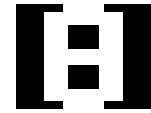




**INSTRUCTION MANUAL FORKS**

KILO NO.1  
KILO 1.2 / 1.3

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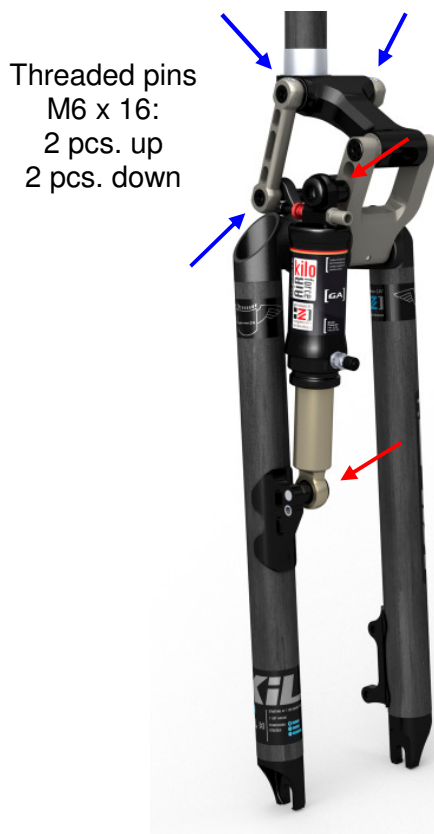
1. Safety instruction

**Attention!!!**

Please regularly control all screws of the fork, especially the shock mount and the threaded pins in the levers (see red arrows)!

**Especially both screws of the shock mount have to be controlled regularly:**

At the upper shock mount please use a **small amount** of low strength thread locking **on the top of the screw**, use only **low** strength thread locking. Do not use thread locking at the lower shock mount! Just make sure to tighten the screw with **12NM!**



**Setscrews (indicated by blue arrows) M6 x 16 DIN 913 A2:**

Use low strength thread locking for all 4 pcs.

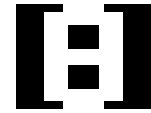
**UPPER SHOCK MOUNT (indicated by red arrows):**

Put a **little bit** low strength thread locking **on the top of the screw.**

**LOWER SHOCK MOUNT (red arrow):**

Please try only a little bit of thread locking, most important is the fastening torque about **12 Nm!**

If you intend to use thread locking, the “steel threaded insert” (Helicoil) will be removed with the Screw and will need to be replaced.



The forks of the "Kilo" series are designed for  
Cross-country (XC), Touring and Marathon use only.

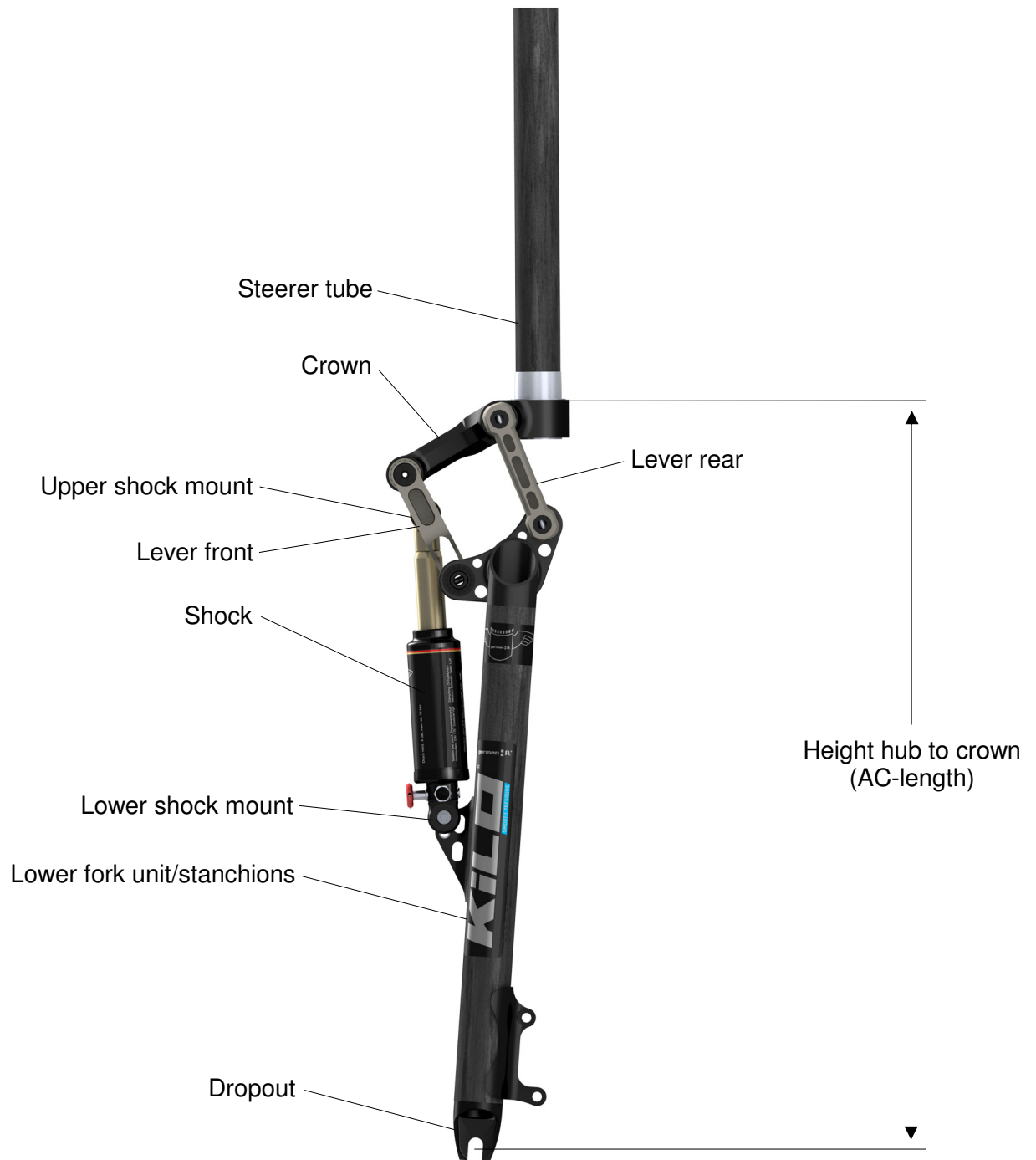
- 1) During use (ride) do not reach into the area of the moving four-link system. This may lead to serious injuries!
- 2) The user is responsible that the fork and shock are operating freely and have no undue contact.
- 3) Tires are must not touch the shock or the fork crown! If you intend to use big tires, contact your dealer or german:A. directly.
- 4) Carefully regard specifications of all components or products attached to the fork.
- 5) The air shock contains an oil hydraulic shock. When dismantling a pressurized unit, an explosion-like pressure release may result. Always wear safety goggles when dismantling the shock.
- 6) You need special confirmation of the producer for dismantling fork and/or shock beyond normal maintenance. The warranty is void if unauthorized maintenance work is done on your fork.
- 7) Gearshift and brake cables must not wear away any aluminium of the fork at any time.
- 8) **Don't use the active lockout for driving off-road and/or non-stop!**

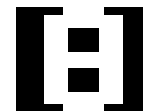
Always ascertain that the steel / air spring is adjusted properly to bear the riders weight for the purpose intended, to avoid bottoming out. This may seriously damage the fork. If the fork has bottomed out, it should be sent in to be checkt.



**2. Build up of a Kilo fork**

- Depending on version the product can differ from the illustration. -





### 3. Installation

#### 3.1. Mounting instructions

Compare picture to the right. The product can differ from the illustration.



#### 3.2. Preparation

Check before beginning:

- Compatibility of frame and all add-ons
- Length of fork stem
- Proper seat of all headset parts

#### 3.3. Head tube and fork stem

The fork stem fits only 1 1/8" headsets. It measures 28,6 mm (= 1 1/8"). The length of the fork stem is adjusted with a standard tube cutter. How much you cut depends on the length of the head tube, the headset, stem and spacers. **ATTENTION!** Don't use a claw fastener for carbon steerer!

#### 3.4. V-brakes

**Kilo 1.2 / 1.3:** The V-brake version is only available in V-brake & disc. It's a system with clamps. The clamps are already mounted with the sockets. The sockets are standard metric thread (M8 x 1,25) with a hole length of 47mm, the thread is 23 mm long. **NOTE!** The „fastening torque“ is **12 – max. 15 Nm!** Don't try more than 15 Nm otherwise the aluminium stanchion (leg) will brake!

**Kilo no.1:** The clamps are already mounted; it's not possible to remove them.

**ATTENTION!** The fastening torque is **max. 4,5 Nm!** The starting torque should be very low, to avoid damage to the carbon lowers (legs). Do not use any hire torque, otherwise the carbon stanchion will brake! It is not possible to tighten the sockets after delivery, because the sockets are mounted from factory with screw locking.

#### 3.5. Disc-brakes

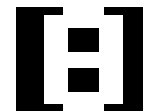
Kilo forks are prepared for international standard (IS) 2000, version "disc" and designed for max. 160 mm disc rotator. For all further details, please follow the specific instructions of the brake manufacturer.

#### 3.6. Hubs

Use only standard hubs intended for an assembly dimension of 100mm.

#### 3.7. Tires

**Note!** Prior to first ride: Please make sure that the tire to be used can rotate freely throughout the whole travel. With these forks, you may use tires to a height of ca. 57 mm (2,25") and a width of 56 mm (2,2") with the air spring version and a width of ca. 58 mm (2,3") with the steel spring. You should be aware that width also depends on the tire pressure and rim width used. Tires must not have any contact with the shock. All concerning data without guaranty.



#### 4. General shock information

##### 4.1. Adjustment

Both, air and steel spring shocks offer a wide range of rebound damping adjustments.

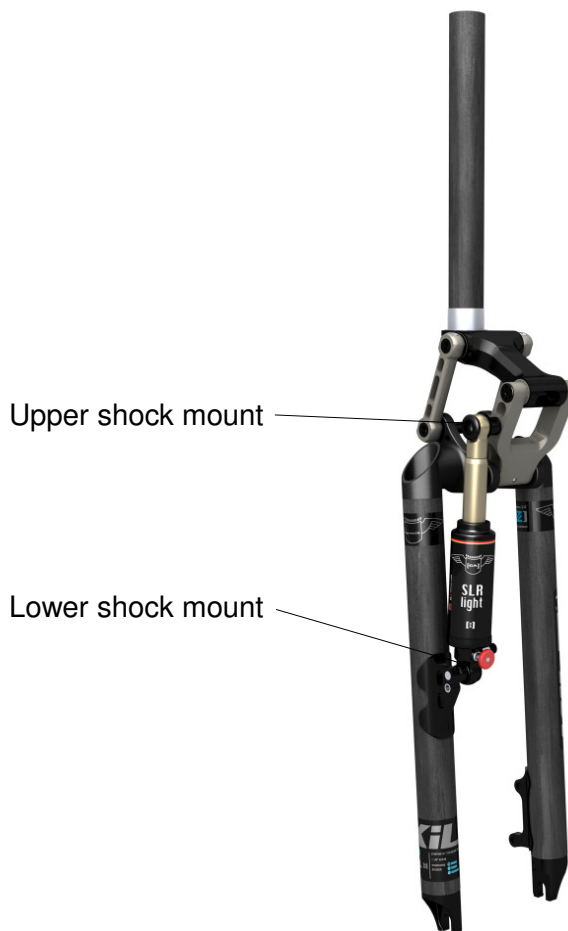
##### **Recommended general adjustment guide:**

- Low damping: For highest sensitivity, fast response, for repeated fast deflections on fast downhill and bad track.
- High damping: Typical to avoid rocking action on asphalt.

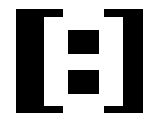
##### 4.2. Dismantling shock

**Before working on the GA shocks, bleed air chambers completely. When bleeding air chambers while shock and fork are installed, damage to the shock may occur due to the weight of the bike.**

**Take due care that the bike is fastened securely in the operating.**



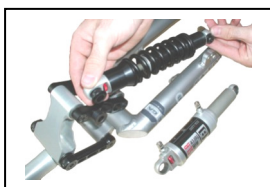
- Depending on version the product can differ from the illustration. -



1. Remove lower M5 (5mm) hex socket bolt of shock  
Carefully lower front end (do not drop!)  
(with M5 allen key)

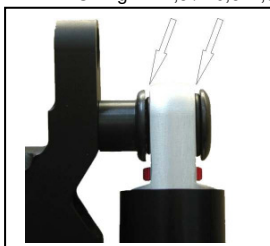


2. Remove upper M5 (5mm) hex socket bolt  
(with M5 allen key)



3. To re-mount the shock, follow procedure in reverse order.

O-ring 12x2,5 / 10,5x2,5



4. Put a little bit thread locking (low strength!) on the top of the screw. The o-rings at the upper shock-mount in corresponding order (see to the arrows).

**NOTE! 2 O-ring positions!**

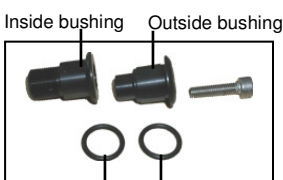
Upper shock-fixation consisting of:

Inside- / outside bushing, M6 x 25 screw, 2 x o-rings (black rings).

According to shock version AiR-force kilo + steel-spring damper:

**1 x o-ring 12 x 2,5 (inside), 1 x o-ring 10,5 x 2,5 (outside)**

According to SLR:light., AiR-force SLR (old model): 2 x o-rings 12 x 2



12x2,5 (inside) 10,5x2,5 (outside)

5. **NOTE! Fastening torque for the screws is 12 Nm!**

**Please Note!**

**UPPER SHOCK MOUNT:**

Use only a small amount of **low** strength thread locking **on the top of the screw.**

**LOWER SHOCK MOUNT:**

It's not recommended to use thread locking, but please make sure to meet the fastening torque of **12 Nm!** If you like to use thread locking, the "steel threaded insert" (Helicoil) will be removed with the screw and will need to be replaced.



### 4.3. Shock position model version 2008-2010

The lower shock mount has 2 different shock positions:

**NOTE! The following specifications are only for fork version 2008-2010!** For prior fork versions (2003 – 2007) the position of shock is different, due to a change in geometry, there is a new position of the low shock mount and different shock lengths.

**Kilo 1.2:** The basic model of the aluminium version is the air shock “AiR-force kilo”. The shock has to be mounted in the upper position (see to the picture). It’s mounted in the same position as the air shock “SLR:light.”. The length of both shocks is 195 mm.

**Kilo 1.3:** The basic model of the aluminium version is the steel spring damper. The shock has to be mounted in the down position (see to the picture). The shock length is 200 mm.

#### Kilo no.1:

The basic model of the carbon version is the air shock “SLR:light.”. The shock has to be mounted in the upper position (compare with the picture). It’s the same position as for the air shock “AiR-force kilo.”. The length of both shocks is 195 mm.

**NOTE! Please follow the instructions. If not, the fork will suffer a damage and loose warranty! The correct adjustment of the air pressure or steel spring is also very important to prevent bottoming out. In particular for riding stairs or drops!**



### 4.4. Spring preload

Spring preload (sag) means how much the shock is compressed when a rider sits on the bike and is measured on level ground. The rider must be seated in a normal riding position.

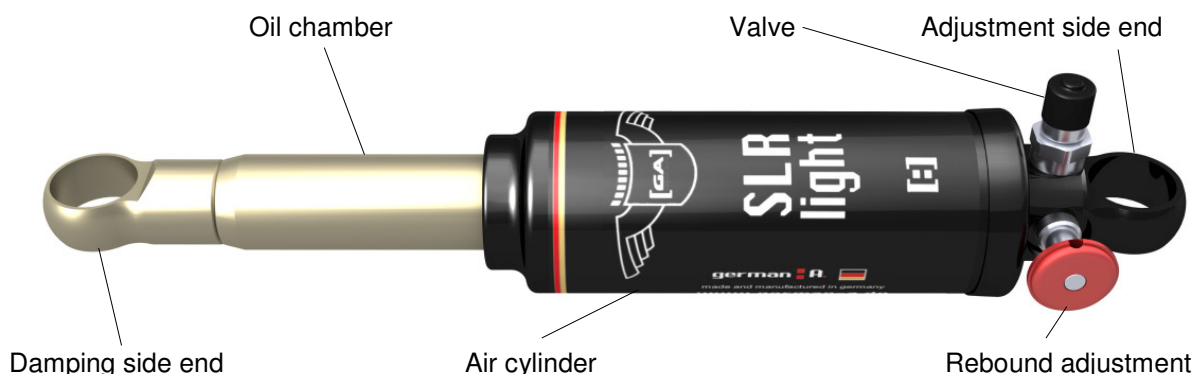
Spring preload should be set between 15 - 25 % of the overall travel.

Static deflection	15 %	20 %	25 %
At total deflection of 80mm max.	12 mm	16 mm	20 mm



**5. Introduction of air-spring damper “SLR:light.”**

**5.1. specifications of air-spring damper “SLR:light.”**



**5.2. Air pressure**

The shocks are delivered with air pressure. Before you change the pressure, you can test whether the preset pressure suits your needs. Otherwise, referring to the table below, you can adapt the pressure to your weight.

If the standard values do not fit your purpose or personal taste, you can adapt the pressure to your individual liking. Please take care to avoid bottoming out (especially if using a very soft setup). You should also take check if the shock is fixed to the lower mount.

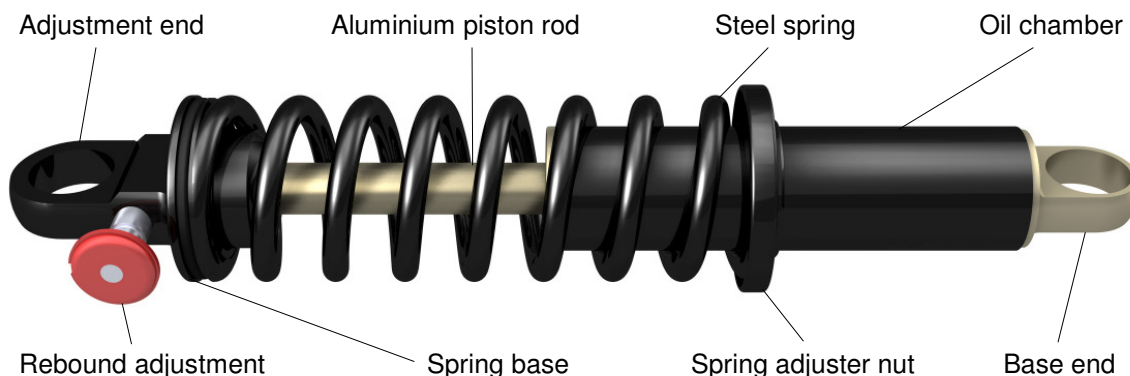
Please check whether your hand pump is equipped with an adapter. A special suspension pump prevents loss of air pressure when removing the pump after having filled the air chamber. Pumps can be bought at your local bike shop. Our reference is the pump from SKS model “SAM” (you’ll find it also in our webshop: [www.german-a.de](http://www.german-a.de)).

Air pressure SLR:light. (guidelines only)		
Weight of biker (kg)	Air pressure in bar (bar)	Air pressure for racings (with stairs)
Up to 70	till 6,5	till 8,0
70 – 75	6,5 – 7,5	8,0 – 8,5
75 – 80	7,5 – 8,5	8,5 – 9,5
80 – 85	8,5 – 9,5	9,5 – 10,5
85 – 90	9,5 – 10,5	10,5 – 11,5
90 – 95	10,5 – 11,5	11,5 – 12,5
Pressure minimum 4 bar – max. 15 bar		



## 6. Introduction Steel-spring damper

### 6.1. Specifications:



### 6.2. Coil spring strengths

Base adjustment of the spring preload is achieved via spring characteristic:

<b>Standard values</b>					
Rider weight	< 60kg	< 70kg	< 80kg	< 85kg	> 85kg
Spring rate (N/mm)	22	27	32	38	42 or air shock
Markings	Red spring	Black spring (green mark)	Black spring (yellow mark)	Silver spring	Black spring (without mark)
Weight of coil only	120 g	130 g	142 g	172 g	181 g
Length of coil	120mm	100mm	100mm	110mm	110 mm
Other: Spring rate 15,7 N/mm (black) and 12 N/mm (silver)					

Basically: More preload of the coil spring means a more firm response characteristic.  
**NOTE!** Spring preload must not exceed 10mm!

## 7. Introduction of air-spring damper “AiR-force kilo“

### 7.1. Primary filling

The AiR-force kilo shock is already inflated with 6-8 bar pressure by delivery. Before the first ride, please make sure that the fork can move through its entire travel without undue contact.

Please check, if your air pump has an adapter for filling shock absorbers, which makes the removal of the pump possible without loss of air pressure. It's available in every specialist shop.

1. Release air: Put off the valve cap, hitting the valve (golden nib) and the air pressure will escape.
2. Before you start filling: The damper has to be in maximum travel position. **NOTE!** Check at first that the damper is not compressed.



3. Filling: The necessary pressure depends on your weight, the ratio of the bike and the application area. Fit your suspension pump and fill the damper by pumping according to table **(picture 1.3)**.

**NOTE! Sometimes the damper is pushed together by filling in the pressure, in that case you have to release the air, pull it apart until the damper is no longer compressed and refill again!**

### 7.2. Air pressure

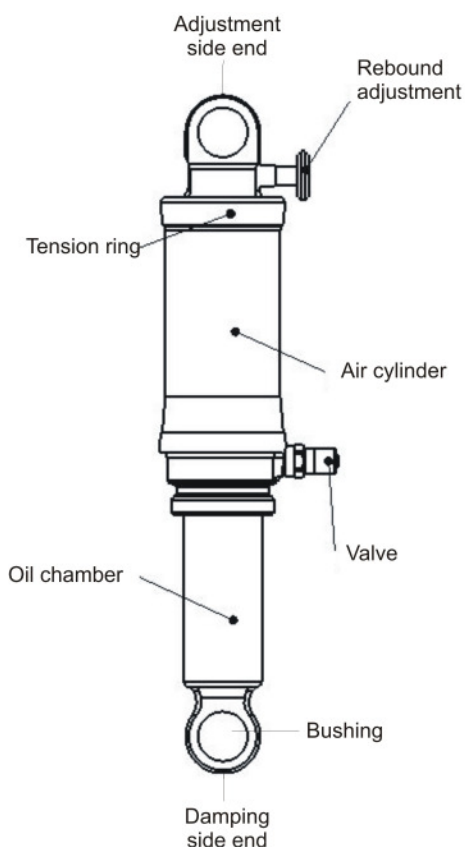
Weight of biker (kg)	Air pressure (bar)	Air pressure for racings
Bis 70	~ 6	7 - 8
70 – 75	~ 7	8 - 9
75 – 80	~ 8	9 - 10
80 – 85	~ 9	10 - 11
85 – 90	~ 10	11 - 12
90 – 95	~ 11	12 - 14

Pressure minimum 4 bar – max. 20 bar

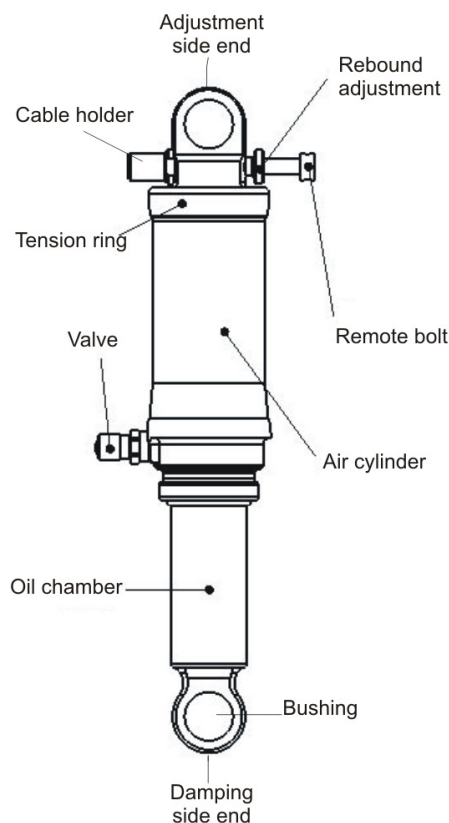
**NOTE!** The pressure table contains only recommended values!  
Air Pressure also depends on the intended use, riding style and personal preferences

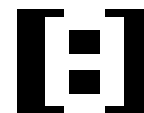
### 7.3. Definition

#### Basic model:



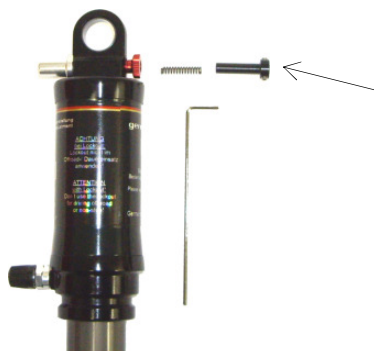
#### Lockout model:





#### 7.4. Installing the lockout remote control

Pic. 1



Provided parts:

Remote bolt, spring, end cap (not pictured). (See also shock description page before.)

**NOTE! Before mounting the red rebound adjustment has to be turned towards the casing until bed stop**

**TIP:** The turning in of the red rebound adjustment is much easier, if you push the black remote bolt into the red rebound adjust screw till bed stop (without pictured spring).

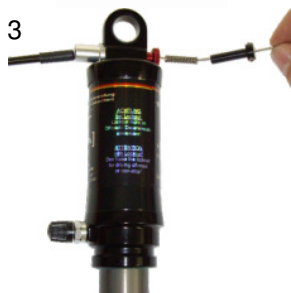
Pic. 2



To assemble the remote control please follow the instructions given below:

**NOTE! First, please activate the lockout at the remote control lever until the lever is locked in place!**

Pic. 3

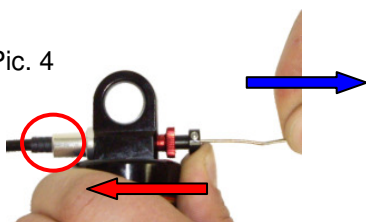


Fit the wire through the shock according to **PIC. 3**.

Insert the spring and the remote bolt into the red rebound adjust screw.

Push the black bolt into the damper (indicated by the red arrow, **PIC. 4**) till bed stop and pull the wire into opposing direction (indicated by the blue arrow).

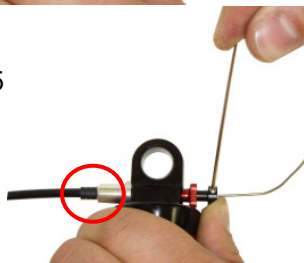
Pic. 4



**NOTE!** The wire counter bracket (red encircled) has to slip into the cable holder (silver aluminium part at the shock).

After stretching the wire you have to seize both M3 tread bolts in the black rebound bolt with a socket wrench 1.5 mm. Finally you can fix the tread bolts with liquid screw lock (shown at **PIC. 5**). It's not necessary to stretch the wire until the tread bolts are seized. The easiest way will be to put your thumb to the black part and fix the wire too.

Pic. 5



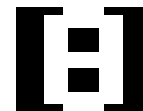
At last you will have to trim the wire. The wire should have a maximum length of 10 mm in (compare with **PIC. 6**). As a last step position the end cap.

Pic. 6



Concluding the assembling as described:

- Turn the rebound adjust knurl 5-6 mm out of the damper (your rebound will get faster).
- Pull the lock lever out of lockout position, the damper is ready for use.
- With the red knurl, you are able to adjust the rebound without changing the lockout performance.



## 7.5. Lockout specifications

The lockout mode of the Kilo is an over-damped rebound control, i.e. when activated, the fork is compressed (especially useful when riding uphill). The use of other kinds of lockouts is not permitted for this system.

When deactivating the lockout, the fork expands again. In order to adjust the rebound control during normal mode (non lockout mode) you can adjust the rebounds using the red rebound adjust screw. If you turn the screw towards the casing the damping is increased and the rebound is slower. In the opposite direction you reduce the damping and decrease the rebound, consequently the rebound is faster.

**Attention! Don not use the active lockout for driving off-road and/or non-stop!**

## 7.6. Lockout

Lockout remote control:

The lockout has only 2 setting: active or inactive. The lockout is activated or deactivated by using the black remote lever (shown in the picture to the left).

There are two modes:

Lockout active: Push the black lever down until it is locked in place.

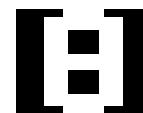
Lockout deactivate: Release the black lever back into the starting position.

Picture 1: Lockout remote lever



Picture 2: „AiR-force kilo“ Lockout model





## **8. Maintenance and rebuilding**

**Note! Please observe the safety instructions described in chapter 1!**

Shocks are subject to wear and tear and must be serviced (depending on usage and type of use) at least once a year. Service means dismantling, change of (silicon) oil, exchange of seals and parts if they are worn out. Due to the modular build-up of the fork almost any worn parts can be exchanged if necessary (you will be given an estimate) and the unit will be as good as new afterwards.

For a proper service please send in the fork including the original papers to your dealer or directly to the address you'll find on our homepage. Please check first the address and the service costs on our homepage or webshop: [www.german-a.de](http://www.german-a.de).

### **8.1. Dismantling of parts**

Any further dismantling of parts requires the agreement of the manufacturer. All warranties are invalid when dismantling parts of the fork or shock on a private base without a written consent of the manufacturer.

### **8.2. Cleaning and maintenance**

Fork and shock may be cleaned with cleaners generally used for bicycles. Ascertain that valve caps are properly seated on valves. Solvents and aggressive cleaners may attack labels and surfaces.

Ball bearings should be lubricated regularly (together with chain and sprockets). Do not use water, just a clean cloth or a soft brush. Apply a drop of oil to each bearing, wipe off any excessive oil.

### **8.3. Warranty**

Applicable are the general terms and conditions of German Answer as well as the warranty rules defined by law. Above this German Answer is ready to tolerate special cases.

The warranty does not apply if un-purposeful usage takes place or in case of:

- Ignorance of safety precautions defined by chapter 1
- If the shock is disassembled for reasons that do not include servicing
- Broken valve casings
- Over tightened and therefore broken threads of the valve casings
- Flow and normal function sounds when all seals are working
- Worn shock mounts
- Parts that are subject to wear and tear (seals/bushings/surfaces)
- Mechanical damage / bent dials
- Mechanical damage on the surfaces
- Missing serial number
- Missing registry card
- Abrasion of aluminium by shifting/brake cables or tire
- All unauthorized work on fork or shocks (Improper maintenance and service)
- Damage due to crashes, jumps and competitions
- Disc brakes with a diameter larger than 160 mm



#### 8.4. Technical information

System	Trapezoid multiple link system
Sizes*	20", 26", 28", 29" only in carbon version
Height hub to crown version 2006	395 (20"), 480 (26"), 495 (28") mm
Height hub to crown version 2007	395 (20"), 470 (26"), 490 (28") mm
Height hub to crown version 2008-2010	approx. 480 (26"), 500 (28"), 510 (29") mm
Weight version Aluminium	ex 1.289 g (26")
Weight version Carbon	ex 1.129 g (26")
Steerer tube length	250 mm aluminium / carbon
Steerer tube size	1 1/8" ahead aluminium / carbon
Damping	Oil, adjustable in tension
Transmission ratio	1 : 1,4
Spring type	Air with negative chamber or steel spring
Travel	ca. 90 mm Long Travel
Bearings	Sealed ball bearings
Brakes	V-brake / disc Standard IS 2000 (160 mm)
Version GA-force kilo no. 1 Carbon	Weight of driver max. 85 kg (95 kg aluminium steerer)
*Sizes 20" 29" availability	only as carbon version
Optional	Rebound lockout with remote control, other colours (aluminium version / down part)

#### 9. Optional equipment (mounting areas)

10.1 fender mounting areas.

10.2 Modified mud guard (SKS fender -snap-on system- with 64 mm width possible)

10.3 Mounting areas for fenders at the front wheel (3 pcs.)

10.4 Mounting areas for carrier mounts (Low-Rider)

- Total Luggage payload max. 10 kg! -

10.5 Mounting area for lighting installation.

- Depending on version the product can differ from the illustration. -

