

# KW automotive



## Set Up Manual KW-Variant 3

No. 685 77 140

Our 2-way adjustable competition shock absorber is based on the KW twin tube [damping system](#), and features independent bump and rebound adjustment. Depending on the sealing and the adjusting system of the individual kit, our systems may be charged with pressures of 3 to 8 bars, or without any pressure at all.

### Adjusting rebound:

The rebound adjustment is positioned in most cases at the end of the piston rod (top of strut). Please use the supplied KW adjustment wheel on the extruded tab adjuster for all adjustments. Some applications, such as Audi A4 8E, need to be adjusted by using a 2mm allen key.

- 1<sup>st</sup> step: Place the KW adjuster or 2mm allen key on the adjustment tab/allen bolt.
- 2<sup>nd</sup> step: Turn the adjuster clockwise until it stops. This is now adjusted to full hard. (clockwise=harder).
- 3<sup>rd</sup> step: Turn the KW adjuster or 2mm allen key counter clockwise to soften the rebound setting to the desired level. The effective adjustment range is from 0 - 3 turns / 0 - 18 clicks open.

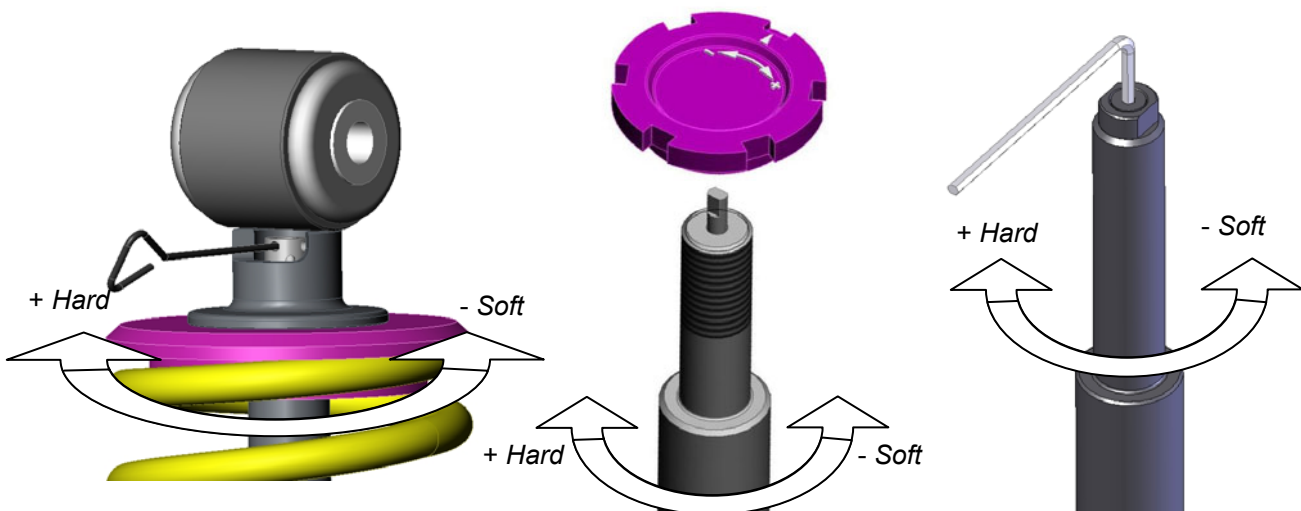
### Attention:

Never drive the vehicle with the shock absorbers set to full hard or full soft!

Never apply force to the adjusting mechanism of the shock absorber. As soon as you reach the end of the adjustment range, you will recognize a certain resistance. Stop turning to avoid damage to the bottom valve.

### Rebound Adjusting principles:

In general a soft rebound adjustment provides a comfortable ride at low vehicle speeds but the vehicle will have less stability at higher speeds, especially on the front axle (vehicle will tend to float at higher speeds). A hard rebound adjustment offers more stability but could reduce vehicle grip (i.e. the vehicle will tend to skip across road imperfections, reducing traction).



# KW automotive



### Adjusting the Bump/compression:

The compression forces can be adjusted on our patented 2-way bottom valve. Access to the bump valve in most instances is found on the bottom of each shock case. Hardness adjustment on the rebound valve is made on the end of the piston rod with the supplied setting wheel or with a 2mm Allen key.

### Adjusting Bump:

Bump forces, especially on low damper speeds, have a great influence on handling and driving behaviour of your car. The setting of the bump forces will be made from the bottom of the shock case. Behind the adjusting groove you gain access to a pin with 4 holes. With the supplied small key, the adjusting pin can be adjusted by a half turn in either direction. Smaller increments are possible.

Before performing any adjustments, the valve must be closed by turning the adjuster in the full clockwise direction or clicks. In this position, the shock will be at full hard, or "maximum power". From here, the adjustment range is  $5 \times \frac{1}{2}$  turns (2,5 full revolutions).

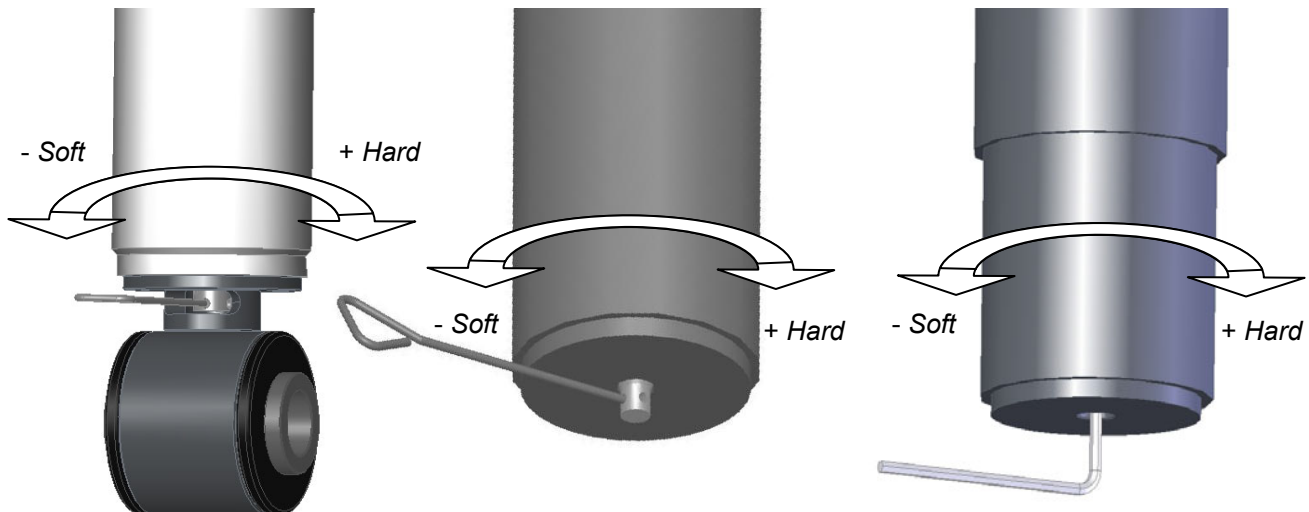
To avoid the mismatch of the dampers when actively changing settings, you should close the valve from time to time to re-calibrate the settings from side to side.

### Bump adjusting principles:

Generally, hard low speed bump settings will stabilize the corresponding axle (less over steer on the rear, for example) or offer the front a more precise steering response. Too much low speed bump power will decrease grip!

Depending on the valve configuration found inside the kit, maximum bump forces will not influence the suspensions response when encountering hard bumps, such as curbs on the racetrack.

**Attention! Do not turn the adjusting spindle by force when you reach the end of the adjustment range, this may damage the fine valve inside the system!**



Our recommendation for your car to start with:

<b>Front axle</b>	Rebound:	9	Clicks open	Bump:	1	Turns open
<b>Rear axle</b>	Rebound:	7	Clicks open	Bump:	0,75	Turns open