the position moves 1.5 mm.

## **Warning!**

To find the latest information

contact an Öhlins distributor. Please contact Öhlins if you have

any questions regarding the contents in this document.

The adjustment range is the standard position  $\pm 10$  mm. If the bracket is moved outside the adjustment range, it may come loose.

> Part no. MI\_SUSMP20\_2 Issued 2015-02-13



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