



Motool Service Assistant 4.0

The new Service Assistant app works as a virtual remote display for the new Slacker V4 and allows you to keep notes and settings on all your off-road, street and adventure motorcycles and full suspension mountain bikes to! Keep all your bikes and setting safe and secure in the cloud and accessible from any iOS or Android device with internet connectivity. Take your ride to the next level with this simple, free app by Motool!



U.S. Patent No. 9,021,872



User Guide

Slacker V4 Overview



For virtual remote just turn Slacker on and open the app.
You do not need to pair your phone, just the wireless remote.

**Android requires location services to be enabled.*

- ① **Wireless Remote Pair**
 - With Slacker and the remote powered off, press and hold the power and reset buttons until the display shows "PR" on each unit respectively. Remote will pair and both will display "0".
- ② **Power/Reset**
 - Press for 1 second to turn on.
 - Press for 5 seconds to turn off.
 - Press once to reset Slacker to zero.
 - Automatically turns off after 5 min.
- ③ **LCD Display**
 - Displays readings in millimeters.
 - Displays system messages.
 - Backlit for poor lighting conditions.
 - Low battery indicator.
- ④ **Backlight/Auto Zero**
 - Push to turn backlight on/off.
 - Hold for 5 seconds to enter Auto Zero.
- ⑤ **Universal Clip**
 - Clips to fenders and number plates.
 - Secures to the rear for easy storage.
- ⑥ **Universal Clip Holder**
 - Secures universal clip to rear.
- ⑦ **Slacker Cable/Hook**
 - 32" retractable cable.
- ⑧ **Battery Compartment**
 - Requires two AAA batteries.
- ⑨ **Universal Magnetic Mount**
 - For steel axles up to 1" diameter.

Quick Tips

- Be sure to install 2) AAA batteries before use.
- For dirt bikes, always take measurements across the arc of the axle except for 2016 and newer KTM and Husky bikes. Measure to the provided mark on the fender for those bikes.
- For street and adventure bikes, always measure vertically from the axle.
- For mountain bikes, be sure to take the initial travel measurement.
- Always center Slacker on the axle and angle with the cable.
- If using the universal clip, make sure the butt is against the edge of the plastics to avoid rotating. Do not dangle the clip as it can rotate and affect readings.
- Always place the clamp/adhesive loop in the same place. You can also drill a tiny hole in the plastics on dirt bikes.
- Always sit in the same position in full riding gear and a full fuel tank.
- For oversize axles you can stick Slacker to a socket and slide the socket into the axle. Shim with small piece of electrical tape to remove any play.
- Do not bump or jar the unit when taking bike off the stand or mounting the bike.



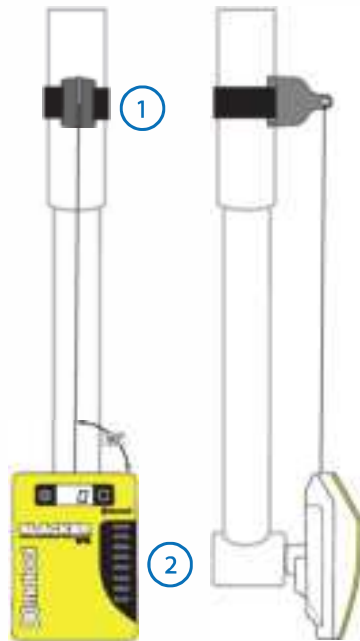
Auto Zero Mode-

Auto Zero mode allows Slacker to learn the zero point when the suspension is unloaded by lifting the bike.

Important- Auto Zero will not activate until the cable has extended out 5mm or more from where it was activated. If using a side stand the suspension may not be compressed enough to activate it. Either stand the bike up and enable Auto Zero with the bike under its own weight using the backlight button or lift the bike against the stand and reset it to "0" using the power button.

Using Auto Zero-

- 1) Press and hold the backlight button on the right side of the display for 5 seconds.
- 2) Once Auto Zero is enabled you will see a cursor scrolling up the display indicating you need to lift the bike.
- 3) Lift the bike to unload the suspension. Be sure you fully top the suspension out, you should feel it.
- 4) Slacker will note the furthest extension of the cable as the zero point where the suspension was fully unloaded.



Forks

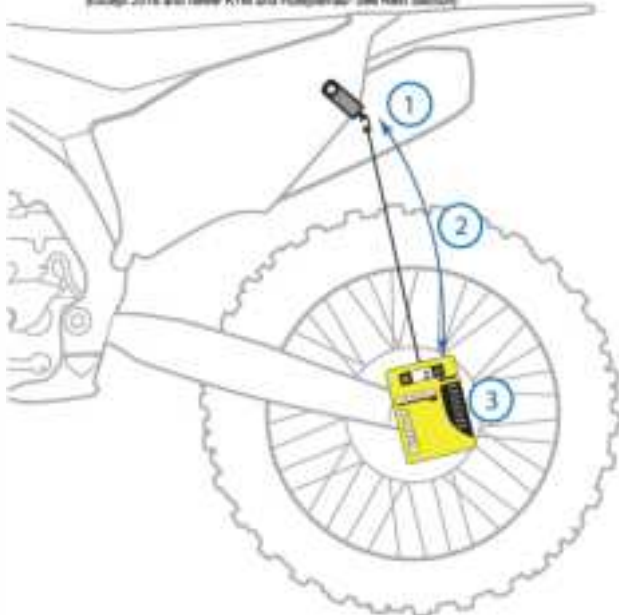
(all bikes, all styles of forks)

- 1) Strap the universal fork adapter to upper fork leg.
- 2) Position adapter pointed out parallel with the axle.
- 3) Snug the cinch strap tightly to avoid movement.

- 1) Center Slacker on the axle and hook retractable cable on the universal fork adapter.
 - 2) Angle Slacker so cable exits at a 90° angle.
 - 3) Turn Slacker on by pressing the power button for 1 second.
 - 4) Power up the wireless remote or open the virtual remote app if you require a remote display.
 - 5) If the fork is already unloaded- (bike is on a stand or MTB forks that are already topped out) Press the power button once to assure it is reading "0" on the display.
You are now ready to take measurements in real-time.
 - 6) If the fork is already under the bike's weight- Place the unit in Auto Zero mode by holding the backlight button for 5 seconds.
 - 7) Once you see the cursor scrolling up the display, you can lift the bike to unload the suspension. A side stand or steering stem stand are highly recommended for most street and adventure bikes.
 - 8) Slacker will note tag the zero point and you are now ready to take measurements in real-time.
- Note:** When removing Slacker, rock it to the side to get the magnet to release, do not pull directly out.

Dirt Bikes

(Except 2016 and newer KTM and Husqvarna- See Next Section)



1

1) Place the universal clip or drill a small hole where the arc of the axle meets the side plate/fender.

2) Make sure you place the butt of the clip all the way against the plastics to prevent movement.

2

1) To find the arc of the axle, simply take a piece of string and pinch one end against the swing arm pivot axle. Then grab it at the rear axle with your other hand and swing it up to see where it hits the plastics. This is where you want to place the clip or drill a small hole for the hook to attach to.



3



1) Place Slacker centered on the rear axle, extend the retractable slacker cable and hook to clip or hole in the plastics from the previous step.

2) Angle Slacker so the cable exits at a 90° angle.

3) Turn Slacker on by pressing the power button for 1 second.

4) Start the virtual remote app or power up the wireless remote if you require a remote display.

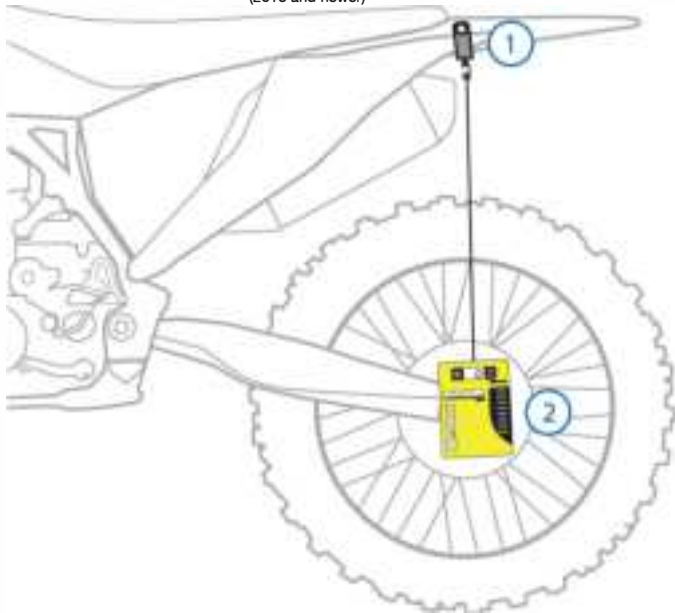
5) Take the bike off the stand and place Slacker in Auto Zero mode by pressing the backlight button on the right and holding it for 5 seconds.

6) Once the cursor begins to scroll up the display, lift the bike to unload the suspension. Be sure to fully unload it to assure the most accurate zero point.

7) You are now ready to take measurements in real-time.

Note: When removing Slacker, rock it to the side to get the magnet to release, do not pull directly out.

KTM & Husqvarna (2016 and newer)



1

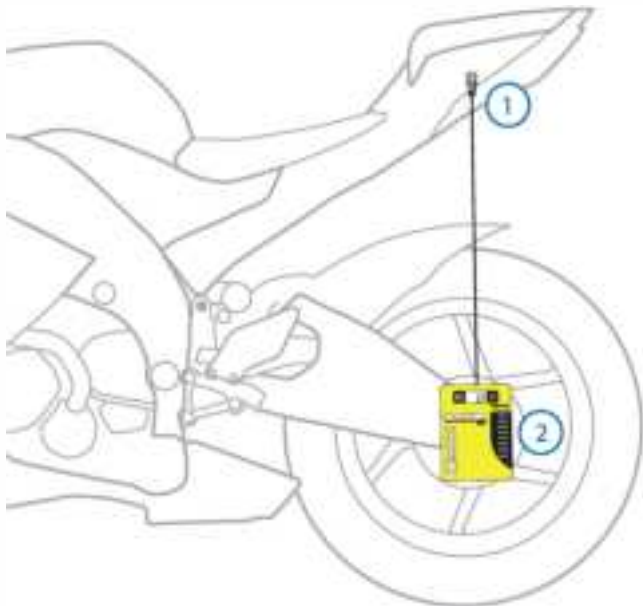
- 1) Place the universal clip or drill a small hole at the sag mark provided by the factory.
- 2) Make sure you place the butt of the clip all the way against the plastics to prevent movement.



2

- 1) Place Slacker centered on the rear axle, extend the retractable slacker cable and hook to the clip or the hole in the plastics from the previous step.
 - 2) Angle Slacker so the cable exits at a 90° angle.
 - 3) Turn Slacker on by pressing the power button for 1 second.
 - 4) Start the virtual remote app or power up the wireless remote if you require a remote display.
 - 5) Take the bike off the stand and place Slacker in Auto Zero mode by pressing the backlight button on the right and holding it for 5 seconds.
 - 6) Once the cursor begins to scroll up the display, lift the bike to unload the suspension. Be sure to fully unload it to assure the most accurate zero point.
 - 7) You are now ready to take measurements in real-time.
- Note:** When removing Slacker, rock it to the side to get the magnet to release, do not pull directly out.

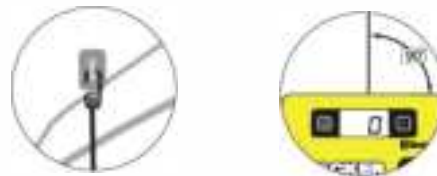
Street Bikes



1

1) Place a clear adhesive loop directly above the rear axle with the loop oriented vertically.

Note: Make sure to clean the area of dirt and oils before you place the loop to assure the adhesive loop sticks properly and does not get pulled off the bodywork.



2

1) Place Slacker centered on the rear axle, extend the retractable slacker cable and hook it to the loop.

2) Angle Slacker so the cable exits at a 90° angle.

3) Turn Slacker on by pressing the power button for 1 second.

4) Start the virtual remote app or power up the wireless remote if you require a remote display.

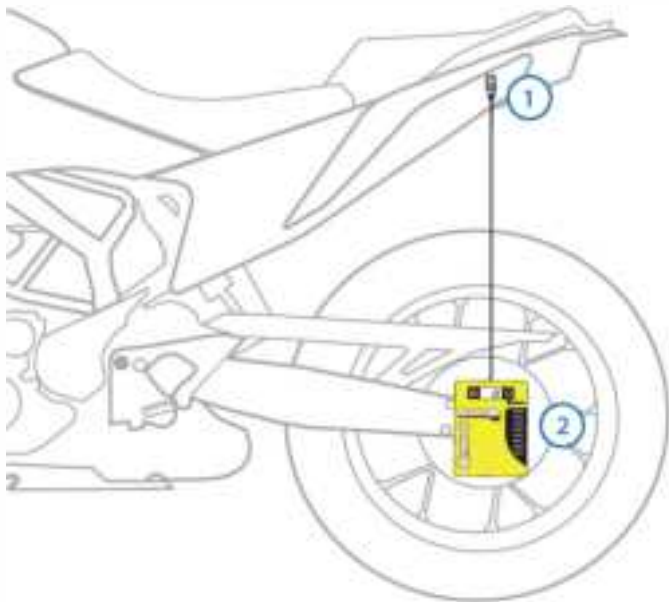
5) Take the bike off the stand (if any) and place Slacker in Auto Zero mode by pressing the backlight button on the right and holding it for 5 seconds.

6) Once the cursor begins to scroll up the display, lift the bike to unload the suspension and Slacker will automatically find the zero point. Be sure to fully unload it to assure the most accurate measurements.

7) You are now ready to take measurements in real-time.

Note: When removing Slacker, rock it to the side to get the magnet to release, do not pull directly out.

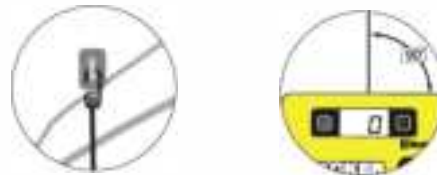
Adventure Bikes



1

1) Place a clear adhesive loop directly above the rear axle with the loop oriented vertically. If you have panniers, you can also place the loop on the back side of them in most cases.

Note: Make sure to clean the area of dirt and oils before you place the loop to assure the adhesive loop sticks properly and does not get pulled off the bodywork.



2

- 1) Place Slacker centered on the rear axle, extend the retractable slacker cable and hook it to the loop.
 - 2) Angle Slacker so the cable exits at a 90° angle.
 - 3) Turn Slacker on by pressing the power button for 1 second.
 - 4) Start the virtual remote app or power up the wireless remote if you require a remote display.
 - 5) Take the bike off the stand (if any) and place Slacker in Auto Zero mode by pressing the backlight button on the right and holding it for 5 seconds.
 - 6) Once the cursor begins to scroll up the display, lift the bike to unload the suspension and Slacker will automatically find the zero point. Be sure to fully unload it to assure the most accurate measurements.
 - 7) You are now ready to take measurements in real-time.
- Note:** When removing Slacker, rock it to the side to get the magnet to release, do not pull directly out.

Mountain Bikes



1

- 1) Strap the universal fork/seat post adapter to the seat post and angle it out slightly to keep the retractable cable clear of the rear tire.
- 2) Make sure you snug the cinch strap firmly to the seat post to prevent any movement.



2

- 1) Place the MTB hex key axle insert on the magnet and insert into hex key in the axle.
- 2) Pull the retractable cable out and hook it on the universal fork/seat post adapter.
- 3) Angle Slacker so the cable exits at a 90° angle.
- 4) Turn Slacker on by pressing the power button for 1 second.
- 5) Start the virtual remote app or power up the wireless remote if you require a remote display.

Note: Prior to taking first measurements, you must first measure the total travel of the rear axle in relation to Slacker's position on the bike. This only needs to be done once to get the total travel of the axle.

-Air shocks- With Slacker mounted, deflate the shock and make sure Slacker reads "0" with the shock fully extended. Now bottom the shock out and note the reading. This will be the number you use to calculate the sag percentage. i.e. total travel of 120mm x 20% = 24mm of sag

-Coil shocks- First, remove the spring and mount just the shock body. With Slacker mounted, make sure Slacker reads "0" with the shock fully extended. Now bottom the shock out and note the reading. This will be the number you use to calculate the sag percentage. i.e. total travel of 120mm x 20% = 24mm of sag.

- 6) Make sure Slacker reads "0". If not, just hit the power button once to reset it to zero.
- 7) You are now ready to take measurements in real-time.

FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferenceto radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in mobile or portable exposure condition without restriction.