

# BC

## BR TYPE

---

### Height Adjustable Coilover Damper Kit --- Instruction

**MODEL**

#### FOREWORD

- Thank you for purchasing the BC shock absorber.
- **Please read the instruction carefully before installation.**
- This product are designed and produced by Taiwan Bor-Chuann Enterprise Co., Ltd.
- This product has one year guarantee; please getting a certificate from the salesman when you purchase the shock absorber.
- **Please use the product in accord with the law of your country. We are not responsible for the illegal use and installment.**
- Please make sure the shock absorber whether it is correspondent with the style and the year of your car. Please don't install if you can't make sure. If the specification doesn't match for your car after you install the shock absorber, we will not return unless it is our miss in assembling.
- If you find the specification of the product is error, lack of parts or broken, please take the valid receipt and contact with the merchant immediately.

## Products Instruction

- BC's shock absorbers are designed and produced according to the dimensions of initial factory.
- The damping and spring rate (hardness) of this product is different suspension series from the initial factory standard.
- **It is not legal absolutely to drive on general road with the shock absorbers installed. Please use the shock absorbers in accord with the law in your country.**
- **BC doesn't have responsible for any indirect accident, damage, danger, and death by which our company produce.**
- **This product has highly compressed nitrogen. Don't approach the fire or expose it to the fire. If not, the product will happen a breakdown or explode.**
- In any situation, please don't decompose cylinder by yourself without our agreement. We don't have responsible for the danger and the breakdown of the product, caused by yourself decomposition.

## Before Installment

- **Please read the content of this instruction completely before installing.**
- This instruction is belong to whom uses the product latest.
- This document is prohibited from copy of some or all according to the law.
- There may not be any announcement when this product is evolved or renewed.
- **This product must carry on the installment work by the professional personnel (professional license).**
- To disassemble brake system must be careful specially and need to have the professional knowledge and technology.
- Before installment, please inspect the components whether it is complete. If has the damage or lacks the components, please contact with the sales clerk.
- Do not install the non-model product of this car on the vehicle. If you do that, that will possibly damage the product and the vehicle components.
- **BC does not have responsible for any accident, injury, or death, caused by incorrect installment, assembly, and revision the product.**
- **BC will not be responsible if the problems result from the negligent installment instruction.**

## Installation

- **This product needs to be installed by the professional technical personnel. The installers need to read this instruction at length before installing.**
- The installers have to wear working glove to avoid injuring when installing.
- Some car types need to use the upper mount of initial factory, and also have to disassemble it from shock absorber of the initial factory.

### **Pay attention to disassemble :**

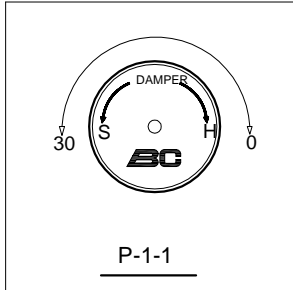
Before removing top nut, you have to use the spring compressor to compress spring and to confirm the spring has already been compressed, and the spring has already left the spring upper seat. Please slack off the spring averagely and carefully remove the shock when you slack off the spring compressor.

- Please use the upper mount which BC attached or initial factory. It possibly is not fit to use upper mount of other manufacturers. If someone uses other companies' fitting to collocate with our shock absorbers and results in any event, BC will not be any responsibilities.
- **Installing this product, you should pay attention whether to hit the piston rod. If the piston rod suffers a breakdown, it is possible to cause leaking oil.**
- Please note the position and direction (left or right) of initial shock absorber when you are installing.
- **When disassembling or installing upper mount, you cannot use an air impact wrench because torsion is over, that will lead to ablate tooth or break .**
- If you cannot avoid using an air impact wrench, please control in lower torsion.
- **BC doesn't have responsibility for incorrect use air impact wrench which results in product failure.**
- After adjusting the length, please use adjusted-wrench to tighten all of lock ring. If you don't do that, that will result in noise or damage vehicles.
- Making sure to fix brake oil tube and ABS line, and to tighten lower-mount. If not, that will damage shock absorber and harm driving safe.

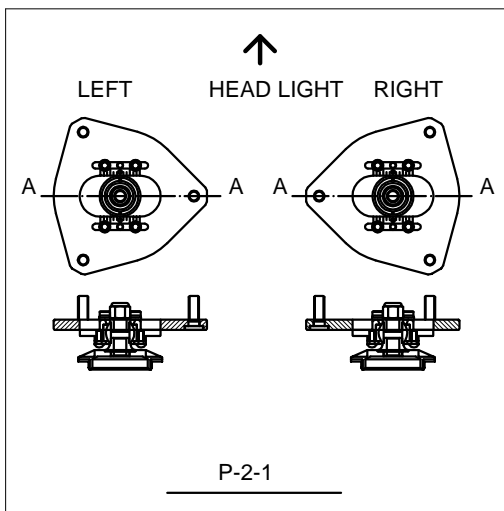
## After installation

- **Please adjust HIGH/LOW setting of shock absorber to control ride height according to the law regulation of local vehicles.**
- **BC does't have responsibility for law affairs which violate automobile law and stipulation.**
- To fix lock ring, screw and nut again regularly.
- Be careful for the dirt and sand on the piston rod because that may damage the piston rod.  
The regular clean the piston rod and check all components will prolong use life.
- **Before adjusting-height again, you have to clean up the dirt and sand of cylinder thread and fixed parts. This is in order to avoid causing jammed situation; further it is unable to adjust height/low.**
- When you change the spring rate (soft or hard), the height of automobile body also will be changed.
- When the spring rate is changed (length), the fixed parts of spring need to be adjusted again.
- After installing, please confirm all components of shock absorber whether they are tightened already.
- **Please confirm all nuts, spring pallet, bracket pallet, and stable line (oil tube, ABS, brake) whether they have tightened.**
- **If you don't check and tighten after installing, this product will lead to noise or danger in driving.**

## DAMPING ADJUSTABLE (30 LEVELS)

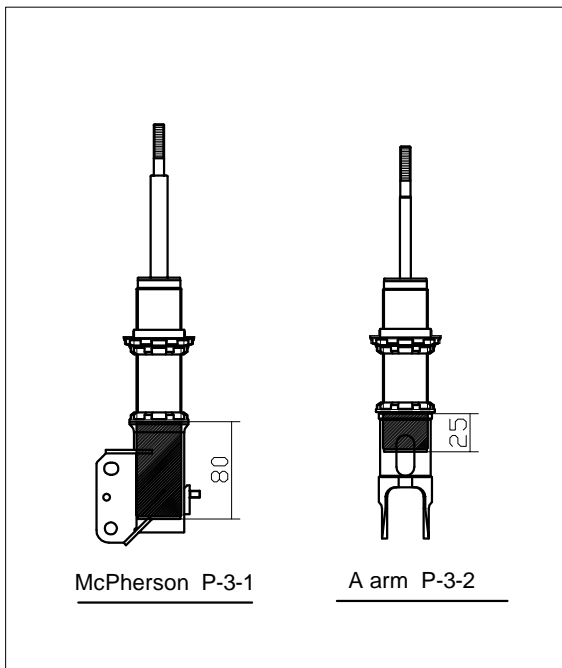


- Direction H(HARD) is hard--clockwise--turning H to bottom is level 0.
- Direction S(SOFT) is soft--counterclockwise--turning S to bottom is level 30.
- Setting of leave the factory is level 8.
- **When damping is adjusted, please follow H direction and turn to bottom; then depends on individual demand to adjust S direction again.**
- When damping is adjusted, damping of shock absorber has to accord with left and right level; however, front and rear can be adjusted by individual need.



## Camber pillowball upper mount

- Installing pillowball upper mount
- **Some car models have possibly no this function.**
- Please tighten four screws first before installing tighten four screws again.
- When you install the camber plate, please pay attention to the chart, AA should have 90 angles with the automobile body
- After installing, you can release four screws of pillowball mount and adjust adequate angle.
- After certain adjustment to adequate angle, please tighten four screws again.



## Caution-Ride Height Adjustment

- **The fixed safe altitude for lower-mount:**  
When adjustment driving-height, you have to pay attention to the depth of cylinder locked into lower-mount, and avoid producing ablated tooth or the distortion; further, to damage the shock absorber or endanger the traffic safety.
- **A arm suspension: that can't be lower than 25mm( P-3-2 )**
- **Mcpherson suspension: that can't be lower than 80mm( P-3-1 )**

# High / Low suspension

## Item instruction

- 1 Adjustable height strut
- 2 Adjustable lock nut
- 3 Spring
- 4 Cylinder

## Ride height adjustable

**Before adjustment, to clean 1 2 by airbrush first.**

**Arise**

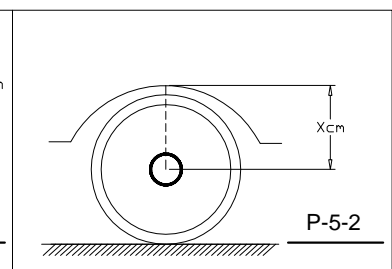
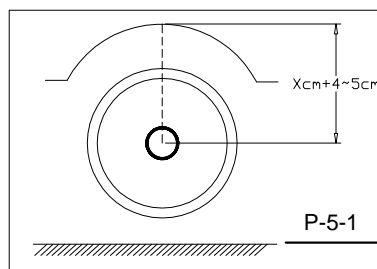
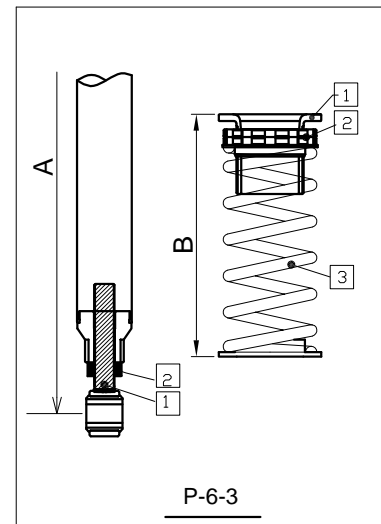
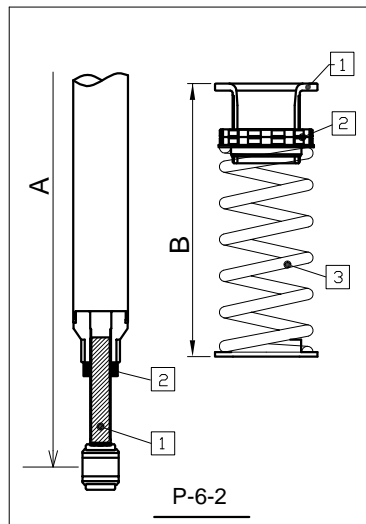
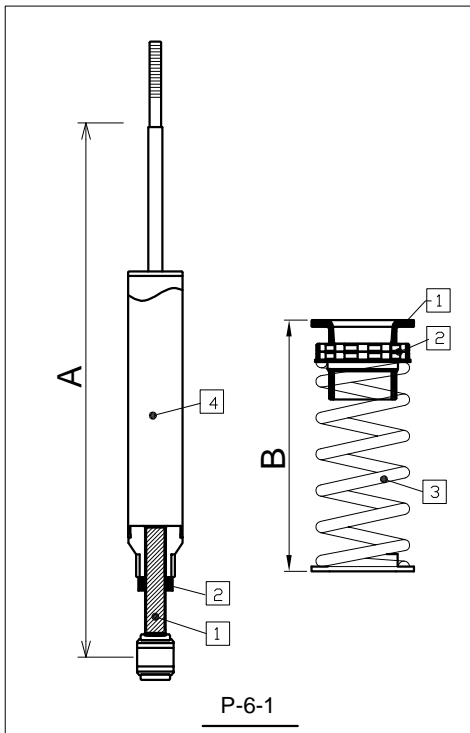
Please adjust **A** and **B** to longer together.

- ( P-6-2 )

**Lower**

Please adjust **A** and **B** to shorter together.

- ( P-6-3 )



## Please

- **When you adjust the high/low, please adjust **A** and **B** together. Don't adjust **A** or **B** by oneself.**

Ex.1 Just adjust A to longer---Spring would be too loose

Ex.2 Just adjust A to shorter---Spring would be too constrictive( bounce)

Ex.3 Just adjust B to longer---Spring would be too constrictive( bounce)

Ex.4 Just adjust B to shorter---Spring would be too loose

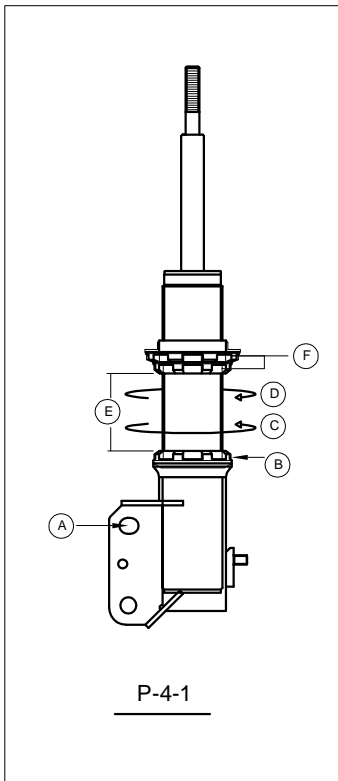
- **Please check car in raising or landing after adjustment. (P-5-1) (P-5-2)**

**Normal stretch distance is 40-50MM.**

- After adjustment, please check 1 and 2 whether they have tightened by wrench .

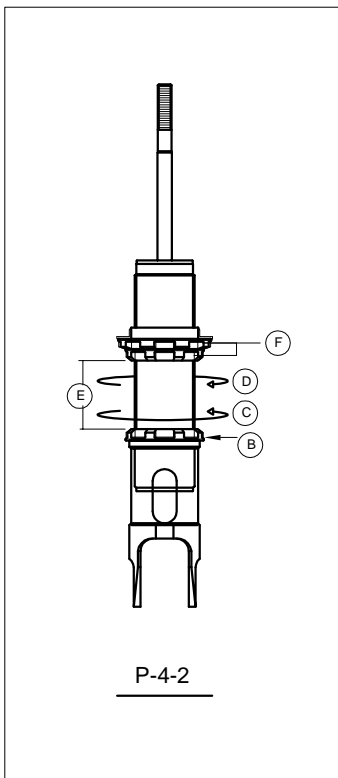
## How to adjust ride height

### <McPherson> P-4-1



- Loosen the locked screw (A). ( The elevation angle already fixed, and you need to adjust ride-height again )
- Measure distances (E).
- Used C wrench to loosen tightened pallet (B).
- Along (C) direction to turn cylinder and raise car body.
- You have to renew with tightening pallet after (D) direction lowers adjustable height.
- **Looseness will result in noise and affect driving safe.**
- If unnecessary or unchange spring length, please don't loosen and move pallet (F).
- Please don't use pallet (F) to tighten the spring to change car height and increase hardness. If do that, that will cause extreme uncomfortable in drive feeling.
- Please don't loosen the pallet (F) to make spring looseness to lower car body. If do this, that can shorten shock cylinder life and cause danger.

### <A Arm> P-4-2



- Measure distances (E).
- Used C wrench to loosen tightened pallet (B).
- Along (C) direction to turn cylinder and raise car body.
- You have to renew with tightening pallet after (D) direction lowers adjustable height.
- **Looseness will result in noise and affect driving safe.**
- If unnecessary or unchange spring length, please don't loosen and move pallet (F).
- Please don't use pallet (F) to tighten the spring to change car height and increase hardness. If do that, that will cause extreme uncomfortable in drive feeling.
- Please don't loosen the pallet (F) to make spring looseness to lower car body. If do this, that can shorten shock cylinder life and cause danger.

## Question and Check

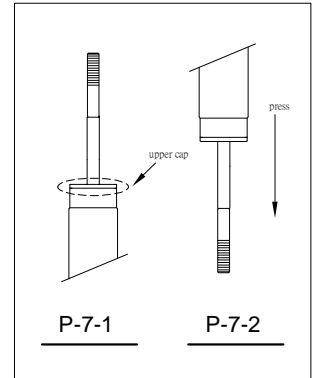
- **The specifications of product is not accord with your car.**

**A:** Please contact the merchant immediately.

- **Oil leaking**

**A:** This situation needs to be judged by professional personnel.  
 The external oil sludge of general shock absorber is uncertainly with oil of shock absorber. You have to move dust cover and check upper cap whether there are a lot of oil sludge.  
 After removing cylinder, you have to clean upper cap and piston rod, and make piston rod does the press test on the ground.  
 If there is oil sludge, it stands for leaking oil (this action has to do three times).

**When leaking oil happens, it usually has a noise.**



- **Noise**

**A:** This situation needs to be judged by professional personnel.  
 Undercarriage noises have a lot of conditions. Shock absorber is one of all conditions.  
 When there are noises, you have to check all nuts and screws whether they have loosened and whether fixed pallet of shock absorber has tightened.

**A: When shock absorber has noise, it is usually breakdown with cylinder (leaking oil is unable to work normally), upper-mount, or tilt rod.**

- **Damping can't be adjusted.**

**A:** When you adjust damping, the knob pivot don't stop.  
 Hexagon rod of adjusting-knob becomes circle.  
 The fixed-mount of adjusting-knob doesn't certainly lock piston rod.  
 Hexagonal mount of piston rod becomes deformed.  
 Hexagon rod of adjusting-knob has plugs.

**A:** When you adjust damping, the knob is unable to be turned.  
 When you adjust to hardest or softest, continuing use more power to turn the same direction, that will cause internal parts which become tightened.  
 At this time, you just need to use adjuster of easier use power. That will be fine.

