BR TYPE COILOVER

MODEL

Thank you for purchasing BC coilovers.
Please read this instruction carefully before proceeding with install.

Disclaimer

All BC coilovers are designed and intended for off road use only. The use of this product on public roadways may not meet local, state, or federal regulations. Installation and use of this product may affect vehicle insurance coverage. It is the consumer’s responsibility to meet and comply with regulations and policies before operating vehicle on public roadways. Please check your local laws and research the parts you wish to purchase to insure they are the correct items you want to purchase.

Before Installation

CAUTION

• This product was designed and developed for a specific vehicle model and should only be installed on the intended application. Insure you received the correct items for your vehicle before attempting installation.
• No part of this instruction may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without express written permission from Taiwan Bor-Chuann Enterprise Co., Ltd.
• The shock absorbers contain highly compressed gas. Do not disassemble the shock absorbers or expose to flames.
• This product may only be installed by trained technical personnel with proper tools.
• Never use impact wrenches to install or remove shock absorber hardwares.
• Installation and removal of suspension components including dampers and springs must be in accordance with the manufacturer’s specifications. Please refer to factory service manual if available.
• BC (Taiwan Bor-Chuann Enterprise Co., Ltd) is not liable for any damages and/or problems caused by the use of components not supplied by BC (Taiwan Bor-Chuann Enterprise Co., Ltd)
• Incorrect installation can cause noise and even damage to the product which will not be covered by warranty.

Installation

• Do not over tighten shock nuts. All of the bolts and nuts should be tightened in accordance with the recommended torque values specified in the vehicle manufacturer’s manual.
• All coil springs on shocks are set at 2-3mm from factory. You may reset the spring preload to meet your personal taste and less than 5mm preload is suggested.
BR TYPE COILOVER

**Damping Force**
- 30 click rebound adjustment
- Preset on 8 clicks from full hard from factory
- Turning the knob clockwise for stiffer ride and counterclockwise for softer ride.
- Keep the same clicks on both sides (right and left).
- Do not overturn the knob when it reaches full hard or full soft.

**Ride Height**
**Note:** All springs come preloaded from the factory. If for any reason the spring becomes loose, tighten the lower spring seat \( C \) until the spring sits snug and lock (lower spring seat and locking collar \( D \) ) in place. Do not over tighten spring as this will compress spring and cause rate shifting. Maximum compression of spring should be 5mm.

Ride height is determined by the overall length of a coilover assembly. Turn the shock cartridge into lower mount for a lower ride height and vice versa. Be sure to leave enough threaded body inside the lower mount for safety. Never turn the lower spring seat \( C \) counter clock-wise to adjust ride height as it would change the spring preload and can result in a poor ride quality.

Rear ride height on a vehicle with a separate coil spring and shock setup is determined by the overall length of the spring and spring adjuster assembly.

Always clean dirt and debris from threads with air blow gun and grease threads before doing ride height adjustment to prevent locking rings from getting stuck.

**Ride Height Adjustment on McPherson Strut (P-4-1)**
- Make sure the lower spring seat \( C \) and locking collar \( D \) are tight. These are locked against each other.
- Loosen the upper clevis bolt \( A \). It will make it easier to turn the shock body.
- Loosen bottom locking ring \( B \).
- Using the spanner wrenches that comes with the kit, turn the lower spring seat \( C \) clock-wise (right to left) to lower or the locking collar \( D \) counter clock-wise (left to right) to raise the vehicle. You may also screw the shock body up or down into the lower mount to adjust the ride height instead.
• After you achieve your desired height, make sure you leave at least 80mm of threaded body inside the lower mount for McPherson strut (P-3-1 on page 2) then tighten the upper clevis bolt A and the bottom locking ring B before you drop the vehicle to the ground.

• You may need to repeat steps 2-4 a few times until you achieve the desired height. It is suggested you do one side front and rear first and then measure the distance E and copy to the other side. This will save time on install.

< Ride Height Adjustment on Non McPherson Strut> (P-4-2)
• Make sure the lower spring seat C and locking collar D are tight. These are locked against each other.
• Loosen bottom locking ring B.
• Using the spanner wrenches that comes with the kit, turn the lower spring seat C clock-wise (right to left) to lower or the locking collar D counter clock-wise (left to right) to raise the vehicle. You may also screw the shock body up or down into the lower mount to adjust the ride height instead.
• After you achieve your desired height, make sure you leave at least 25mm of threaded body inside the lower mount for Non-McPherson strut (P-3-2 on page 2) then tighten the bottom locking ring B before you drop the vehicle to the ground.
• You may need to repeat steps 2-4 a few times until you achieve the desired height. It is suggested you do one side front and rear first and then measure the distance E and copy to the other side. This will save time on install.

< Ride Height Adjustment on Separate Coil Spring & Shock Setup> (P-5-1)
• Adjust the locking rings 2 on the spring perch to your desired height, and jack the bucket up to keep the spring taut or you may jack it further by 3-5mm for preload.
• Loosen the bottom locking ring 1.
• Adjust the shock assembly by screwing the shock body down into the lower mount or up until the lower mount matches the mounting hole of the rear lower control arm and can be bolted. Make sure you leave at least 25mm of threaded body inside the lower mount (P-3-2 on page 4).
• Tighten the bottom locking ring 1 before you drop the vehicle to the ground.
CAMBER (P-2-1)

NOTE: Adjustable camber plates are available for specific car models only. You may need to rotate the camber plate to the proper orientation. The camber orientation must be at 90 degree angles to the vehicle centerline.

- Loosen all 4 upper allen bolts from camber plate.
- If for any reason more adjustment is needed, additional accessory holes are located to allow for further range of adjustment.
- Once desired camber is achieved, tighten the 4 upper allen bolts.

After Installation

- Make sure all the nuts and locking rings are properly tightened.
- A wheel alignment is highly suggested and recommended after installing coilovers as it greatly influences the vehicle's handling and tire wear especially on a lowered vehicle.

Technical Support & Warranty

- This product carries 1 year limited warranty covering shock oil leaking. Wearable components such as bearings and/or pillowballs are not included in this warranty.
- Please keep the original purchase invoice and warranty card for future service requests.
- Lowering your car can also change the chassis geometry and due to which some chassis parts such as control arms may generate noise. You may contact your local dealer for advice and assistance.
- Please contact your local distributor for more information about the technical support and warranty conditions.

Designed & Manufactured by
Taiwan Bor-Chuann Enterprise Co., Ltd.
www.bcec.com.tw
bc@bcec.com.tw