

#### 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		
	Description	Part No	Pcs
1	Shock absorber	SUS 1P20 & 2P20	2
2	Dust boot	10216-02	2
3	Plastic spring spacer	25602-01	2
4	Spring	47010-15	2
5	Rubber spring spacer	25601-01	2
6	Upper spring seat	24637-01	2
7	Spacer	24629-25	2
8	Nut (M12)	95702-12	2
9	ABS cord clamp	24624-01	2
10	Nut flange (M8)	04777-02	2
11	Bolt (M6)	24617-01	2
12	Spacer		2
13	C-spanner	24639-01	1
14	C-spanner	24639-03	1
15	Öhlins sticker kit	10207-01	1
16	Öhlins emblem kit	10207-02	1
17	Öhlins Owners manual	07451-01	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 & ZD8), Toyota GT86 (ZN6/ZN7) & Toyota GR86 (ZN8), Scion FR-S



# **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 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.

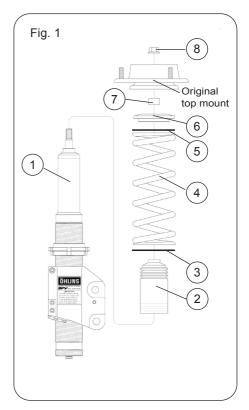
# 6

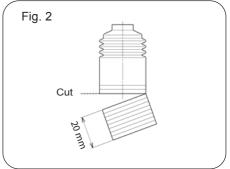
Cut the dust boot 20 mm from the lower end with a pair of scissors according to fig 2.

#### 7

Fit the dust boot, the plastic spring spacer, the spring, the rubber spring spacer and the upper spring seat to the strut according to fig 1. Fit the top pin spacer, the top mount and the M12 lock nut. Tighten the lock 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). Height of the vehicle is needed to be adjusted 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

Adjust the preload and lower bracket position according to fig 5. Tighten the lower spring seat and the lock ring to 50 - 60 Nm).

# 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

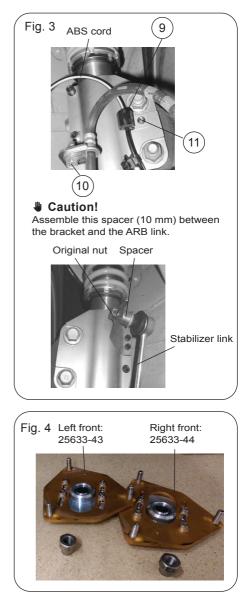
Tighten the lower bracket Allen bolts to 10-15Nm. Mount the OEM ARB links with the spacer (10 mm) according to fig 3.

# 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. This is very important if you have installed an after market sway bar end link!.

# 14

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



# ADJUSTMENTS

# A 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 10 mm from a free length of 200 mm, giving 190 mm installed length, see fig 5.

# SETUP DATA

#### Recommended set-up

Click setting		
Track	0-7	clicks
Winding road	5-10	clicks
Street	10-20	clicks
Spring preload	10	mm

#### Recommended spring

47010-15 (60 N/mm)

#### The actual vehicle height

With the preload and height adjuster in their recommended position, the vehicle is lowered approximately -20mm when compared to the original suspension. Depending on car model and equipment, the height may vary. The spring preload adjustment range is 1-15mm.

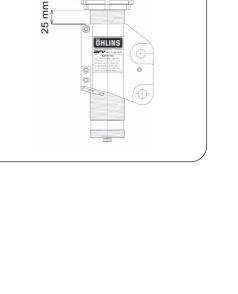
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Fig. 5

190 mm

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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		
	Description	Part No	Pcs
1	Shock absorber	SUS 6P20	2
2	Dust boot	10216-01	2
3	Rubber spring spacer	25601-01	2
4	Spring	47000-15	2
5	Spring seat	25618-11	2
6	Spacer	24629-26	4
7	Lock nut (M10)	24627-01	2
8	Adjuster	24631-04	2
9	Bushing spacer	24629-06	4

#### 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 & ZD8), Toyota GT86 (ZN6/ZN7) & Toyota GR86 (ZN8), Scion FR-S



# **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 70mm 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.

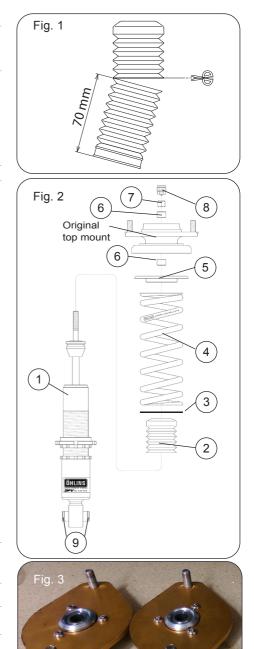
Solid top mount is available as option (part number 25633-45 see fig 3). Note that you need two pieces for one car. Height of the vehicle is needed to be reset when changing to solid top mounts.

# 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 - Optional

For easier access to the adjuster, drill a  $\emptyset$ 20 hole in the side panel according to fig 4, and install the adjuster.

# 9

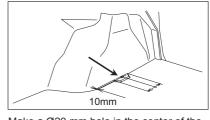
Make sure that all removed parts are reinstalled in the same way as they were before the installation of the Öhlins shock absorber.

# Fig. 4

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 6mm from a free length of 180mm, giving 174 mm installed length, see fig 5.

# SETUP DATA

#### Recommended set-up

Click setting		
Track	0-7	clicks
Winding road	5-10	clicks
Street	10-20	clicks
Spring preload	6	mm

#### Recommended spring

47000-15 (60 N/mm)

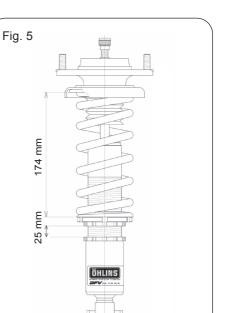
#### The actual vehicle height

With the preload and height adjuster in their recommended position, the vehicle is lowered approximately -20mm when compared to the original suspension. Depending on car model and equipment, the height may vary. The spring preload adjustment range is 1-15 mm.

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