

# SETUP MANUAL



# KW automotive

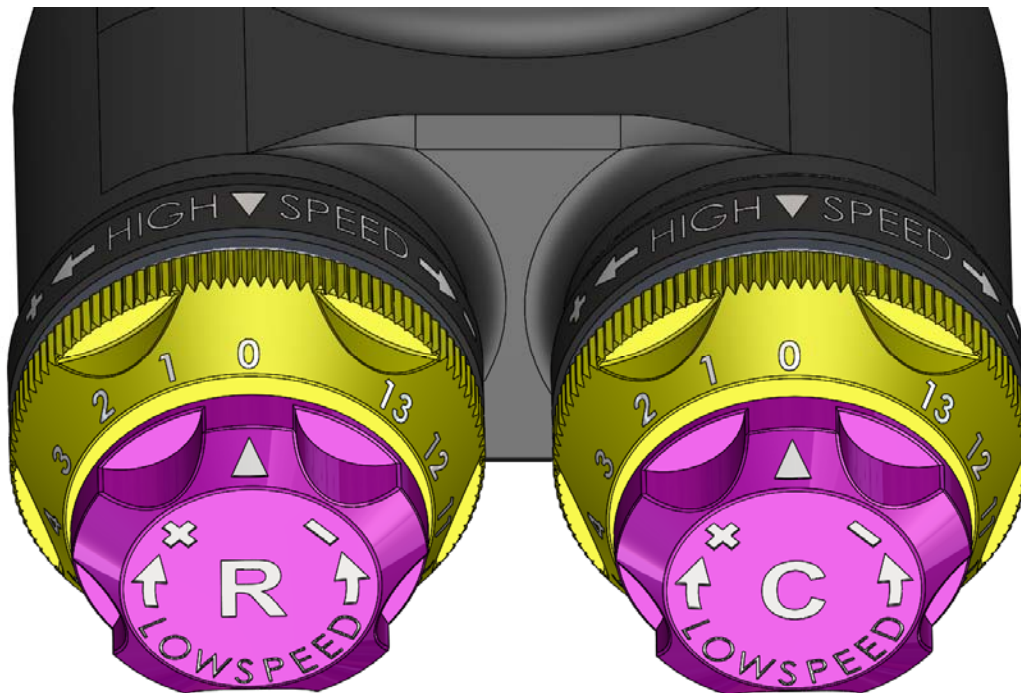
## Set Up Manual KW V5

No. 685 79 003

Attention: The KW Variant 5 dampers are mechanically adjustable high-performance shock absorbers. Changing the setting by adjusting the valves has an influence on the driving behavior of your vehicle. All suspensions are delivered in a setup agreed by KW. Setup changes should always be made in small steps (max. 2 clicks), axially and separately (rebound or compression).

Our 4-way adjustable damper is based on the principle of the "displacer" damper. Depending on the design of the reservoir the damper is built in a 2-pipe or 3-pipe system. The system is charged with a low gas pressure filling of 5-8 bar.

The dampers are separate and independently adjustable in rebound and compression. The valves for rebound and compression are located at the valve connection and described as follows:



R → Rebound-valve – Rebound

C → Compression-valve – Compression

**Rebound:**

The rebound adjustment is made on the valve marked with "R".

Purple adjustment wheel "Lowspeed" → \ slow rebound movements (clockwise (+) higher damping)

Golden adjustment wheel "Highspeed" → \ fast rebound movements (counterclockwise (+) higher damping).

The setting of the valve can be read on the arrow markings (shown setting 0-0). The valve has the following setting range:

"R" Lowspeed: 0-13 clicks (14 positions)

"R" highspeed: 0-13 clicks (14 positions)

Position 0 → maximum damper performance

Position 13 → minimum damper performance

Attention: The adjustment wheel operates a precision mechanical valve. Please do not try to use force to exceed the end of the adjustment range. This damages the setting technology.

**Effect of the rebound:**

(Lowspeed)

Low rebound forces improve driving comfort when driving slowly but reduce the stability and steering precision when driving fast.

High rebound forces further improve handling on the front axle but under certain circumstances makes the grip and traction worse. The driving comfort is severely limited at high rebound forces.

In no case one axle may be set very hard in combination with the other very soft!

(Highspeed)

A higher highspeed rebound adjustment reduces the rebound after strong compression and thereby increases body control.

A lower highspeed rebound adjustment enables the wheels to rebound faster when driving over edges and curbs. The body is decoupled, parallelly the comfort increases. The wheel relief is reduced.

**Compression:**

The compression adjustment is set on the valve marked with "C".

Purple adjustment wheel "Lowspeed" \ slow rebound movements (clockwise (+) higher damping)

Golden adjustment wheel "Highspeed" \ fast rebound movements (counterclockwise (+) higher damping)

The setting of the valve can be read visibly on the arrow markings (shown setting 0-0). The valve has the following setting range:

"C" Lowspeed: 0-13 clicks (14 positions)

"C" highspeed: 0-13 clicks (14 positions)

Position 0 → maximum damper performance

Position 13 → minimum damper performance

**Effect of the compression:**

The pressure level has a significant influence on handling and driving behavior.

Basically:

**(lowspeed)**

With harder compression settings on the front axle, the vehicle becomes more precise or more aggressive on steering. A softer setting on the other than, favors a more 'benevolent' steering behavior.

Harder compression levels on the rear axle make the vehicle more stable when changing direction or counteract a tendency to oversteer. In contrast a soft pressure level allows to help steering. However too much pressure can cause hard uncomfortable driving and reduces the grip.

**(highspeed)**

The high-speed pressure level is used to tune vehicle behavior during fast positive road stimulation. These influences include: transverse edges, curbs, speed bumpers, rough roads, driving through depressions/wells, etc. Increasing the high-speed pressure level increases the body support and vehicle control when driving through depressions and bumps (e.g. highway, undulating country road). Reducing the high-speed pressure level increases the comfort when driving over edges etc.

Attention: The adjustment wheel operates a precision mechanical valve. Please do not try to use force to exceed the end of the adjustment range. This damages the setting technology.

**Factory default:**

Our dampers are always delivered in basic setting. This basic setting was specified specifically for your vehicle on the front and rear axles. If the dampers are reset to their basic settings, the value listed in the table below applies.

**We recommend the following basic performance settings (standart setting on delivery):**

	Lowspeed rebound	Highspeed rebound	Lowspeed compression	Highspeed compression
Front axle	7	7	7	7
Rear axle	7	7	7	7