



QUARQ

SHOCKWIZ

User Manual

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ShockWiz™ is not compatible with all air suspension forks and rear shocks. For a complete list of incompatible suspension, go to www.shockwiz.com.

ShockWiz firmware must be updated after each app update. Use the ShockWiz app to update device firmware.

The ShockWiz app is available in iOS® and Android® formats.

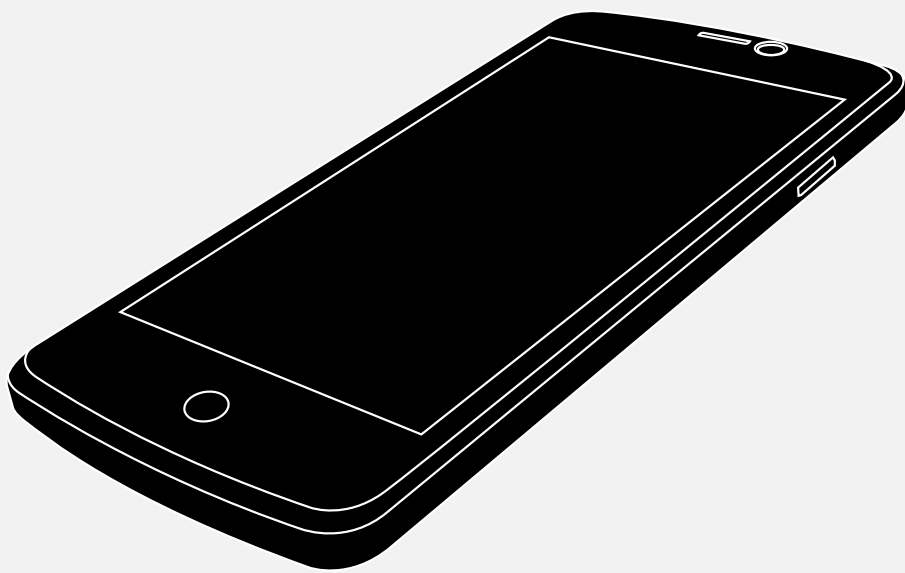
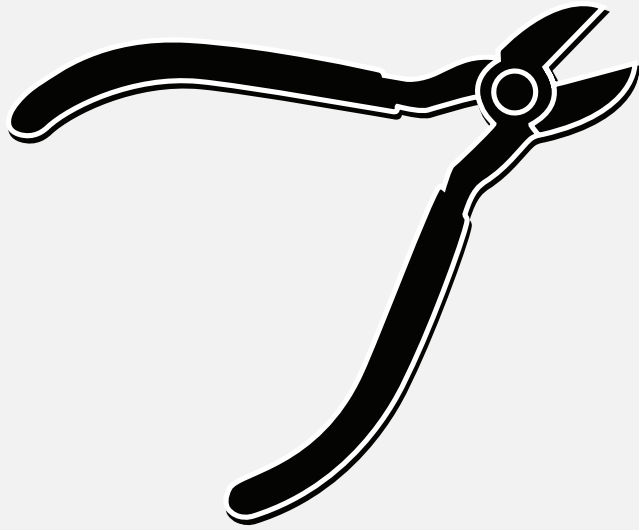
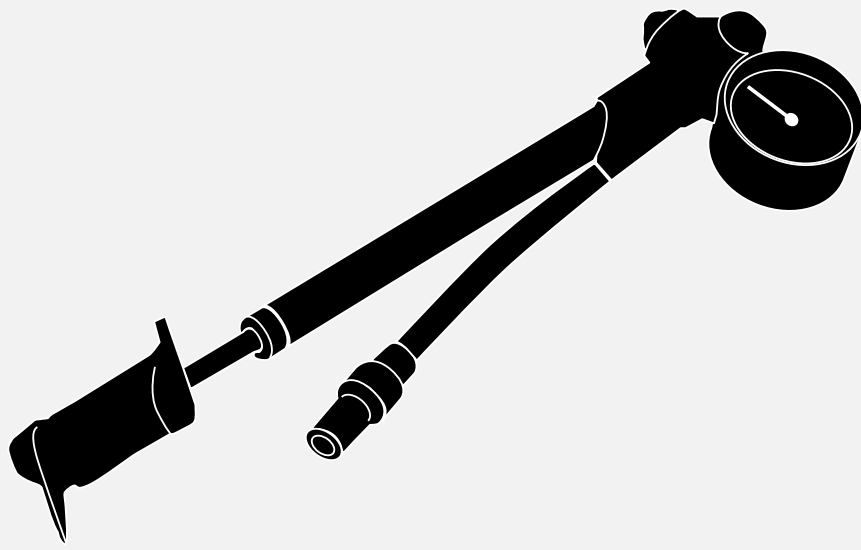
For regulatory compliance, please visit www.shockwiz.com.

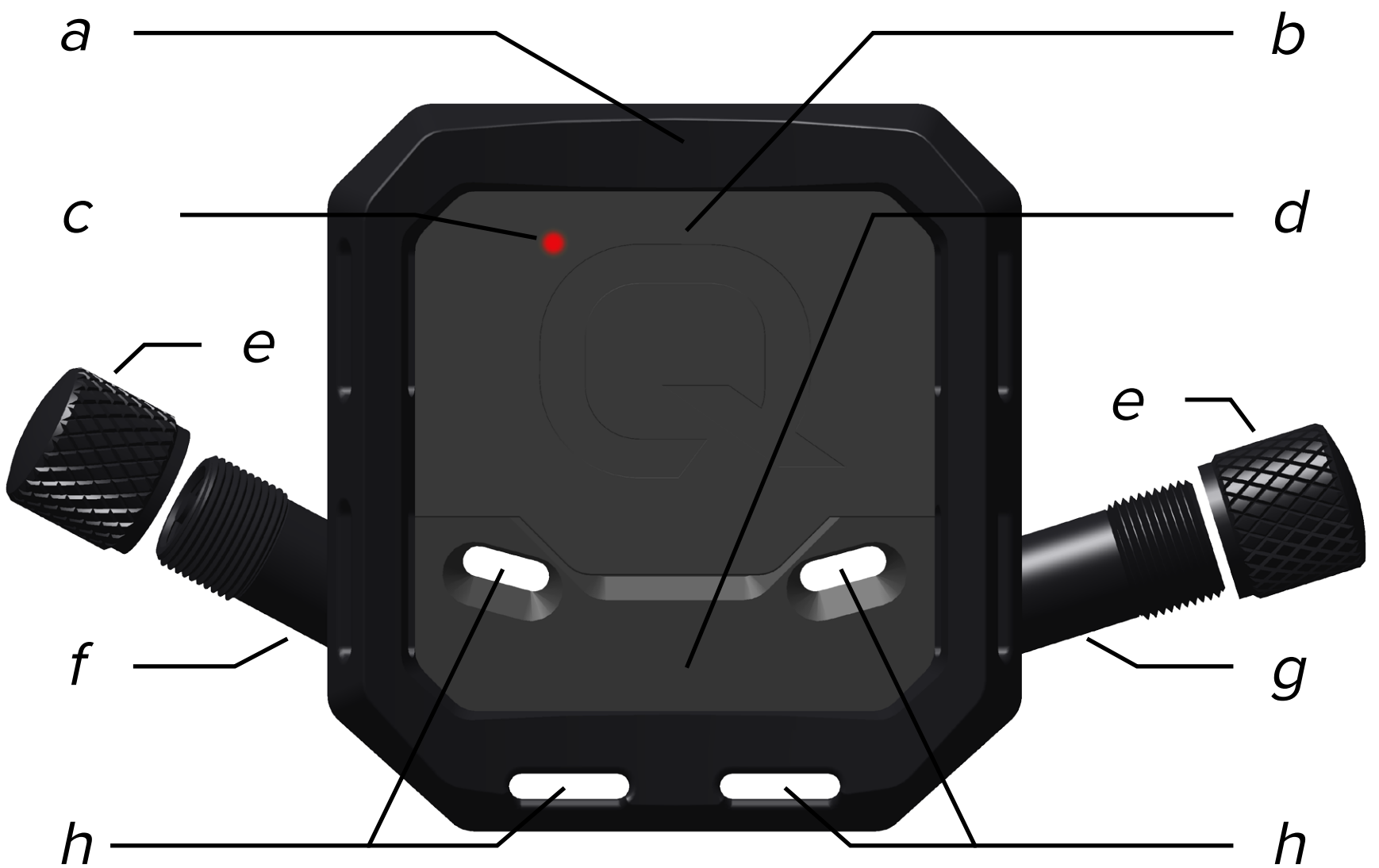
For recycling and environmental compliance information, please visit www.sram.com.

iOS® is a registered trademark of Cisco Technology, Inc.

Android® is a registered trademark of Google Inc.

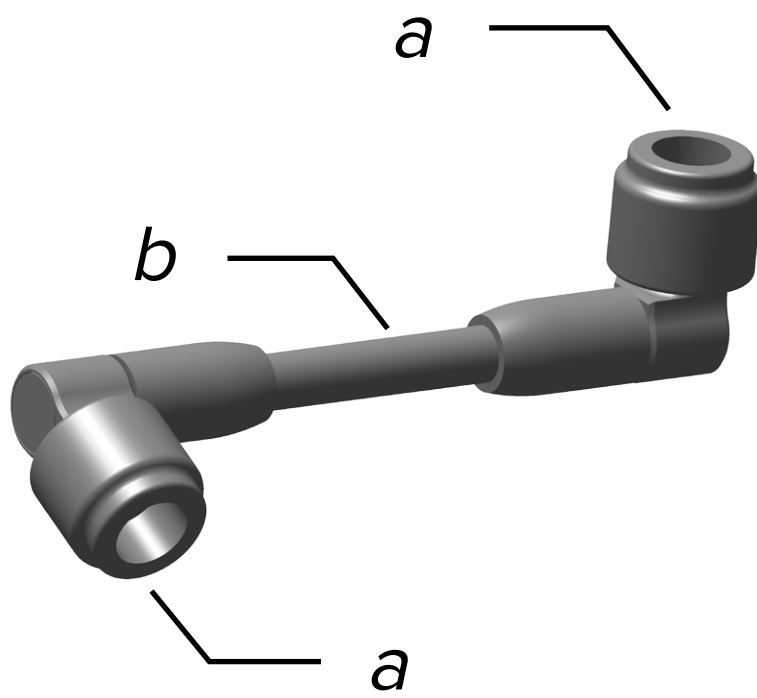
Tools and Supplies



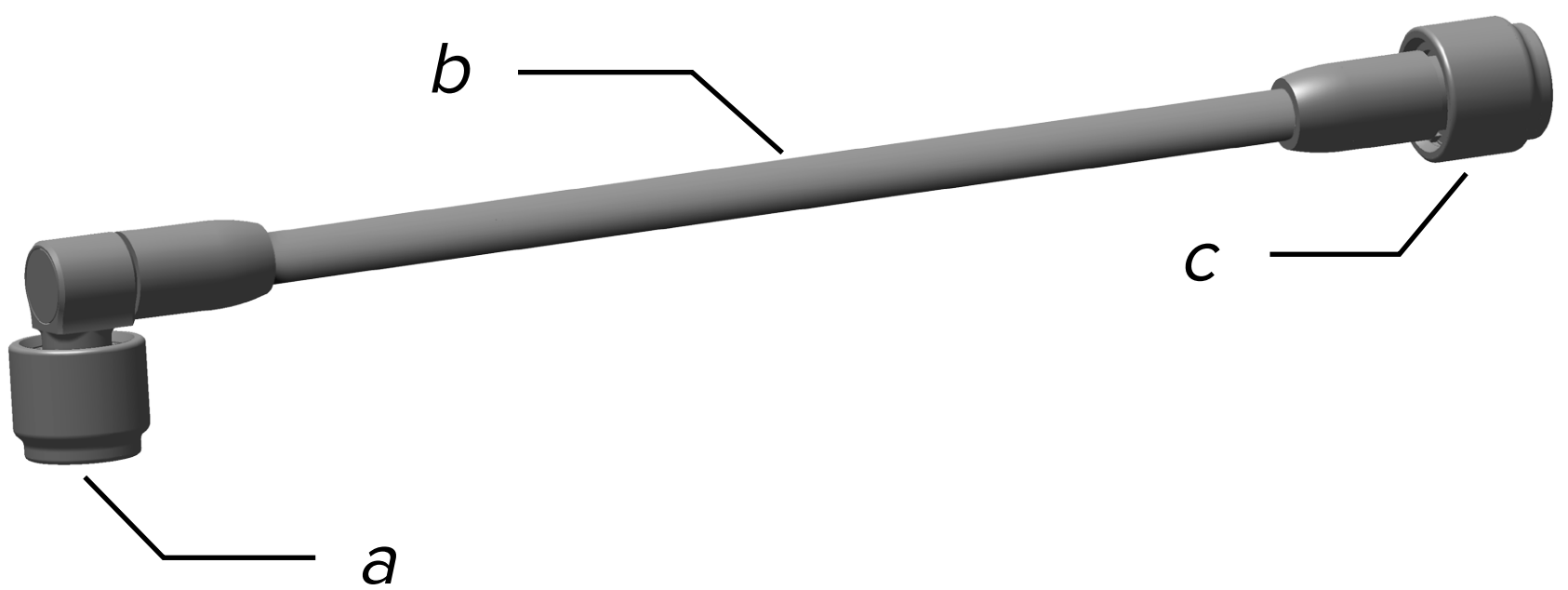


- a** Mounting boot
- b** Battery cover
- c** LED status indicator
- d** ShockWiz body
- e** Air valve cap
- f** Air inflation valve (L - 28°)
- g** Air inflation valve (R - 17.5°)

Hose Connectors



- a** Hose connector (90°)
- b** Short hose



- a** Hose connector (90°)
- b** Long hose
- c** Hose connector (0°)

Battery Installation

WARNING

Do not use sharp or conductive objects to remove the battery.

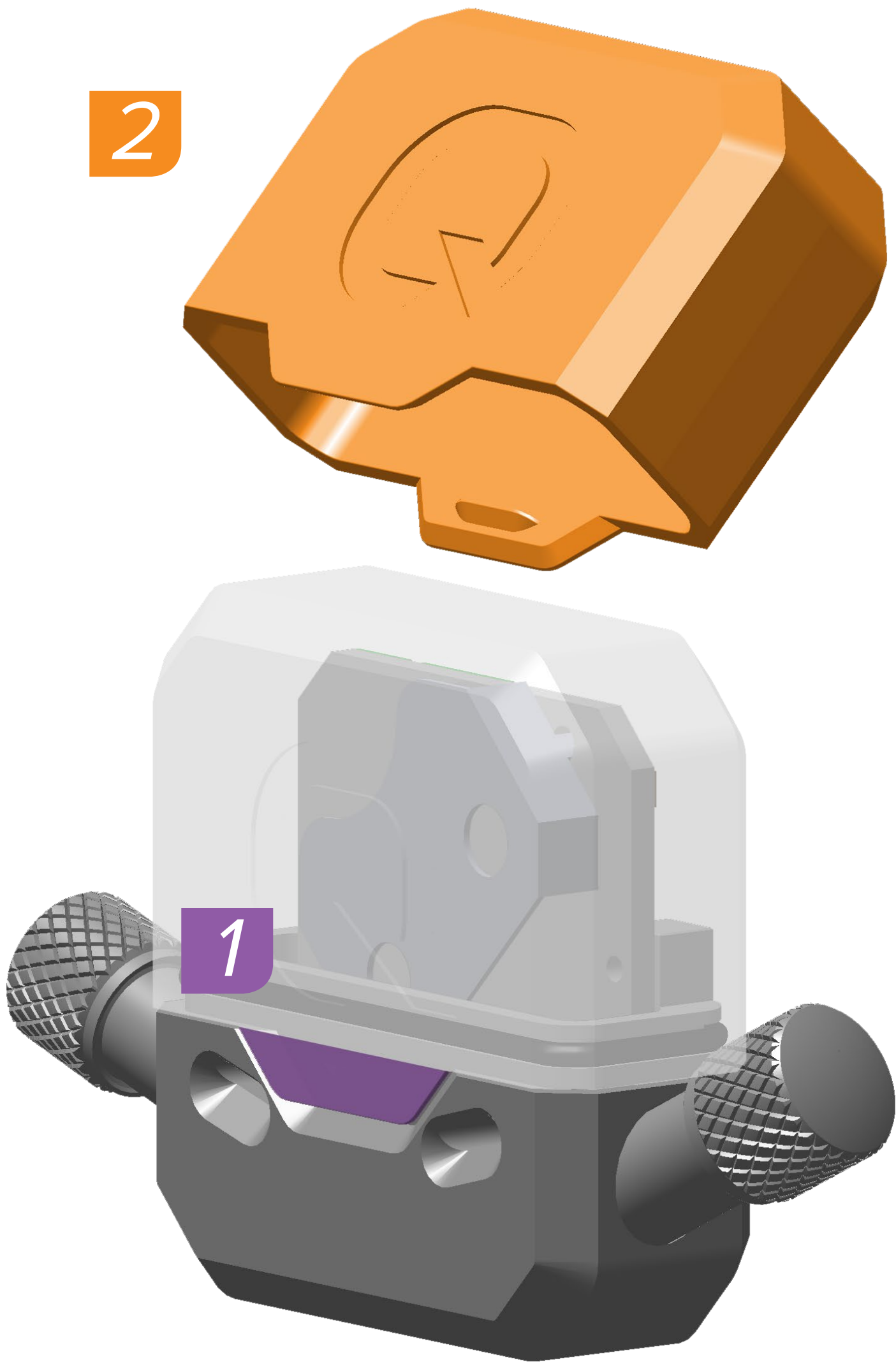
Keep the battery out of reach of children.

Do not put the battery in your mouth. If ingested, seek medical attention immediately.

Do not disassemble, damage, or puncture the battery.

Consult the battery manufacturer for safe handling instructions.

Battery Installation

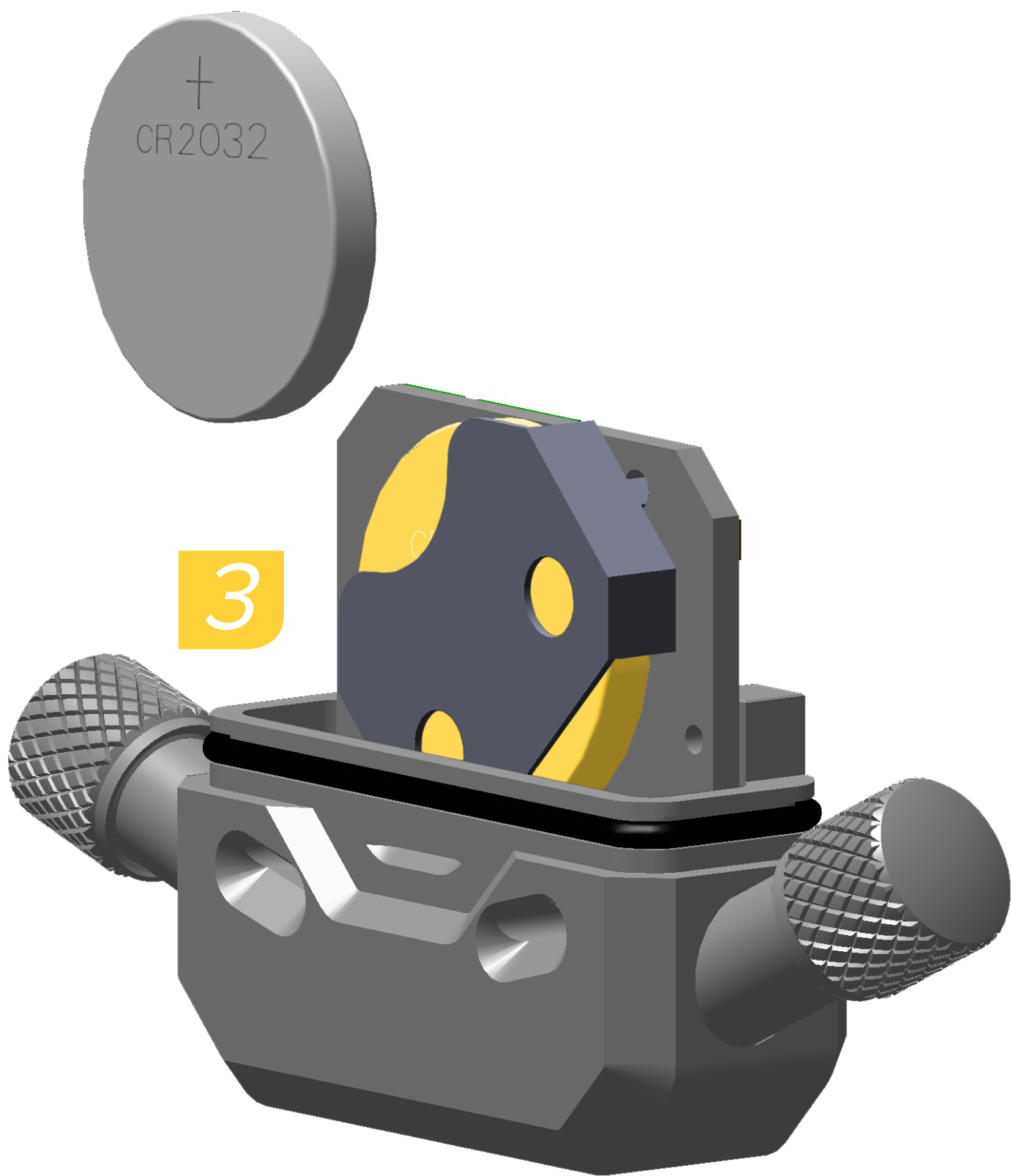


Gently lift one battery cover tab outward, then the other, and remove the battery cover from the ShockWiz™ body.

NOTICE

Do not use metal tools to pry the battery cover tab. Metal tools may damage the cover.

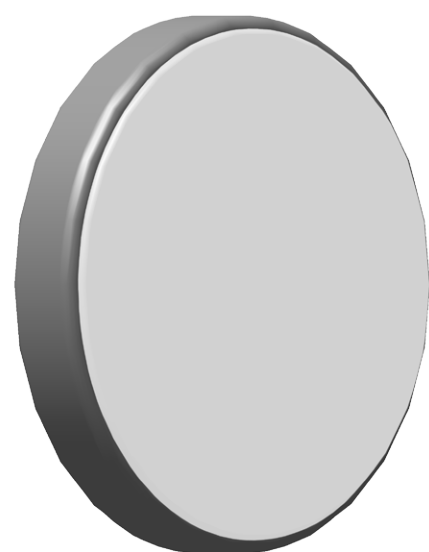
Battery Installation



Insert a new CR2032 coin cell battery into the battery slot, terminal side in, positive side (+) out.

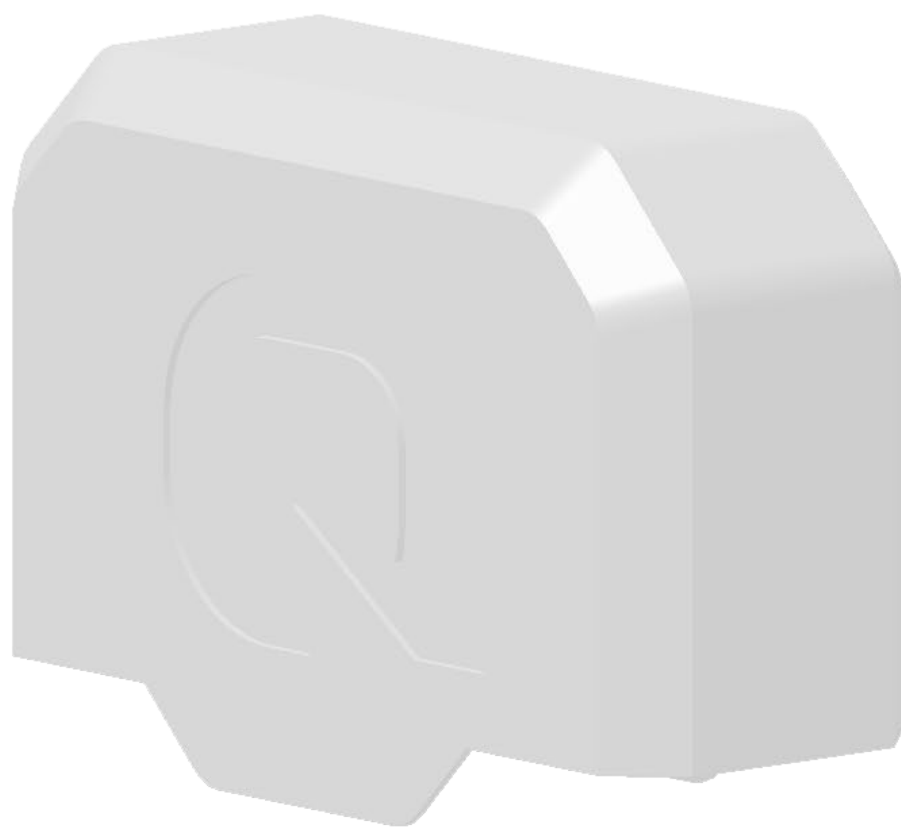


Positive Side

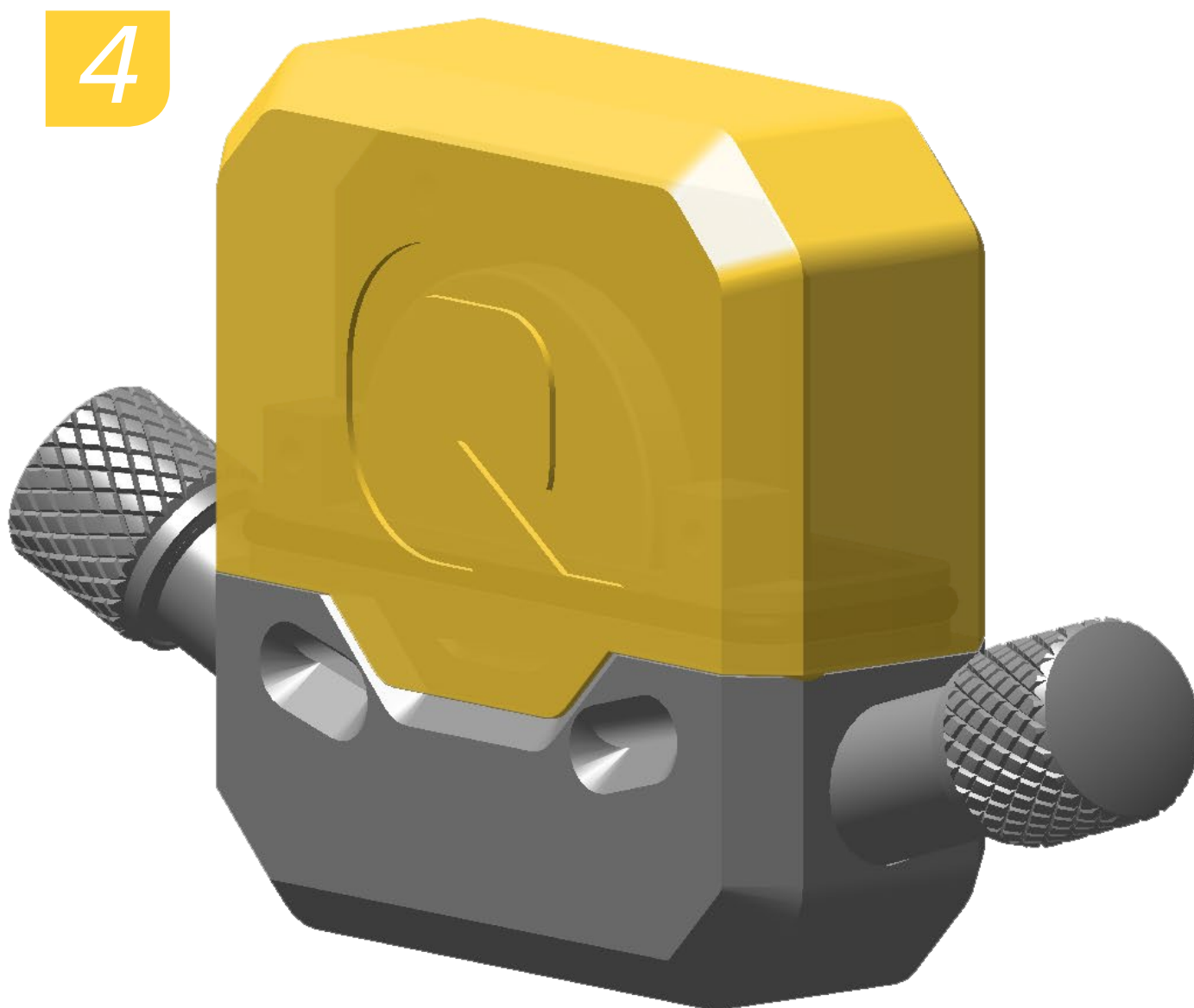


Terminal Side

Battery Installation



4



Install the battery cover onto the ShockWiz™ body. The cover is secure when the each tab snaps into place.

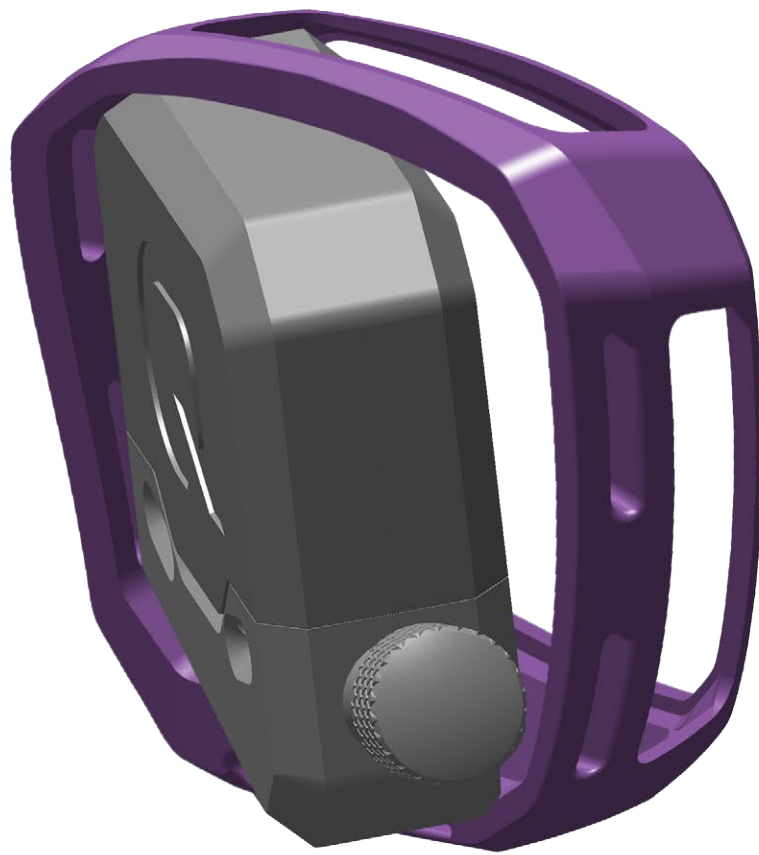
NOTICE

Ensure the battery cover o-ring seal is clean and in the groove around the ShockWiz body. Remove, clean, and reinstall the o-ring if it is contaminated.

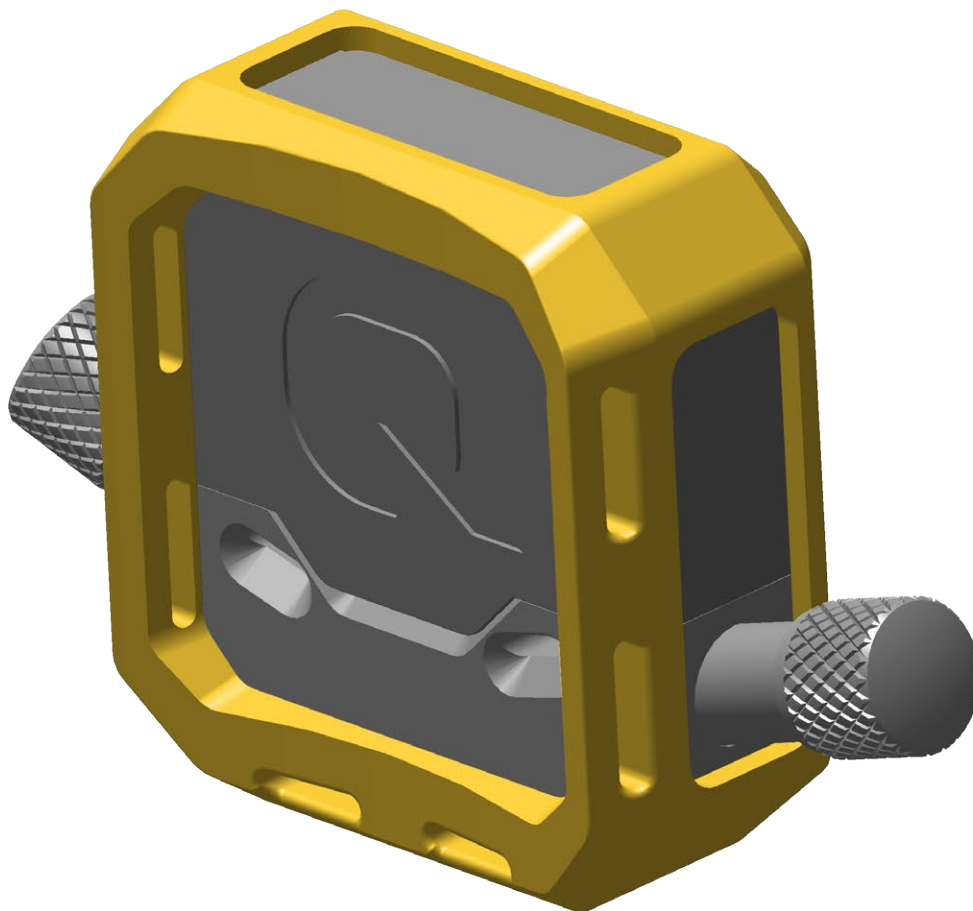
To avoid permanent damage caused by moisture, verify the battery cover is securely attached before use.

Mounting Boot Installation

1



2



Install the rubber mounting boot onto ShockWiz™ in the desired orientation.

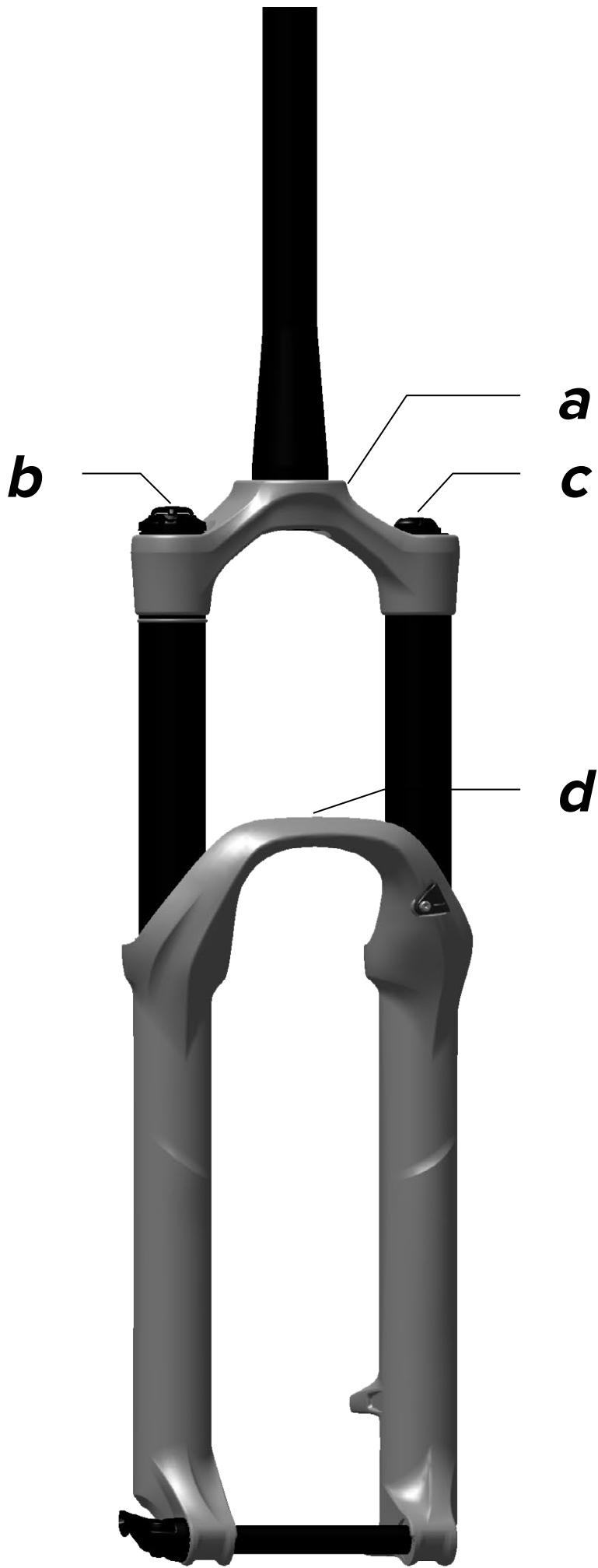
The rubber mounting boot can be installed onto ShockWiz in multiple orientations. Choose the orientation that best fits your suspension. It may be necessary to adjust the boot depending on suspension mounting orientation.

NOTICE

Failure to install the included protective rubber mounting boot onto ShockWiz™ may cause damage to the fork and/or rear shock.

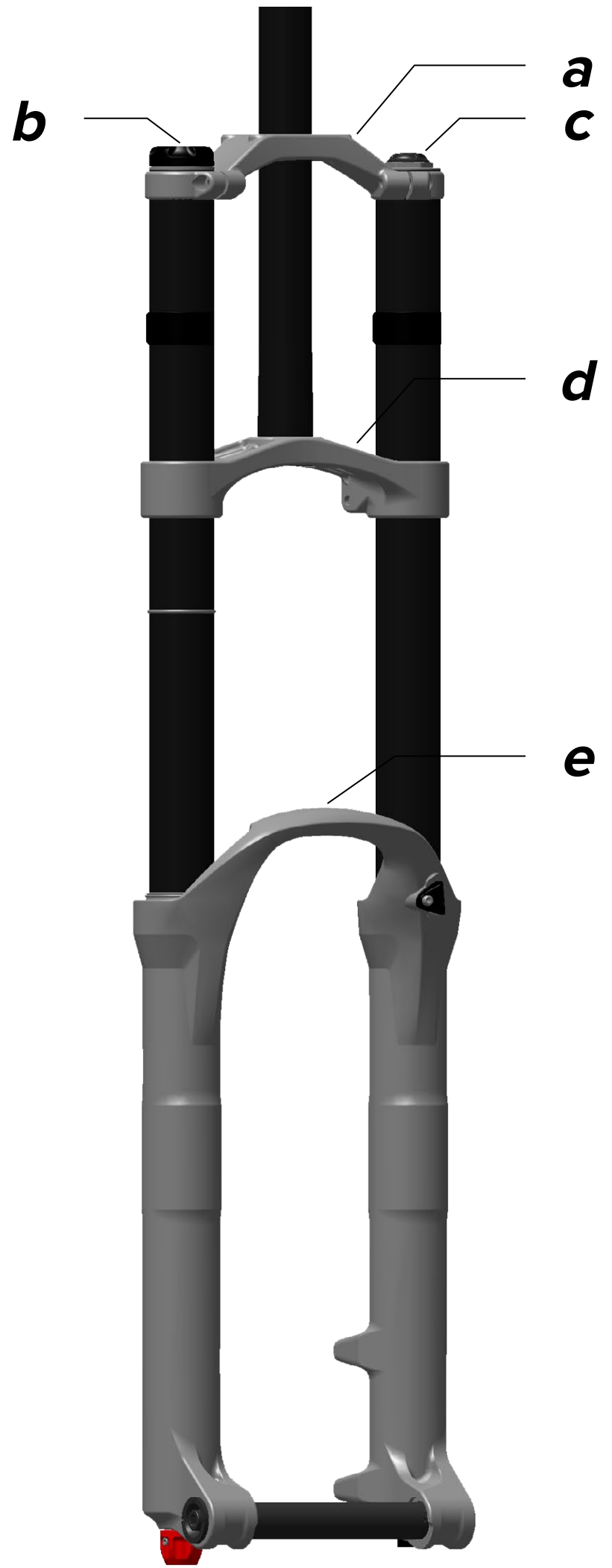
Suspension Forks

Single Crown



- a** Crown
- b** Damper
- c** Air spring inflation valve
- d** Lower leg arch

Dual Crown



- a** Upper crown
- b** Damper
- c** Air spring inflation valve
- d** Lower crown
- e** Lower leg arch

Attachment Locations

ShockWiz™ is not compatible with all air suspension forks. For a complete list of incompatible suspension, go to www.shockwiz.com.

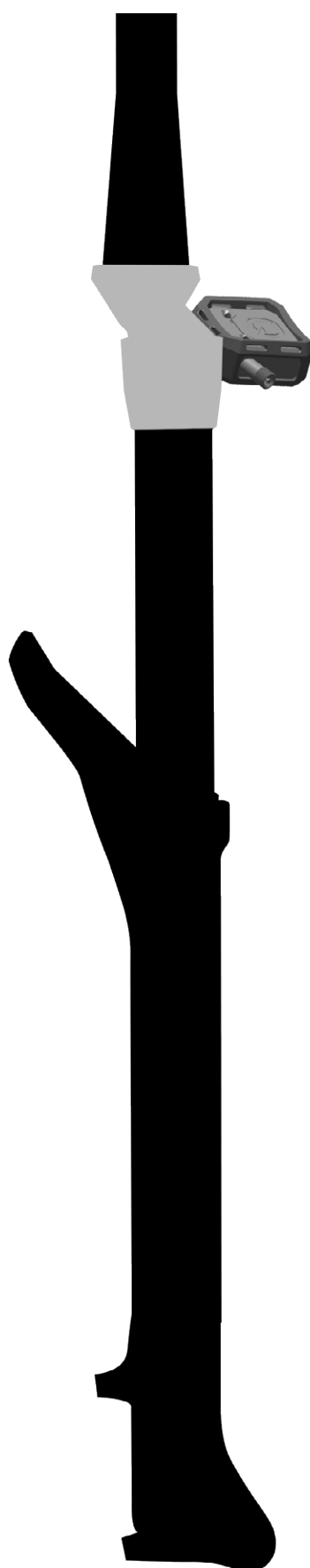
NOTICE

Do not attach ShockWiz to any part of the fork that moves **independent** of the air valve. ShockWiz must not contact the fork upper tube or any part of the fork that moves during compression. The hose cannot move when the fork is compressed.

Front Arch



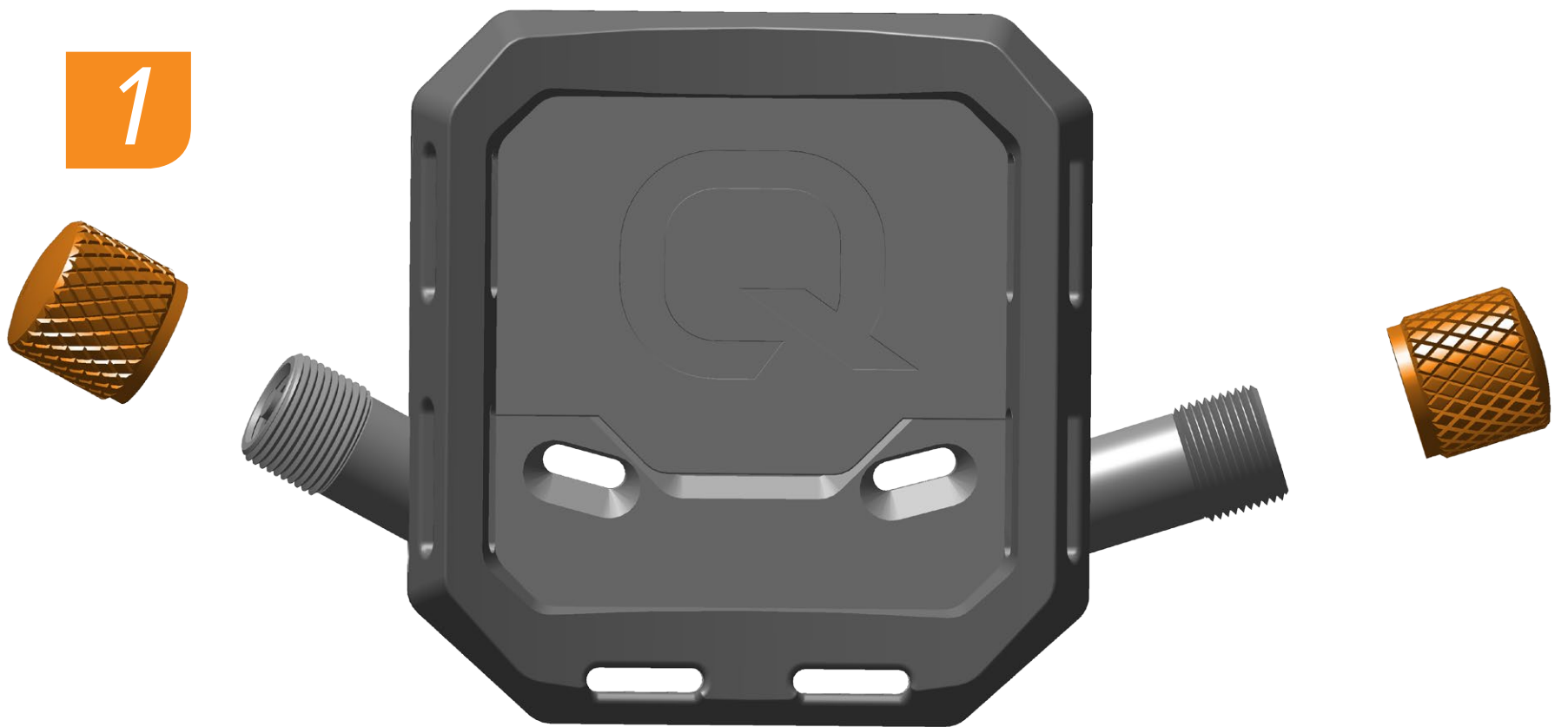
Reverse Arch



Dual Crown



Installation



Remove the air valve caps from ShockWiz™.

NOTICE

To avoid air loss during use, one air cap must be installed on the unused ShockWiz air valve.

Installation

2



Remove the positive air inflation valve cap from the fork.

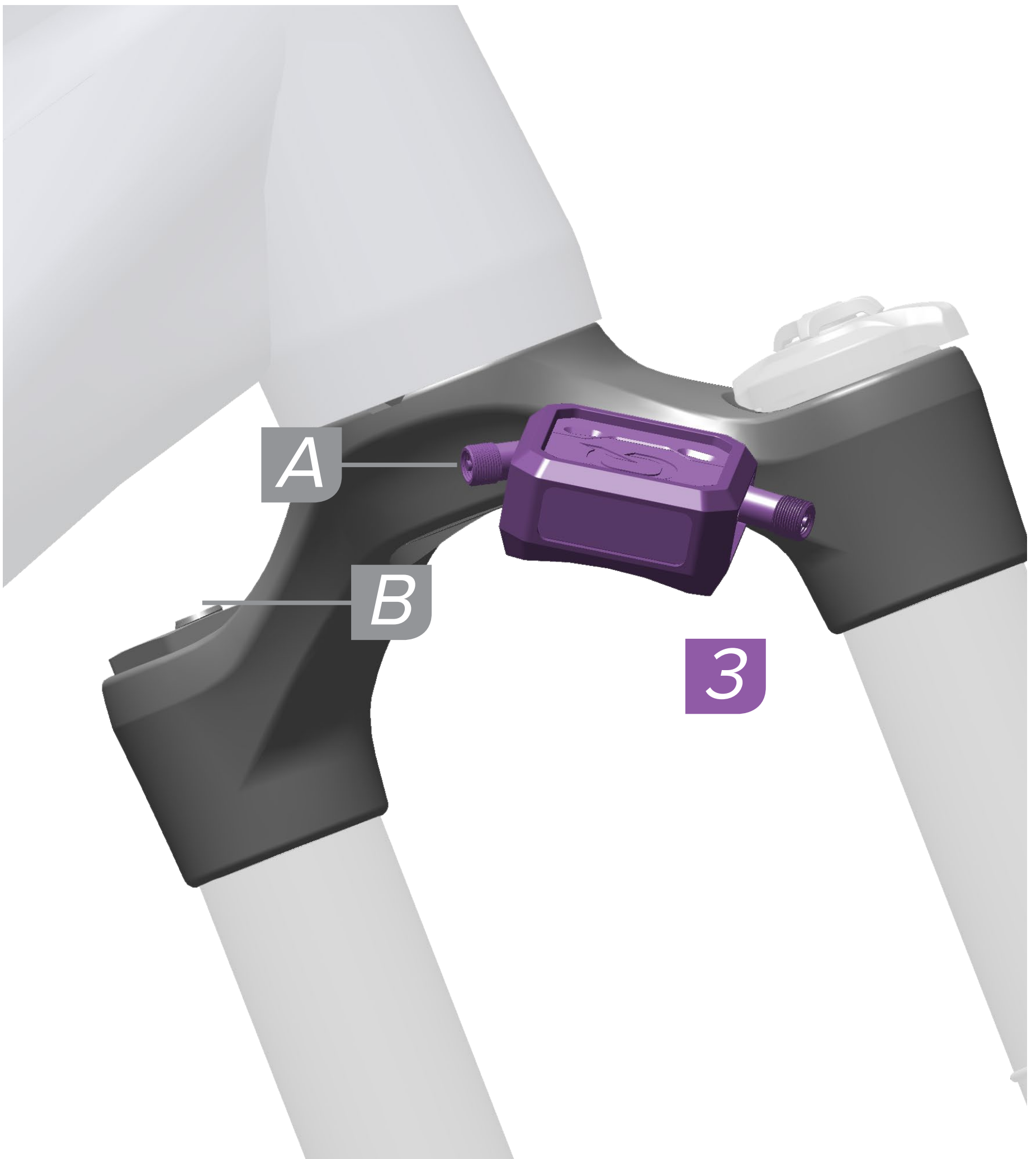
Installation

The ShockWiz™ air inflation valves are oriented at differing angles for various mounting orientations.

Your suspension may vary. Choose the optimal air valve orientation for your suspension. Test fit the position and orientation of ShockWiz before installation. The rubber mounting boot may need to be repositioned.



Installation

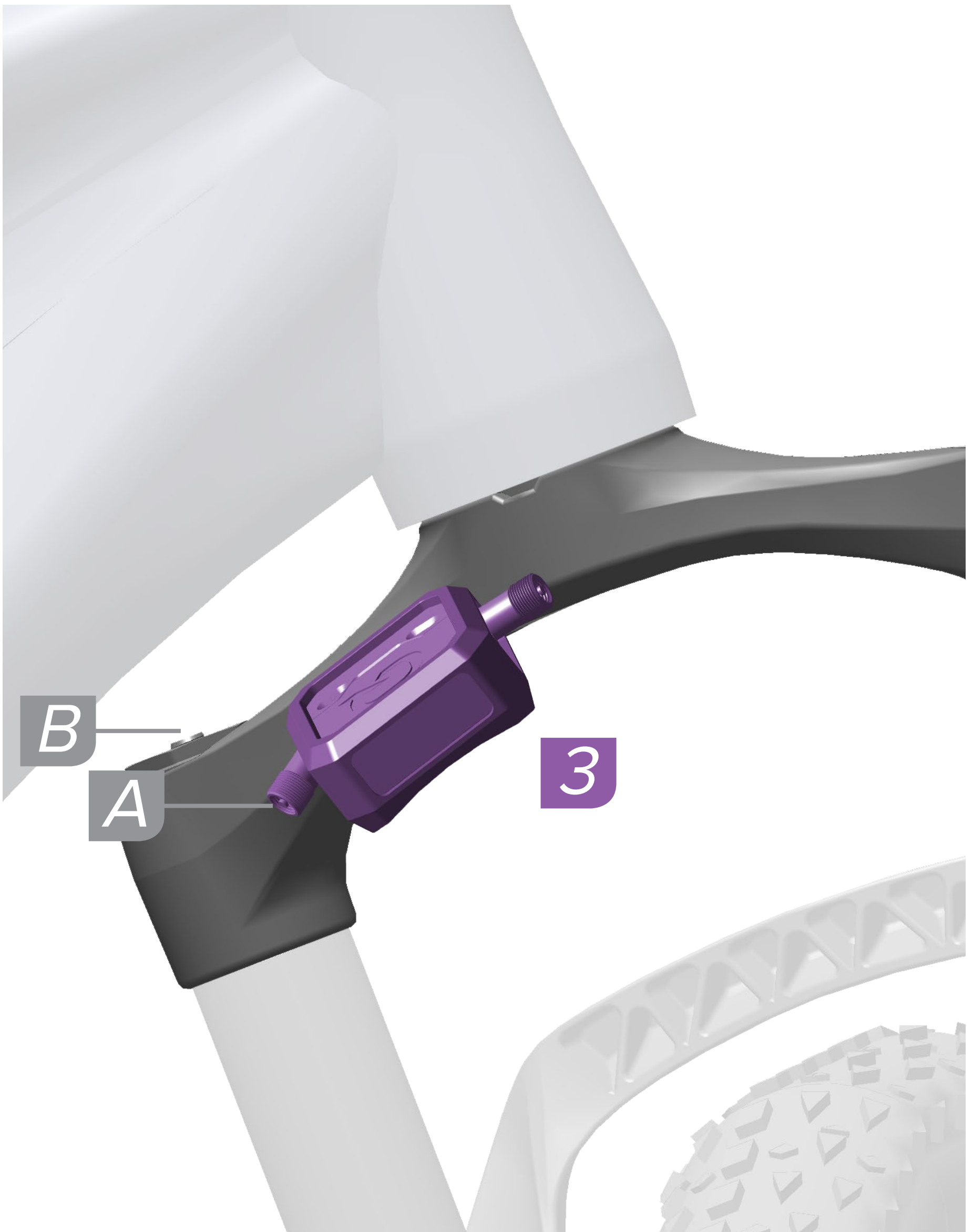


Front Arch

Front Arch Forks: Position ShockWiz™ on the **back** of the fork crown on the damper side. Orient the optimal ShockWiz air valve (A) toward the fork air inflation valve (B).

Reverse Arch Forks: Position ShockWiz on the **front** of the fork crown on the damper side. Orient the optimal ShockWiz air valve toward the fork air valve.

Installation

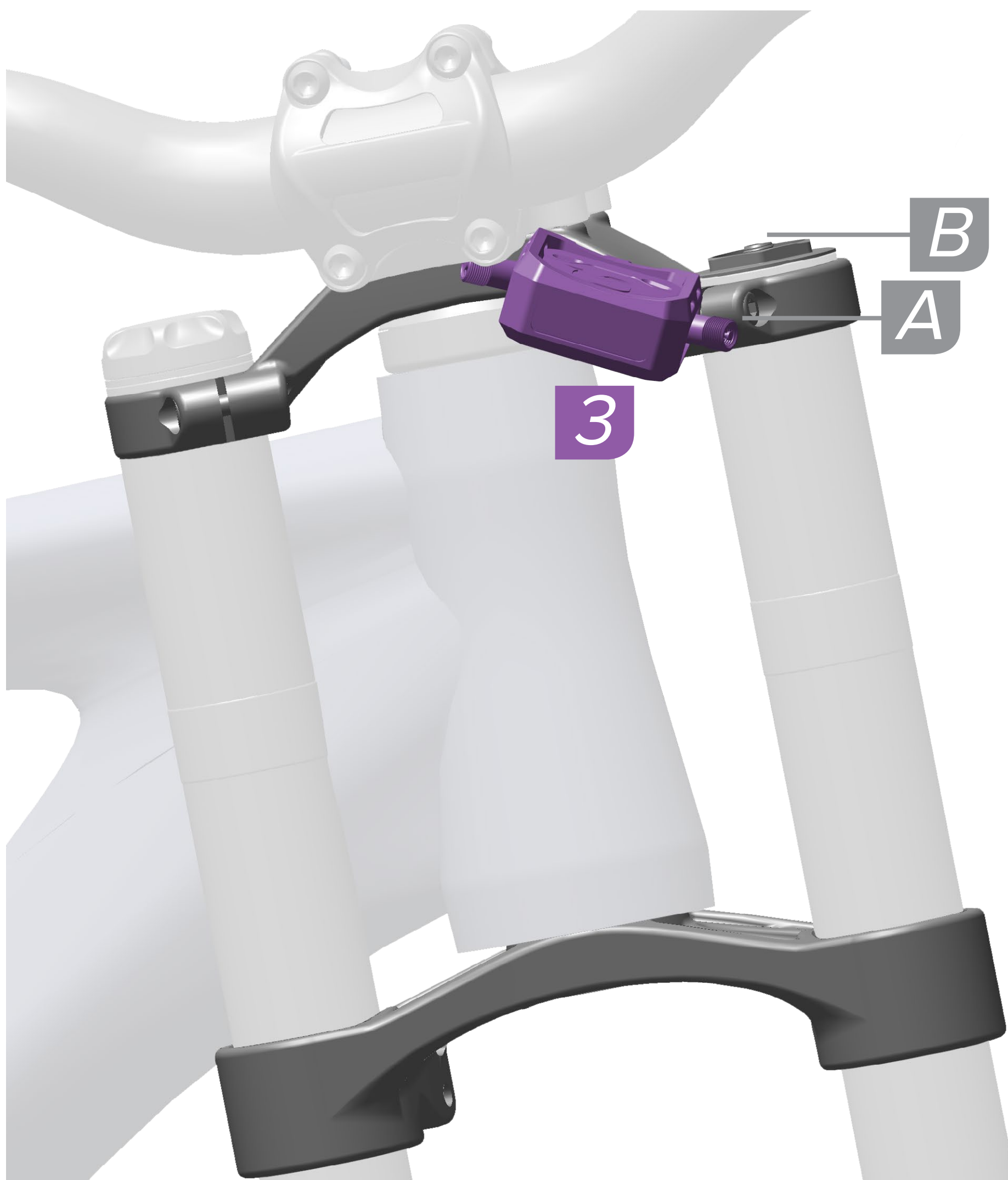


Fat Bike - Front Arch

Position ShockWiz™ on the **back** of the fork crown on the air inflation valve side.

Orient the optimal ShockWiz air valve (A) toward the fork air valve (B).

Installation



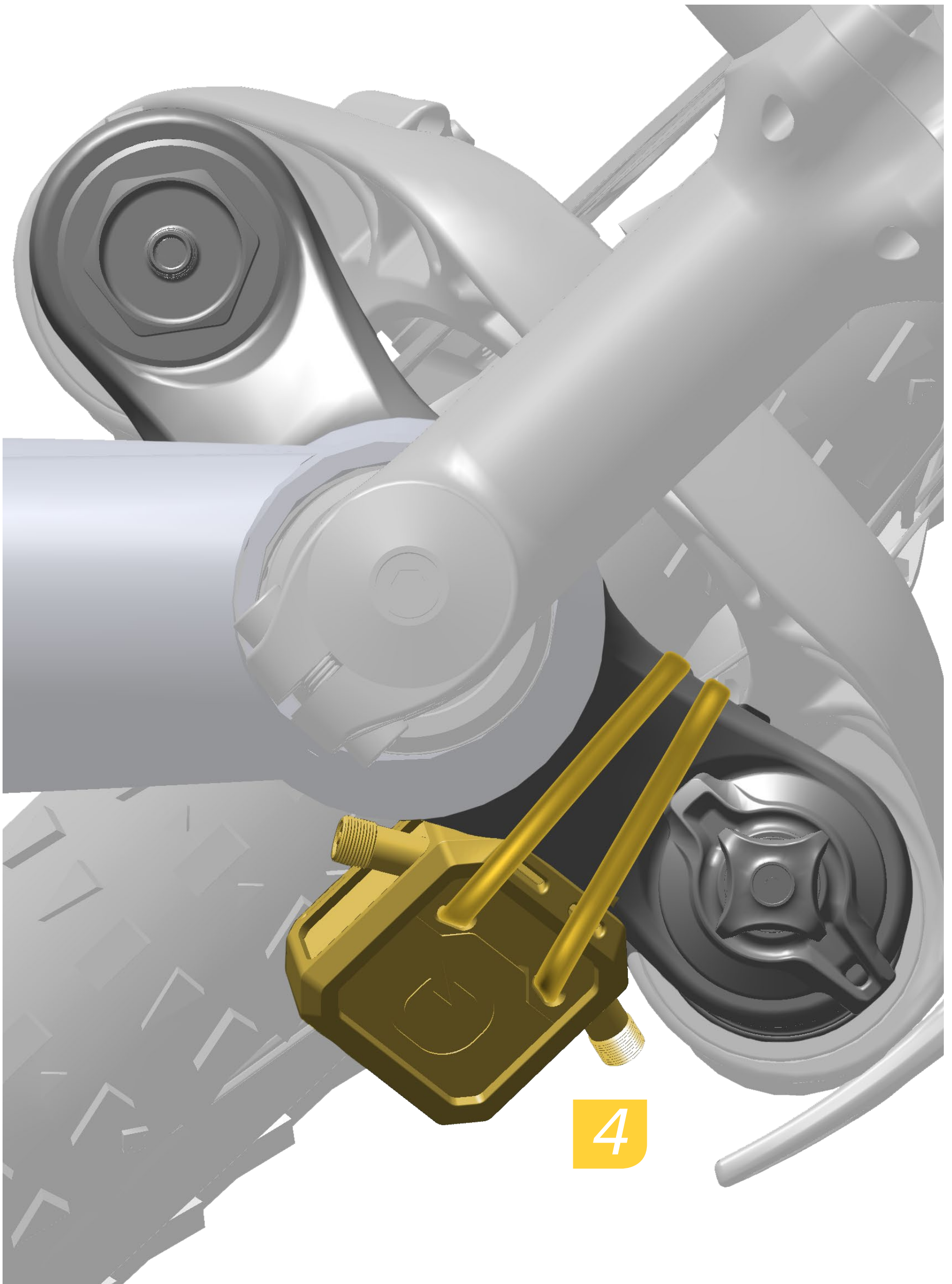
Dual Crown

Position ShockWiz™ on the fork upper crown on either the damper or spring side.

ShockWiz can be attached to any location and in any orientation on the upper crown.

Orient the optimal ShockWiz air inflation valve (A) toward the fork air inflation valve (B).

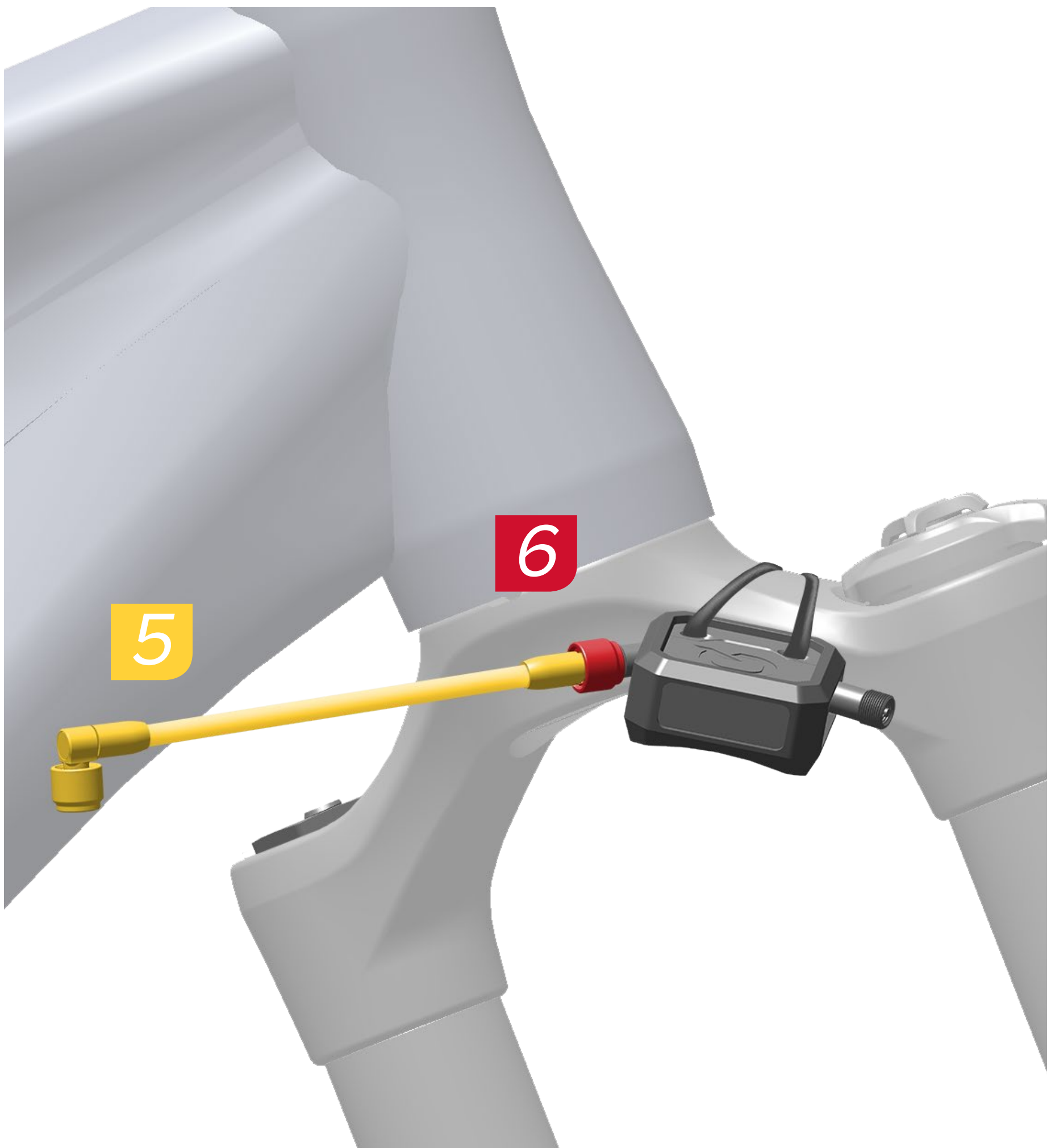
Installation



Insert cable ties through the guide holes in the ShockWiz™ body and attach ShockWiz tightly to the fork crown. The device should not move.

Cut the excess ends of the cable ties.

Installation



Thread one end of the hose assembly onto the ShockWiz™ air valve. Tighten the hose connector hand tight.

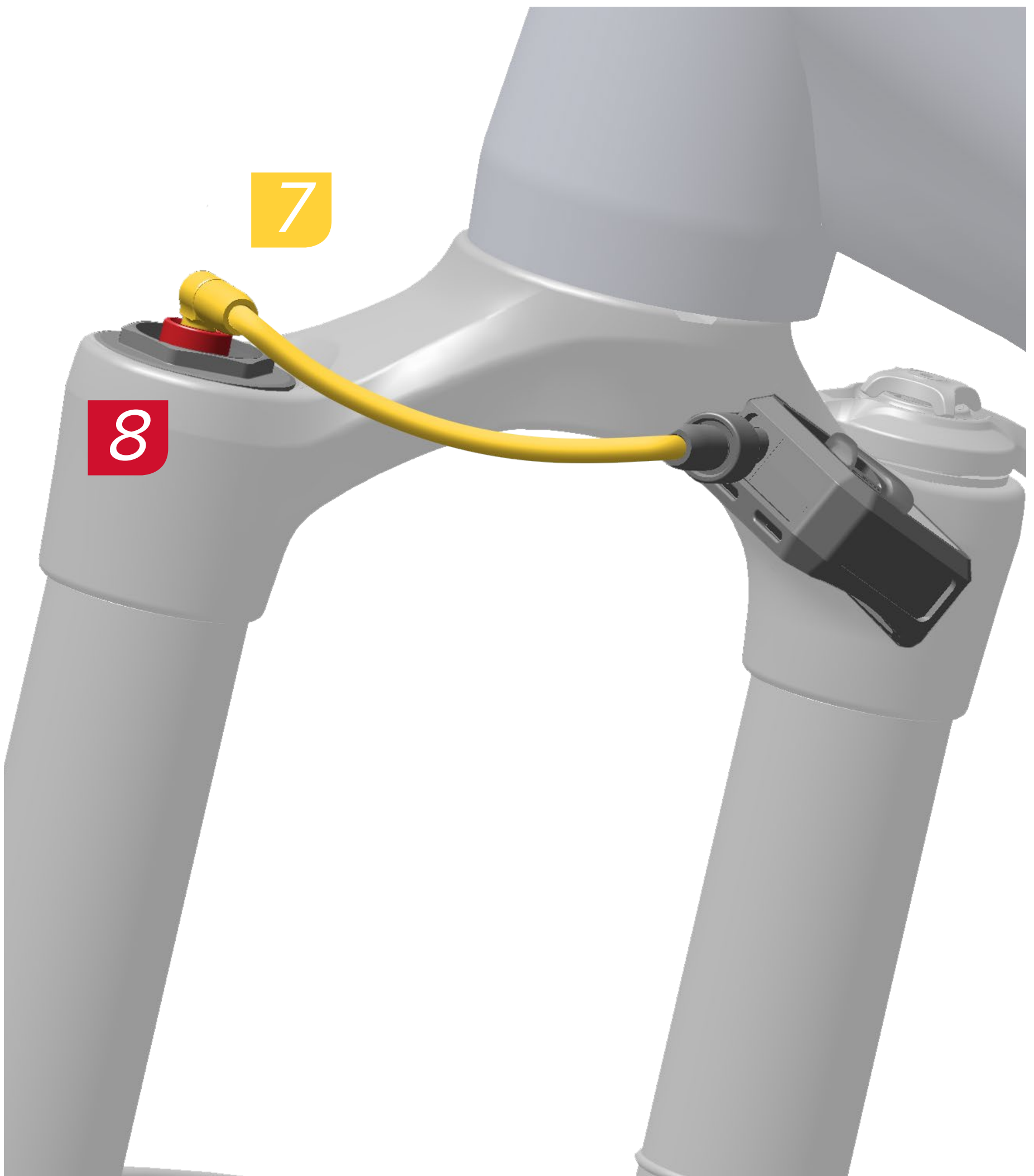
Loose hose connections will cause air to leak.

NOTICE

Do not use tools to tighten the hose connector. Use of tools can damage the connector and air valve.

Do not sharply bend or kink the ShockWiz hose. Sharp bends or kinks will damage the hose.

Installation



Thread the other hose connector onto the fork air valve. Tighten the hose connector hand tight.

Loose hose connections will cause air to leak.

NOTICE

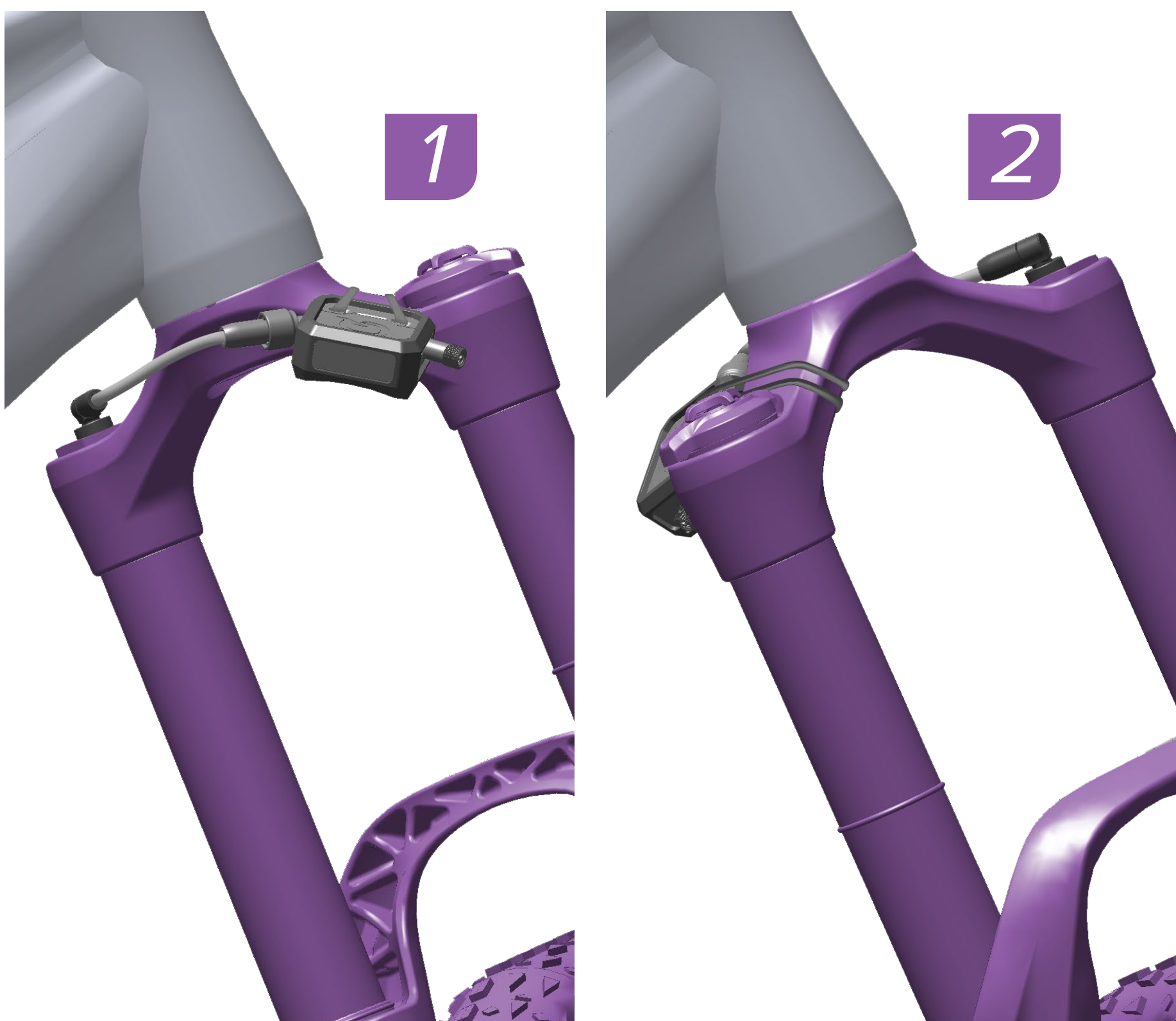
Do not use tools to tighten the hose connector. Use of tools can damage the connector and air valve.

Do not sharply bend or kink the ShockWiz™ hose. Sharp bends or kinks will damage the hose.

Check Clearance

⚠️ WARNING

ShockWiz™ must not contact the fork lower leg arch, fork upper tubes, bicycle frame, tire, components, or the rider during use. Contact while riding can cause ShockWiz to disconnect from the fork and could cause a crash resulting in serious injury to the rider.



Turn the handlebars to the left and right to confirm ShockWiz and the hose assembly do not contact the frame at any point during the full range of turning motion.

If ShockWiz or the hose assembly contacts the frame, adjust as needed.

Check Clearance

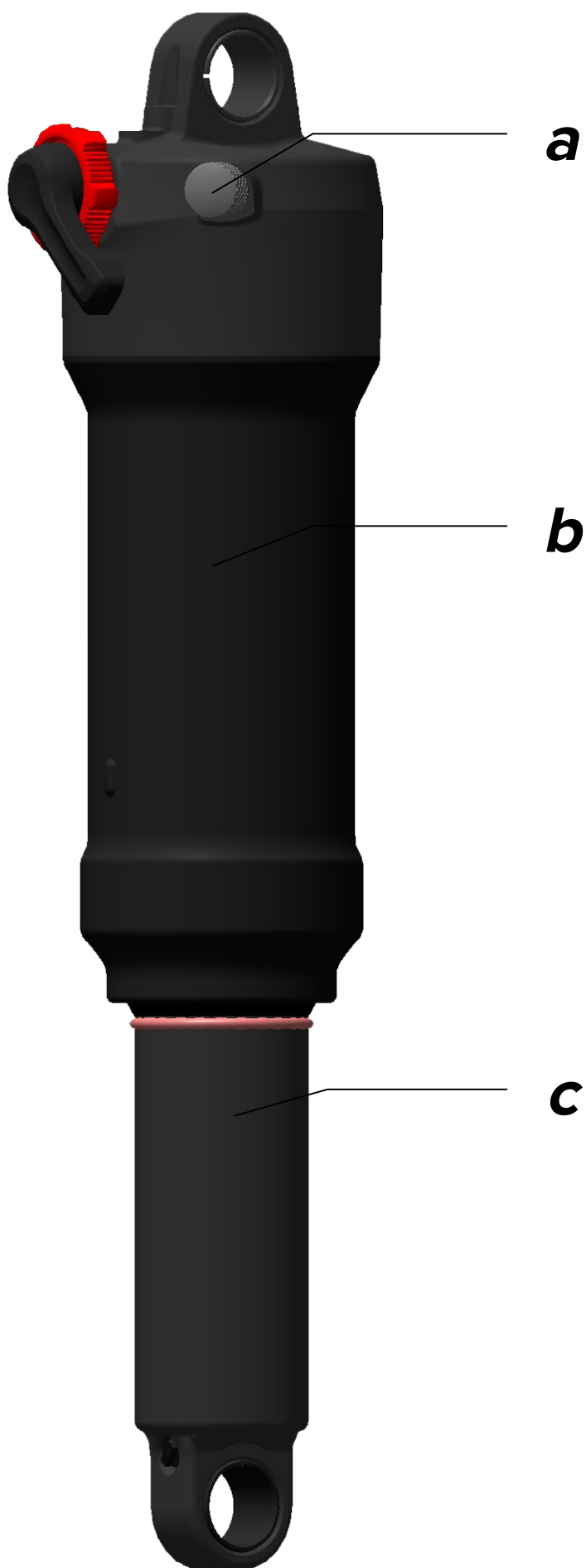


Single Crown Forks: Compress the fork to full bottom out and confirm ShockWiz™ does not contact the tire or fork lower leg.

If ShockWiz or the hose assembly contacts the frame, tire, or lower leg adjust as needed.

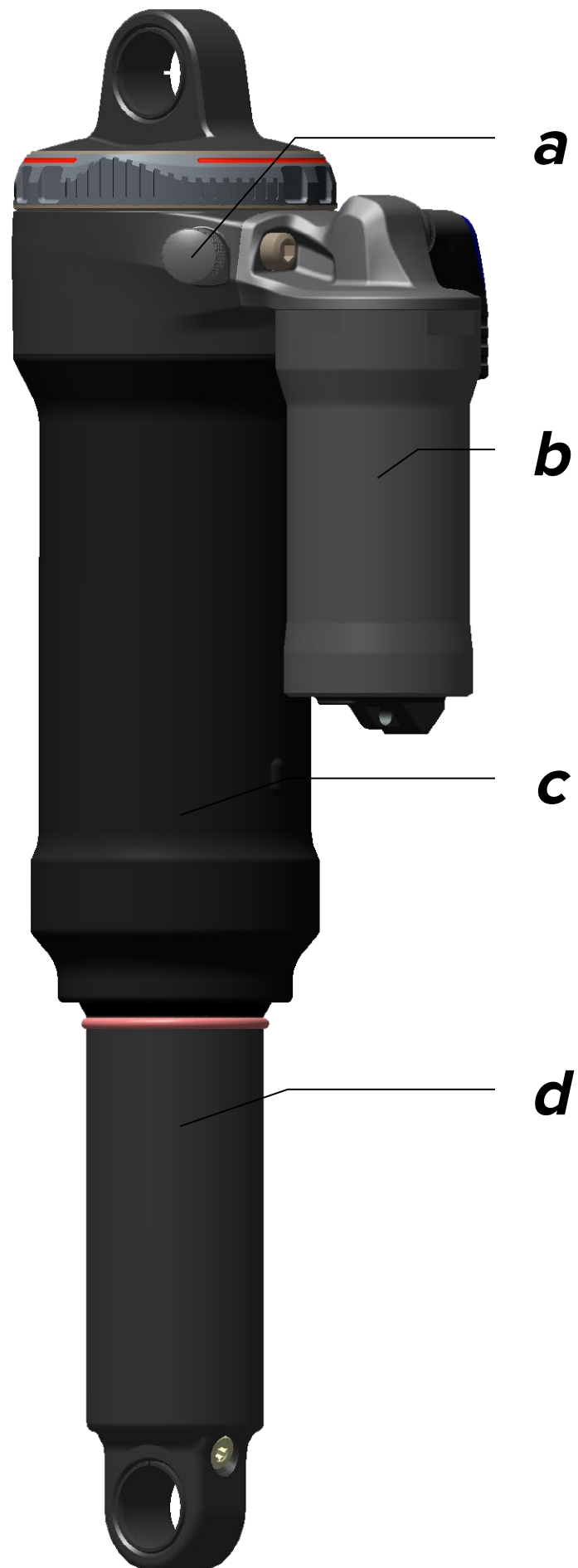
Rear Shocks

Standard



- a** Air spring inflation valve
- b** Air Can
- c** Shock damper body

Reservoir



- a** Air spring inflation valve
- b** Reservoir
- c** Air Can
- d** Shock damper body

Attachment Locations

ShockWiz™ is not compatible with all air rear shocks. For a complete list of incompatible suspension, go to www.shockwiz.com.

Attach ShockWiz to the rear shock air can nearest to the fixed air inflation valve.

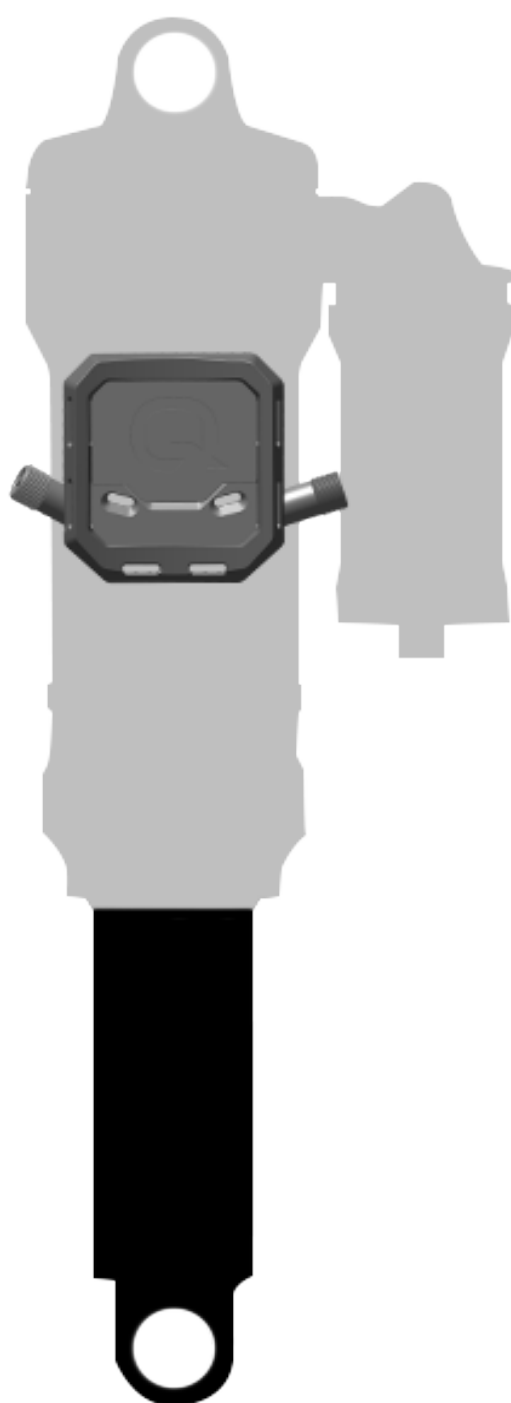
NOTICE

Do not attach ShockWiz to any part of the shock that moves **independent** of the air valve. ShockWiz must not contact the shock body or any part of the shock that moves during compression. The hose cannot move when the shock is compressed.

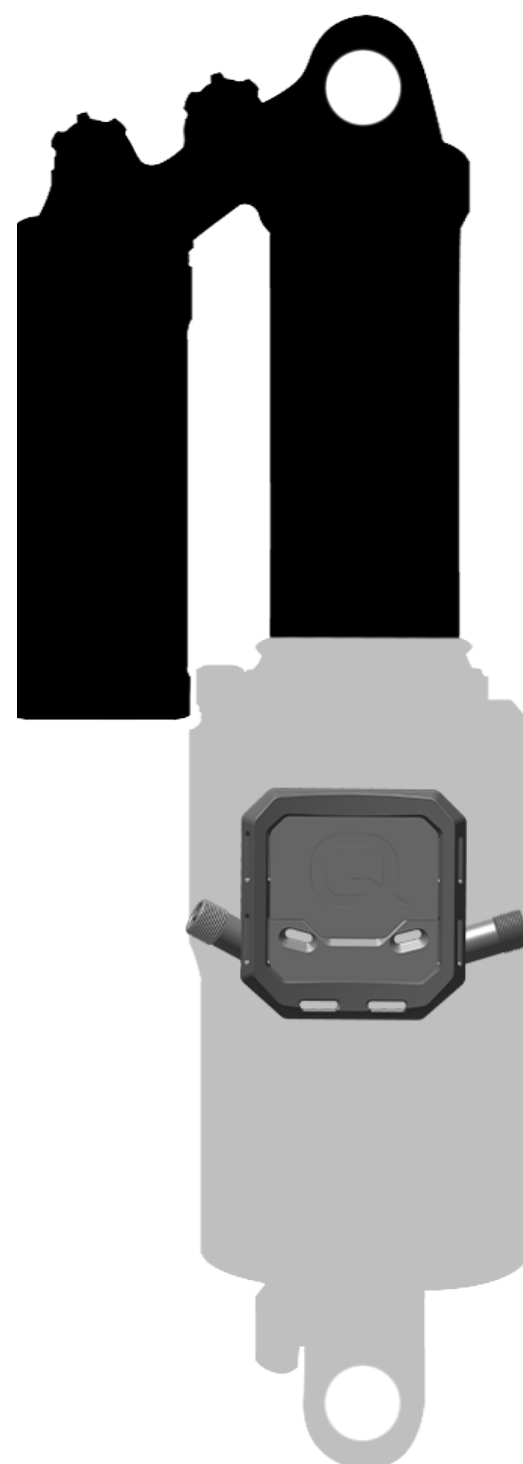
Standard



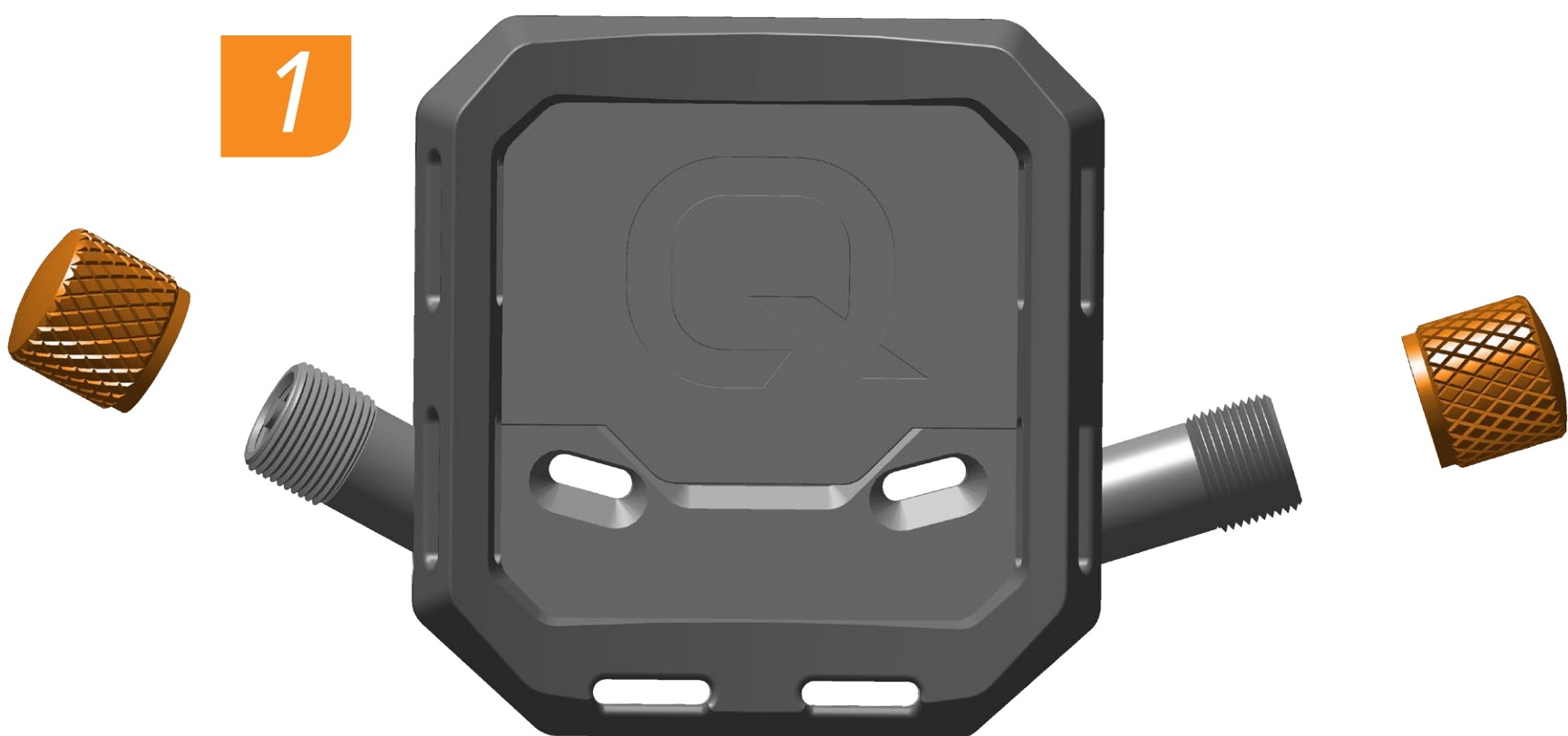
Reservoir - Air Can Eyelet



Reservoir - Body Eyelet



Installation



Remove the air valve caps from ShockWiz™.

NOTICE

To avoid air loss during use, one air cap must be installed on the unused ShockWiz air valve.

Installation



Remove the positive air spring inflation valve cap from the rear shock.

NOTICE

Reservoir Rear Shocks: Do not remove the air valve cap from the shock reservoir. ShockWiz™ does not connect to the shock reservoir.

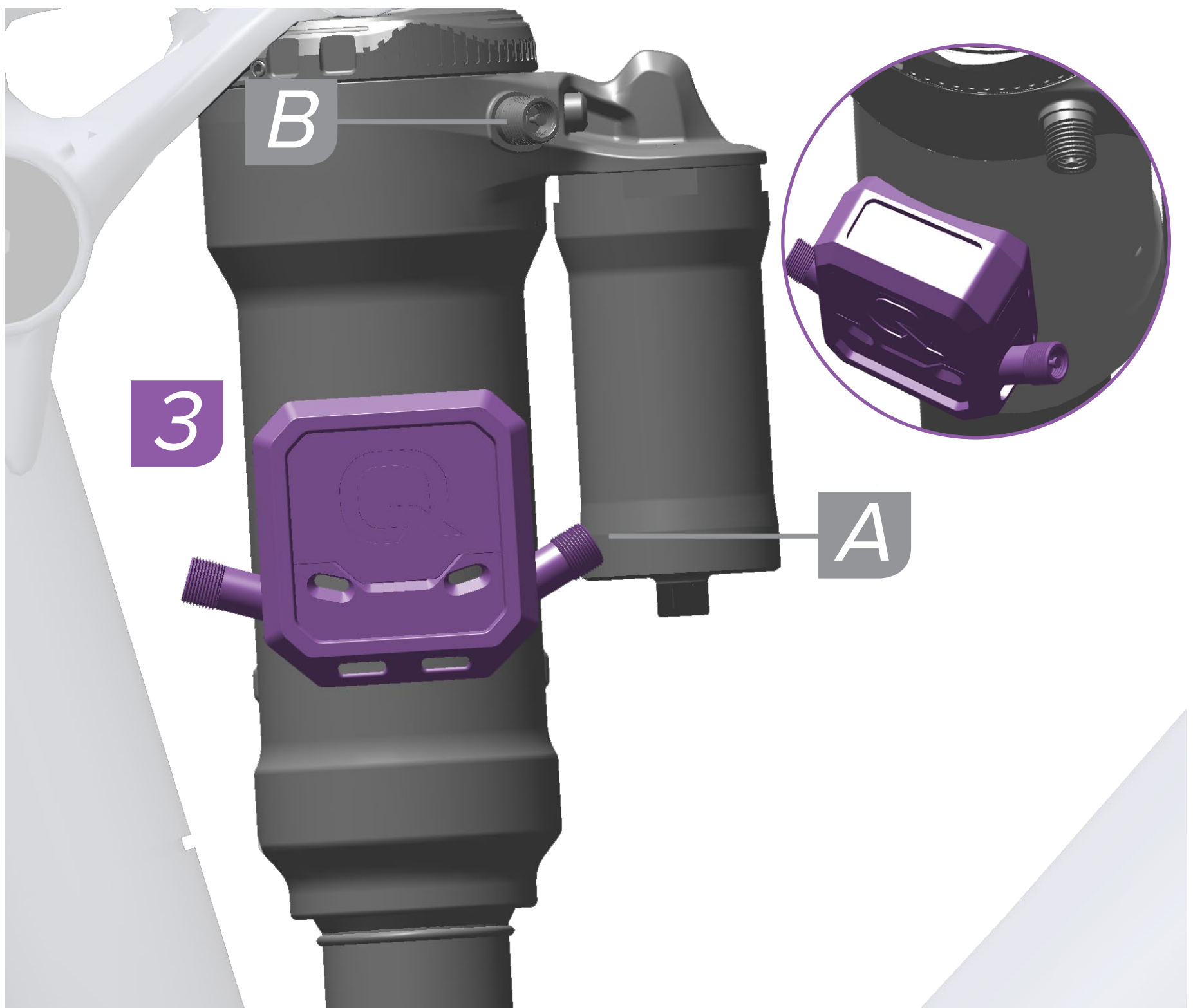
Installation

The ShockWiz™ air inflation valves are oriented at differing angles for various mounting orientations.

Your suspension may vary. Choose the optimal air valve orientation for your suspension. Test fit the position and orientation of ShockWiz before installation. The rubber mounting boot may need to be repositioned.



Installation

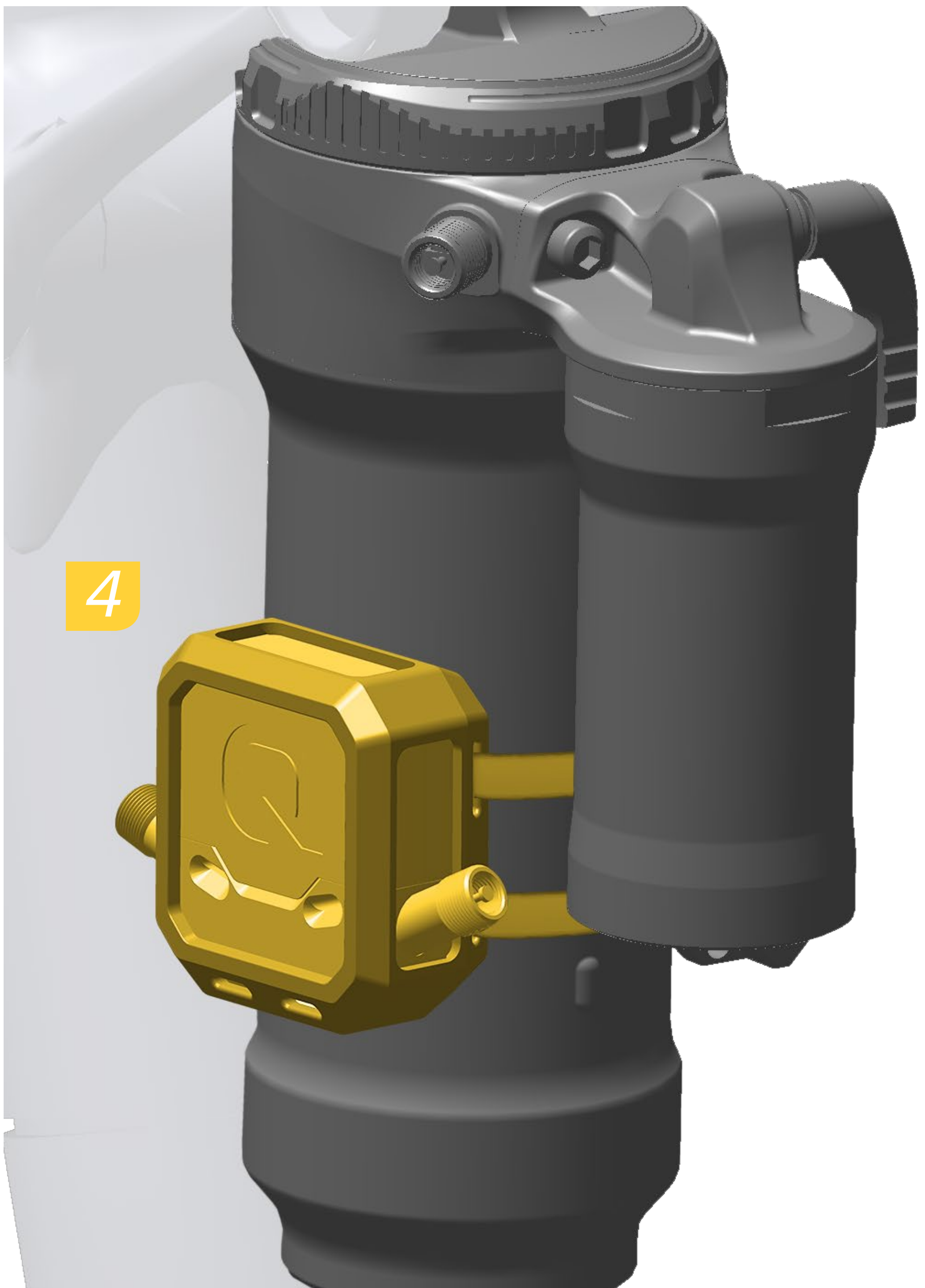


Position ShockWiz™ on the rear shock air can close enough to the rear shock air inflation valve to connect the hose.

Orient the curved side of the rubber mounting boot against the air can.

Orient the optimal ShockWiz air inflation valve (A) toward the shock air inflation valve (B).

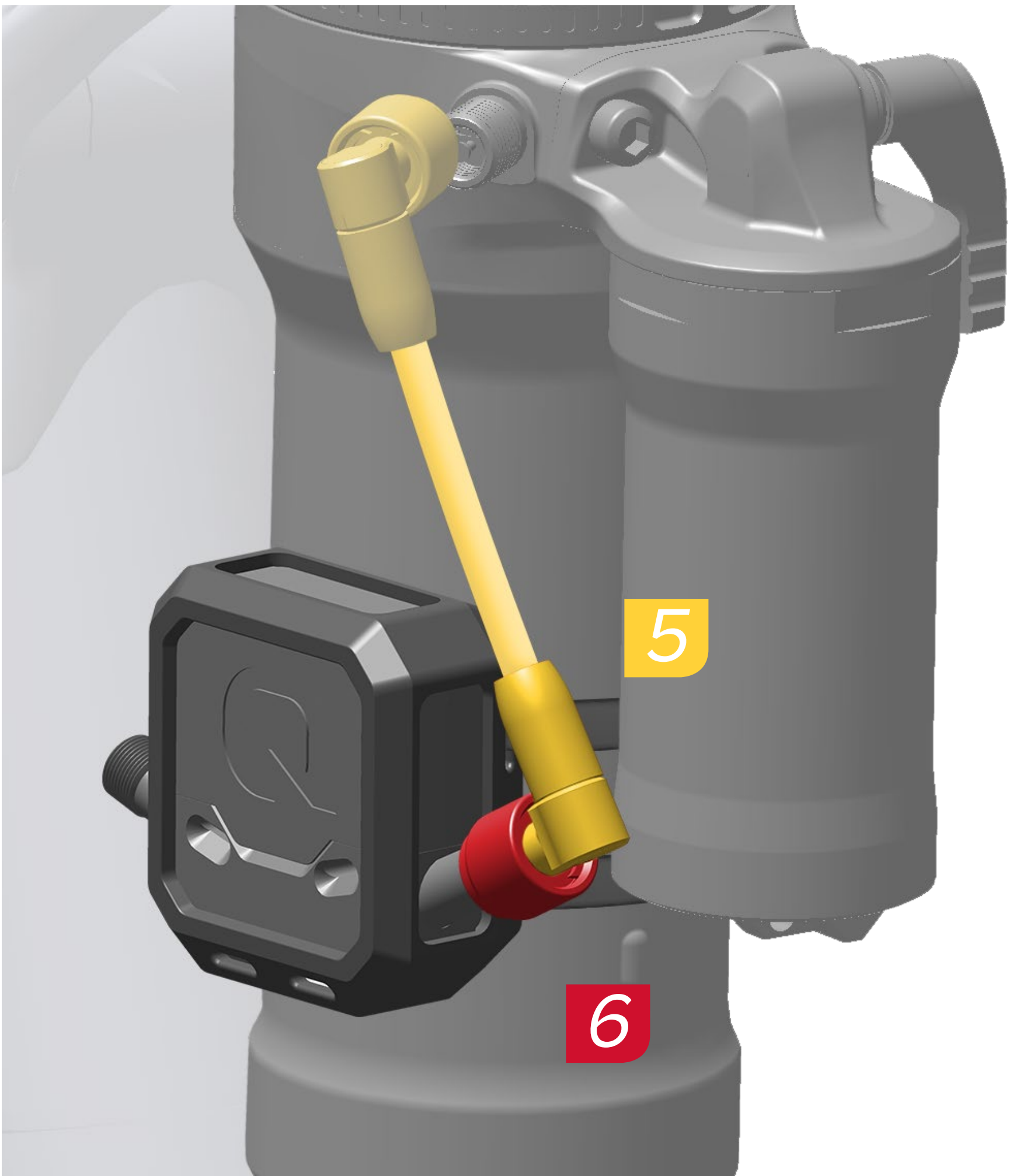
Installation



Insert plastic cable ties through the guide holes on the curved side of the rubber mounting boot and attach ShockWiz™ tightly to the rear shock air can.

Cut the excess ends of the cable ties.

Installation



Thread one end of the short hose assembly onto the ShockWiz™ air valve. Tighten the hose connector hand tight.

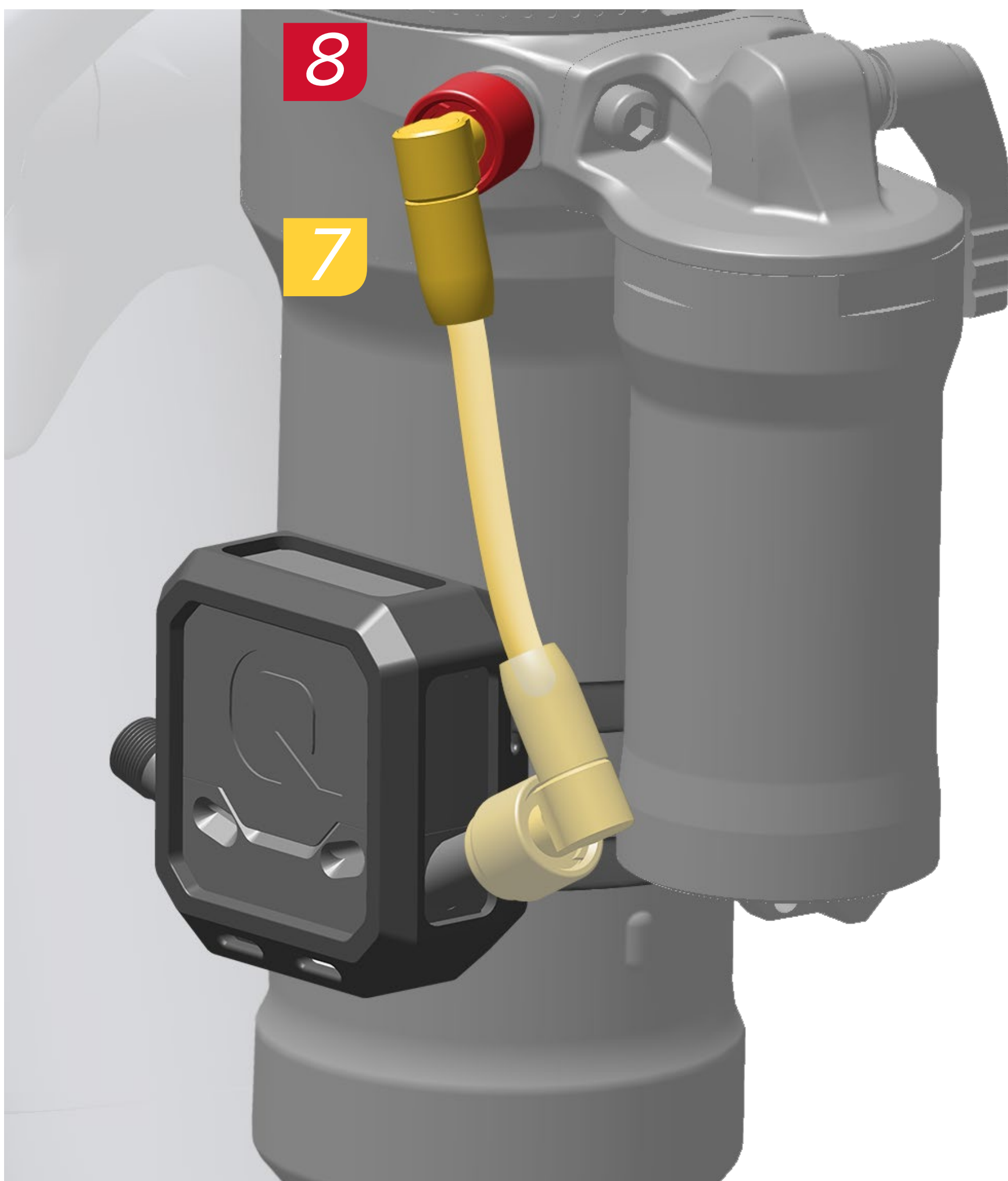
Loose hose connections will cause air to leak.

NOTICE

Do not use tools to tighten the hose connectors. Use of tools can damage the connector and air valve.

Do not sharply bend or kink the ShockWiz hose. Sharp bends or kinks will damage the hose.

Installation



Thread the other end of the hose assembly onto the rear shock air inflation valve. Tighten the hose connector hand tight.

Loose hose connections will cause air to leak.

NOTICE

Do not use tools to tighten the hose connector. Use of tools can damage the connector and air valve.

Do not sharply bend or kink the ShockWiz™ hose. Sharp bends or kinks will damage the hose.

Check Clearance

⚠️ WARNING

ShockWiz™ must not contact the shock damper body, shock reservoir, bicycle frame, tire, components, or the rider during use. Contact while riding can cause ShockWiz to disconnect from the shock and could cause a crash resulting in serious injury to the rider.



Sit on the bicycle to compress the shock. Pedal backwards, and confirm ShockWiz does not contact the frame, crank arm, components, or the rider.

If ShockWiz, or the hose assembly make contact, adjust as needed before use.

ShockWiz App



ShockWiz™ must be on to connect to the app.

ShockWiz is motion-activated. Bounce the wheel, or compress the fork or shock one or two times, to turn ShockWiz on.

A flashing LED on one side of the device will indicate ShockWiz is on.

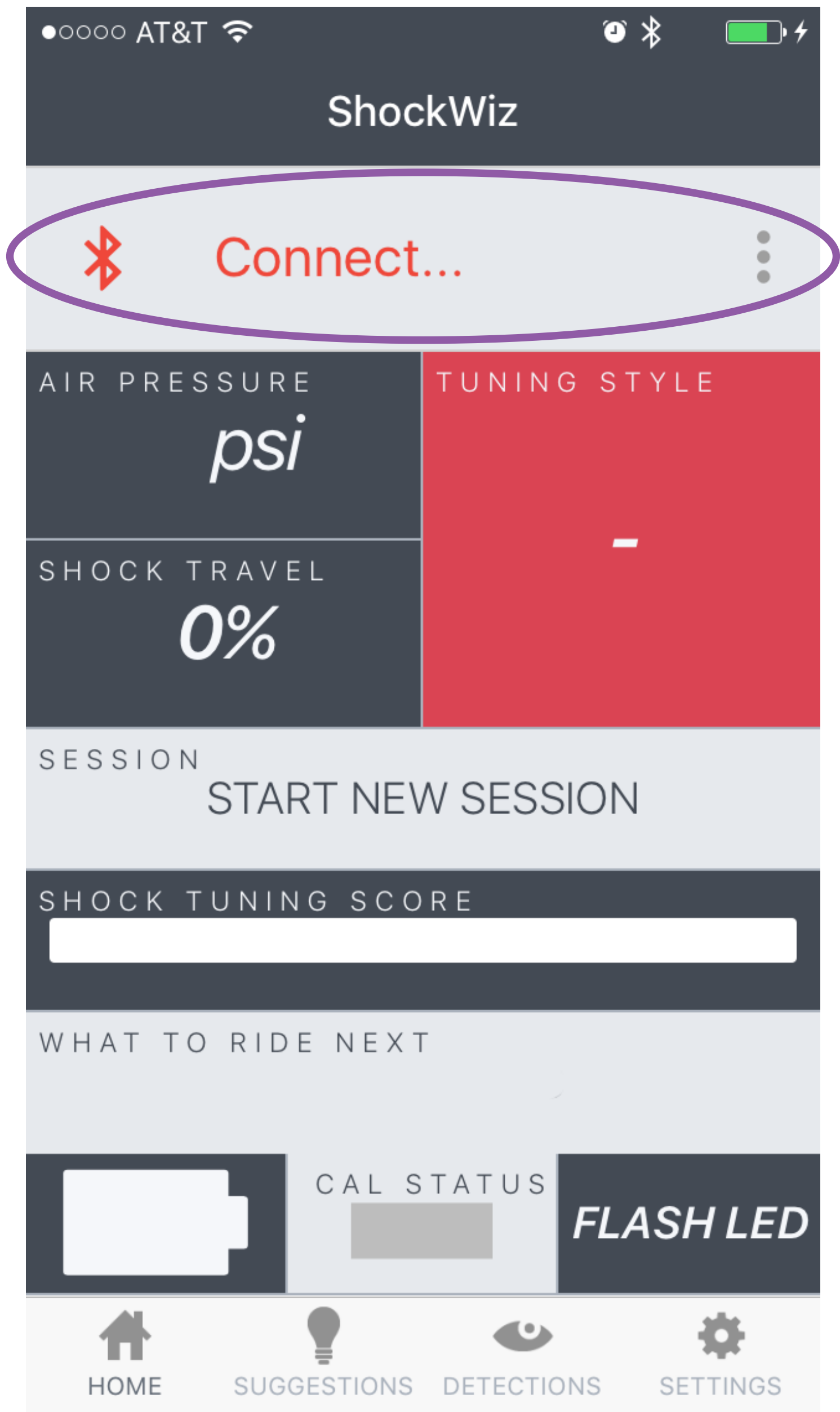
ShockWiz will turn off automatically when idle for 10 minutes.

Connect to App



Open the ShockWiz™ app on a smartphone or tablet.

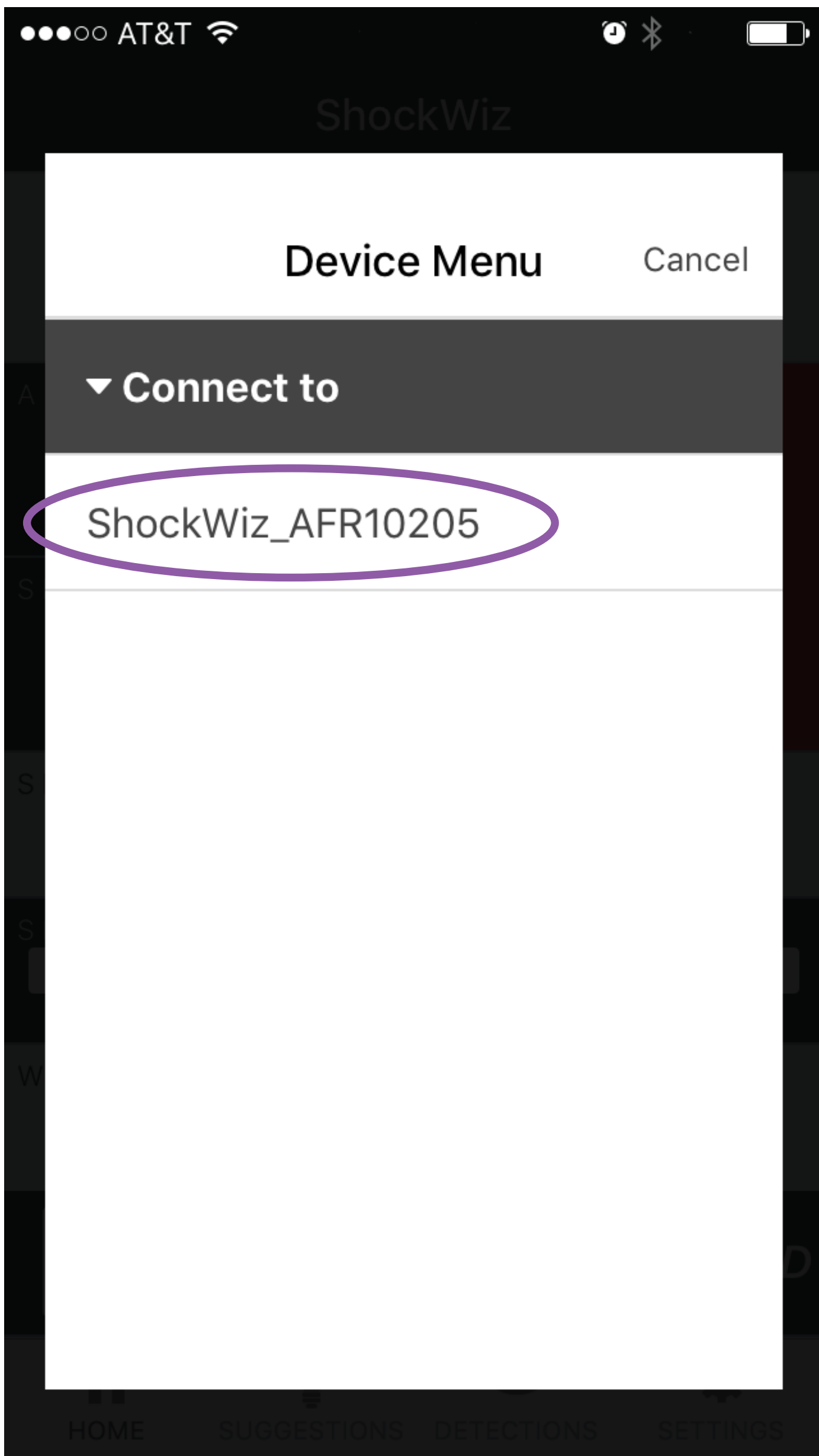
Connect to App



From the **HOME** screen, select **Connect**.

Bluetooth® must be activated on your smartphone or tablet.

Connect to App

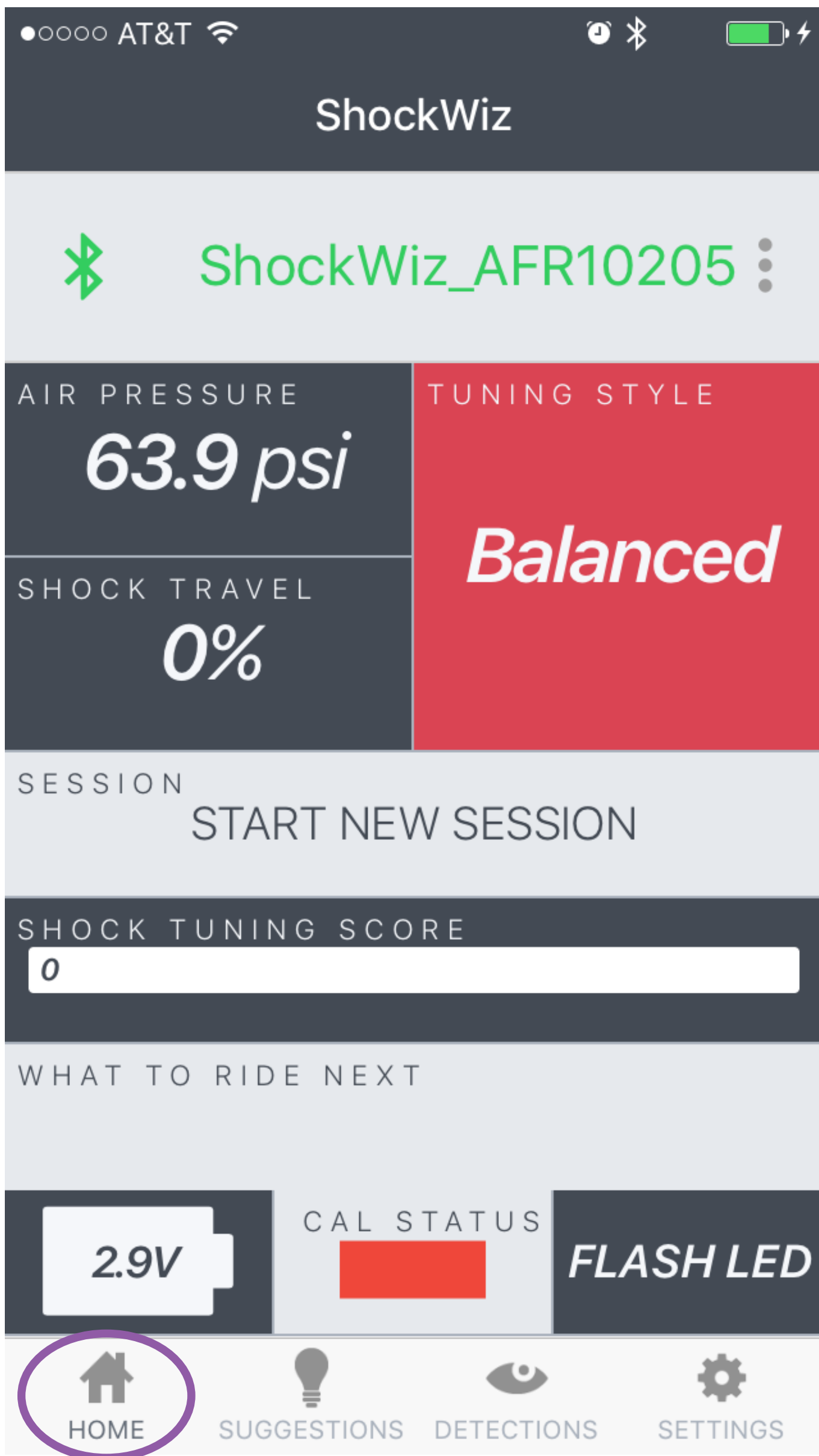


Select your ShockWiz™ device.

For first time use the device name will appear as:
ShockWiz_Serial Number.

The serial number is printed on the ShockWiz device.

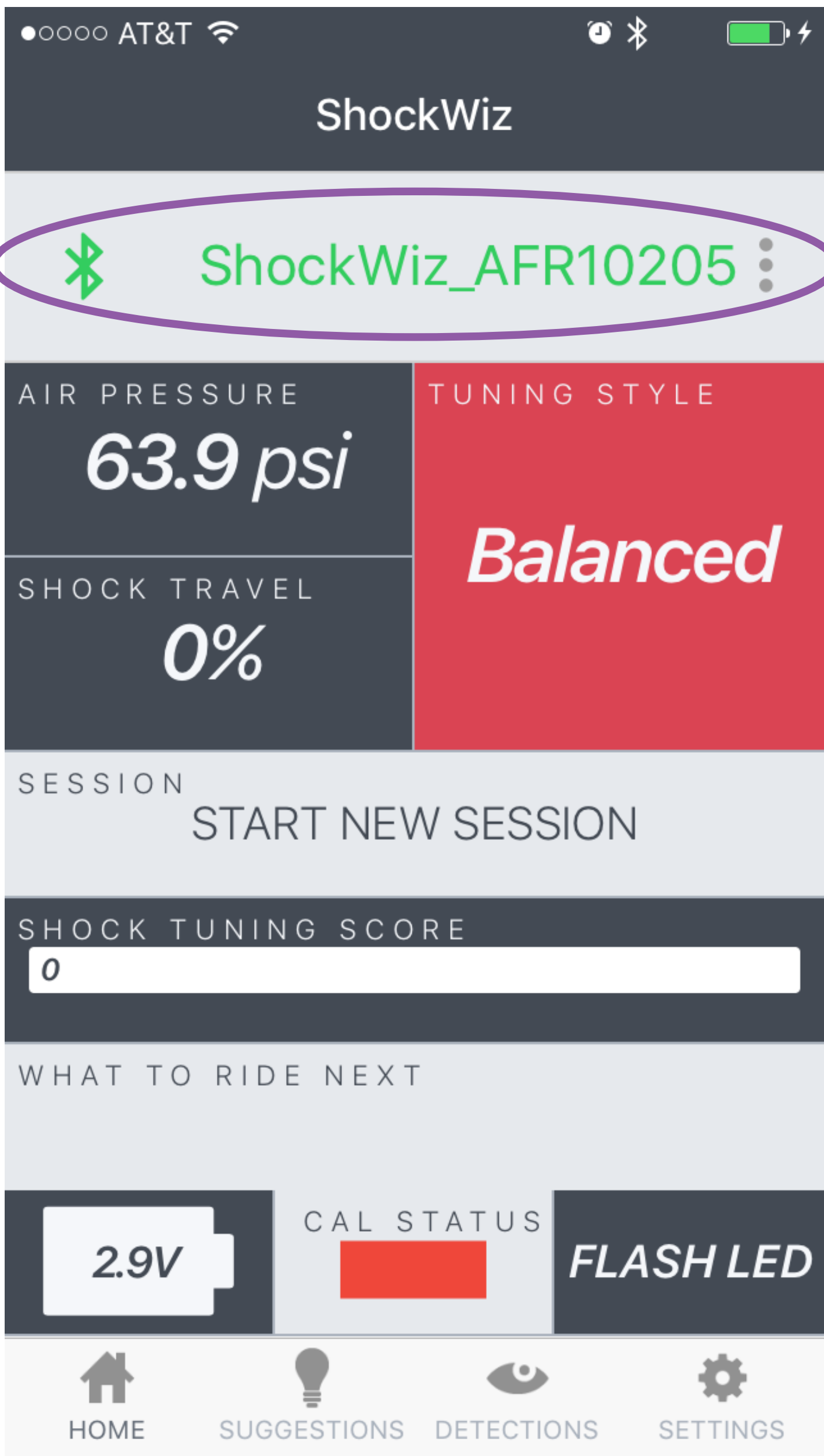
Connect to App



When ShockWiz™ is connected with the app, the **HOME** screen will display information from the device.

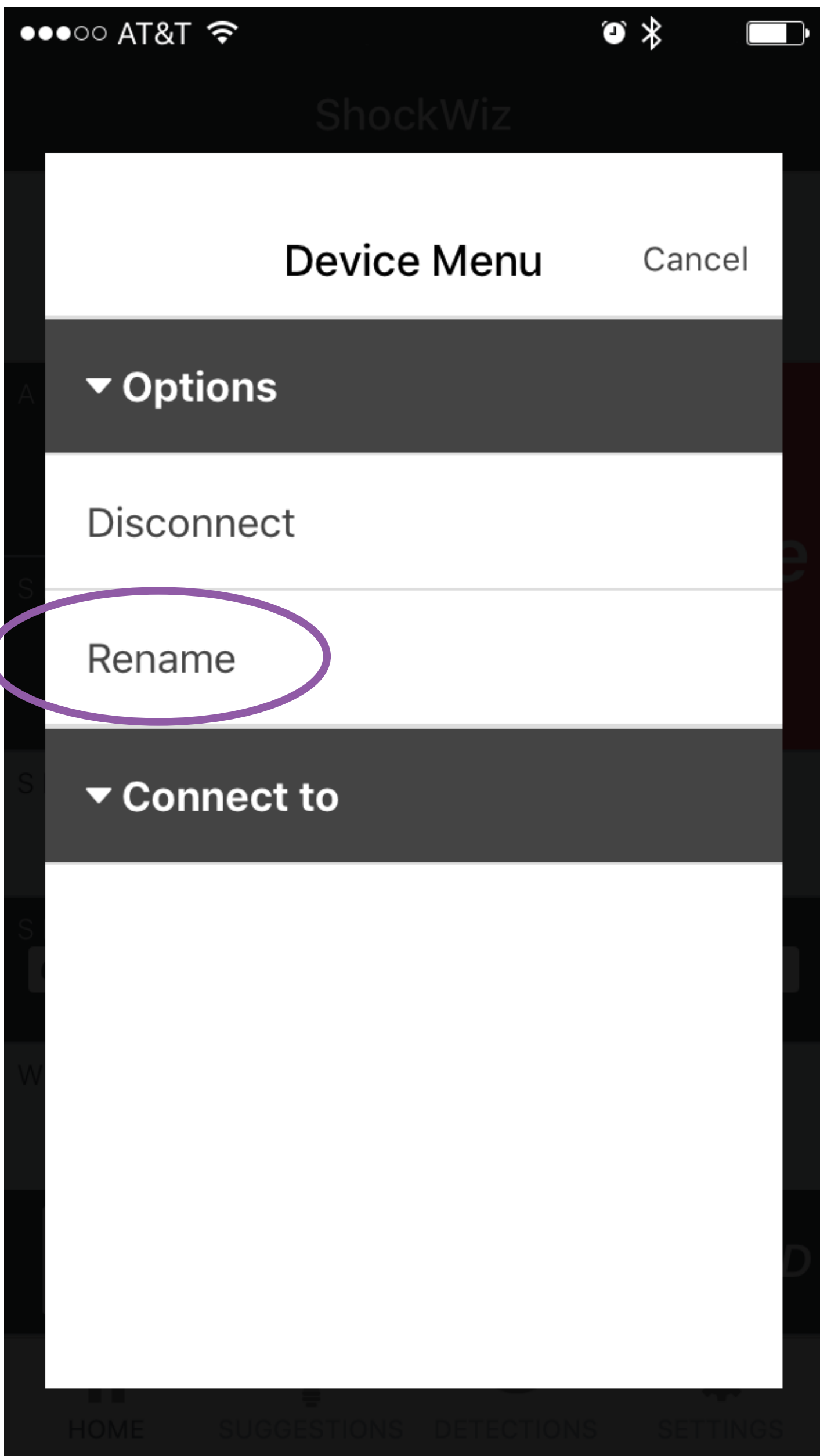
AIR PRESSURE and **SHOCK TRAVEL** readings may fluctuate slightly when the bike is idle. This is normal.

Rename Device



To rename the device, select the connected ShockWiz™ device in green.

Rename Device



Select **Rename**.

Rename Device

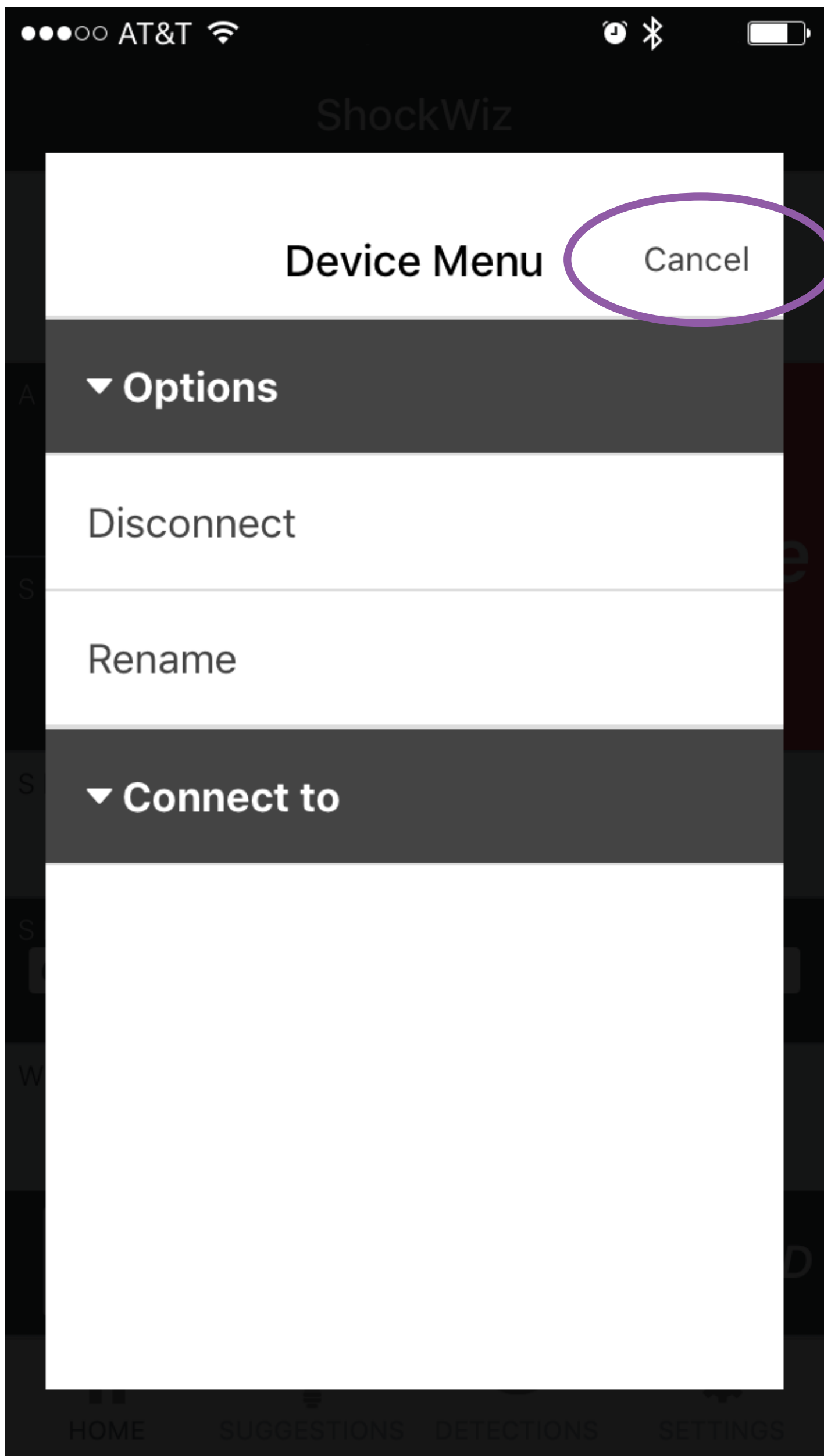
Cancel **Rename Device** OK

Device Name

Pike Fork

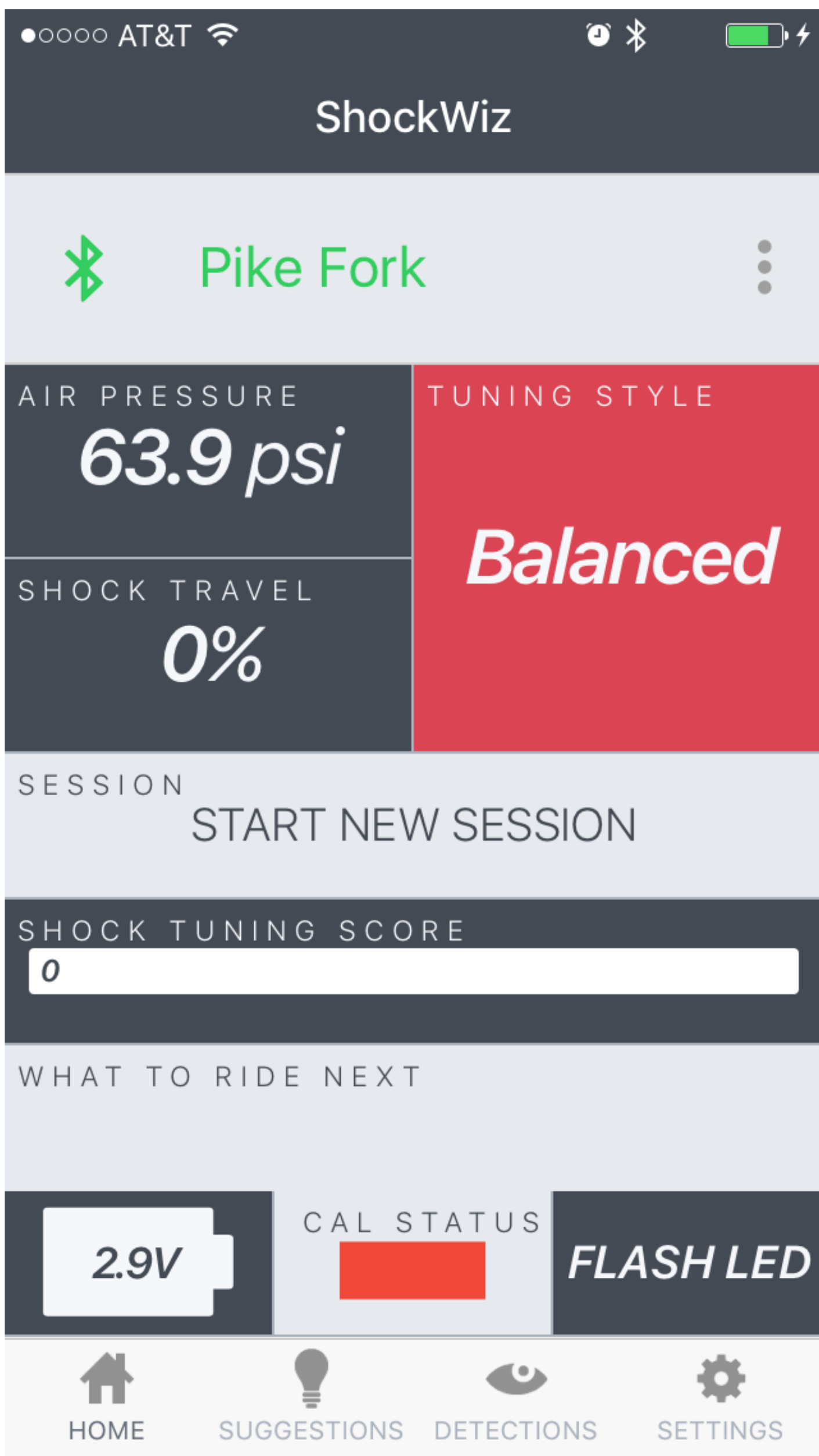
Select the device name to activate the entry bar.
Enter the new device name.
Select **OK** to save.

Rename Device



Select **Cancel** to exit.

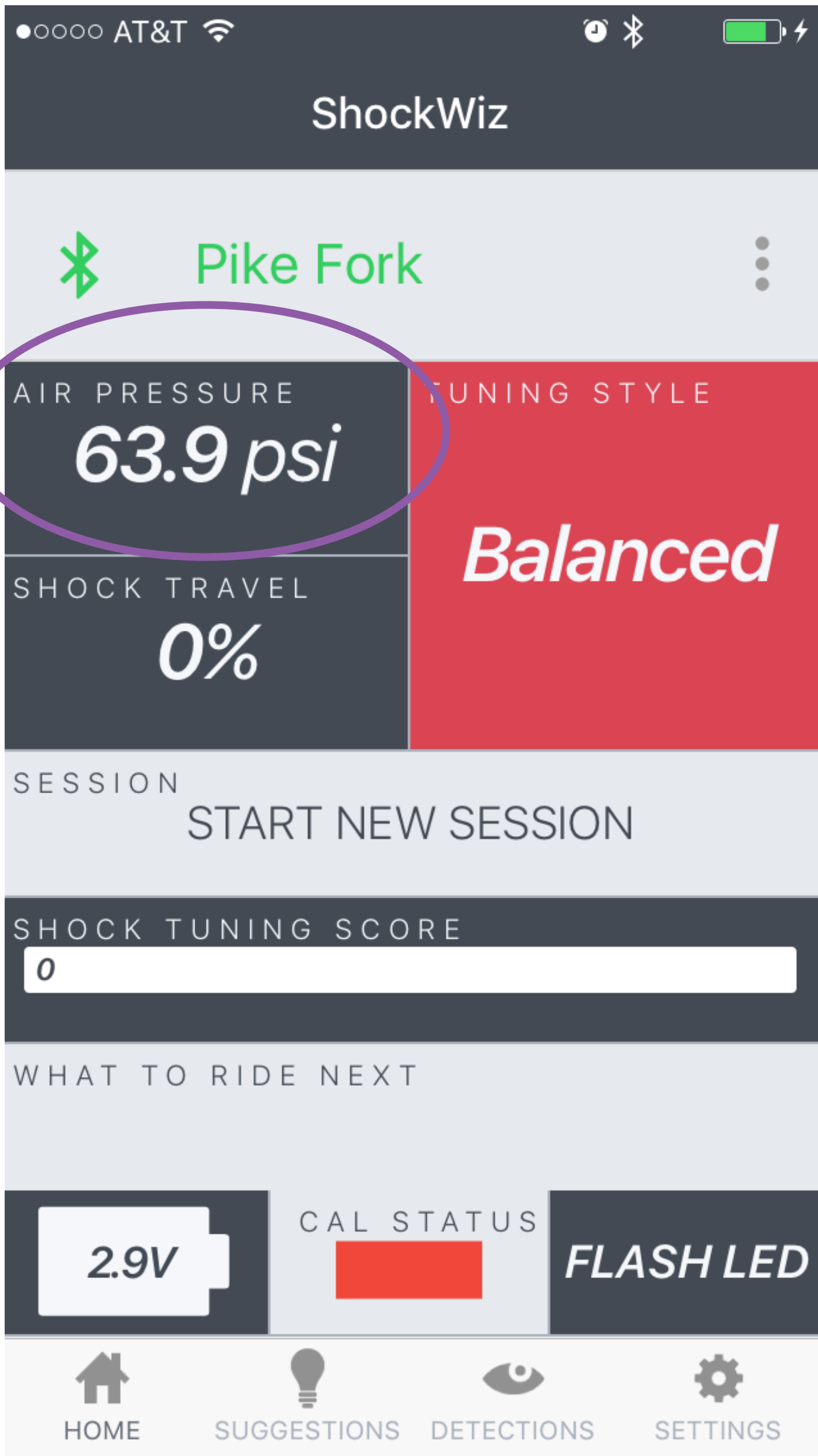
Rename Device



The new ShockWiz™ name will be visible in the **HOME** screen in green.

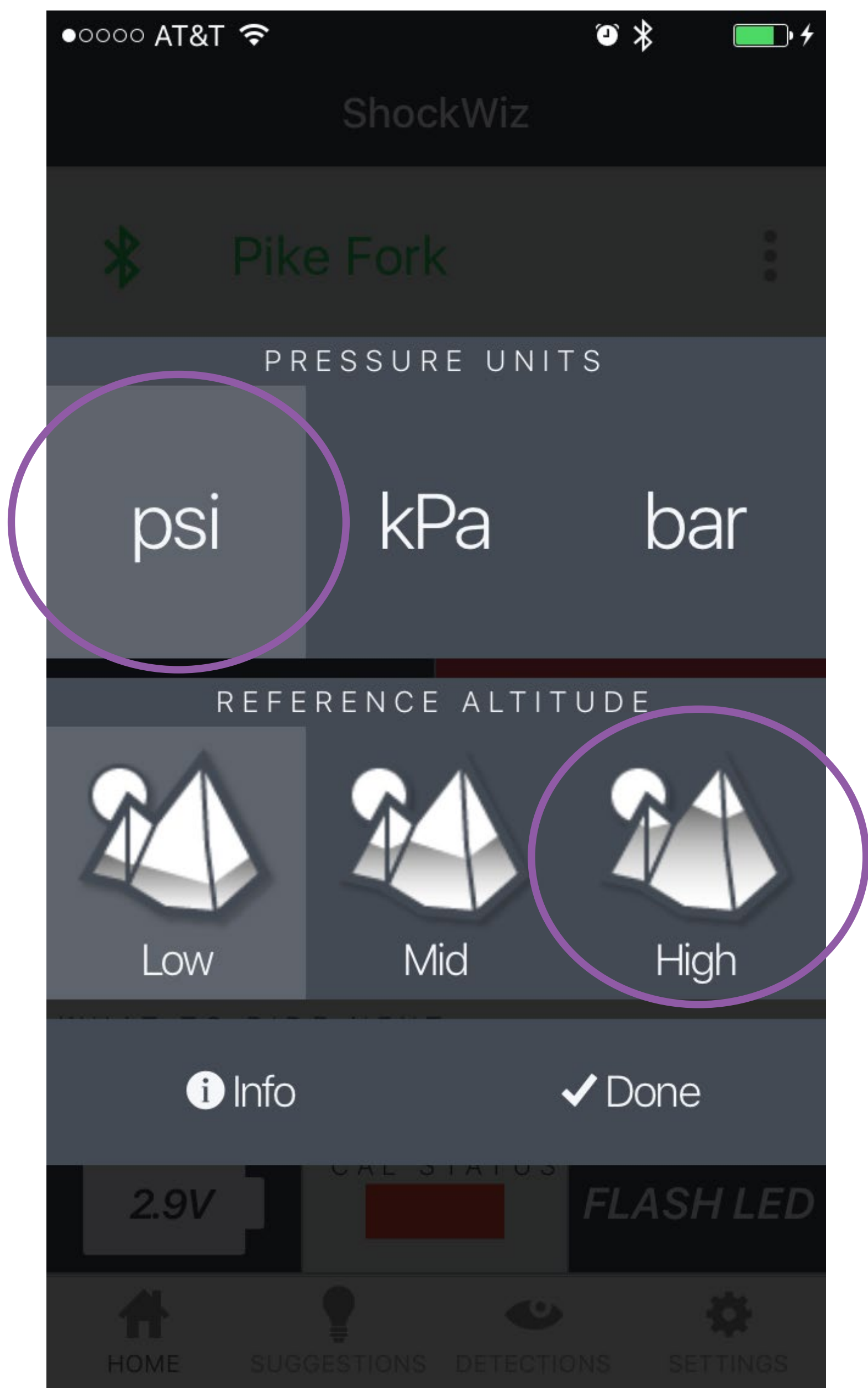
To rename the device again follow the same procedures.

Select Altitude



Select **AIR PRESSURE**.

Select Altitude



Select **PRESSURE UNITS**.

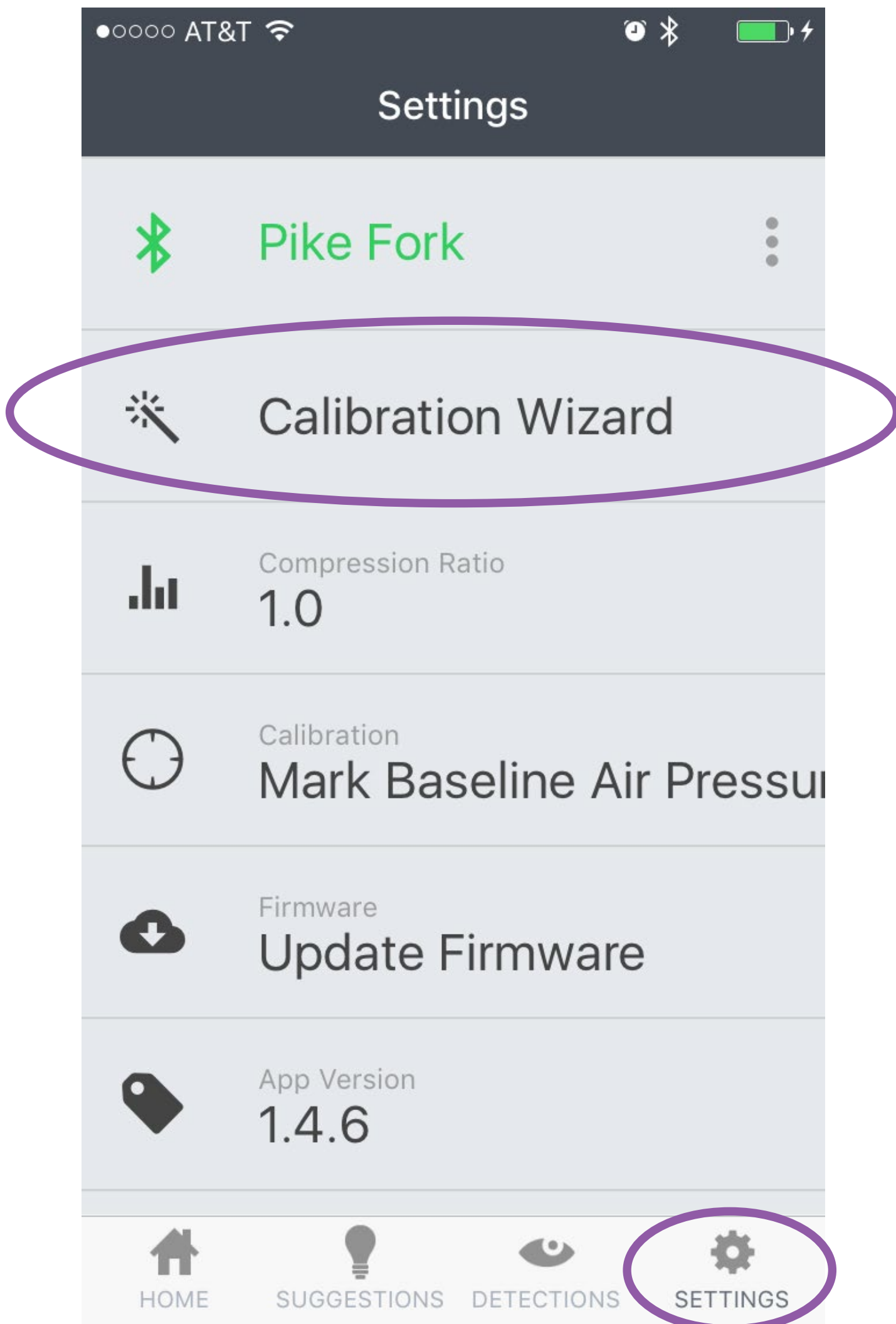
Select **REFERENCE ALTITUDE**, then select **Done**.

Select **Info** for *Altitude Range Details*.

Calibration Wizard

ShockWiz™ must be calibrated with the suspension fork or rear shock before use. The **Calibration Wizard** will guide you through the Calibration process.

ShockWiz must be installed onto the suspension fork or rear shock during calibration.



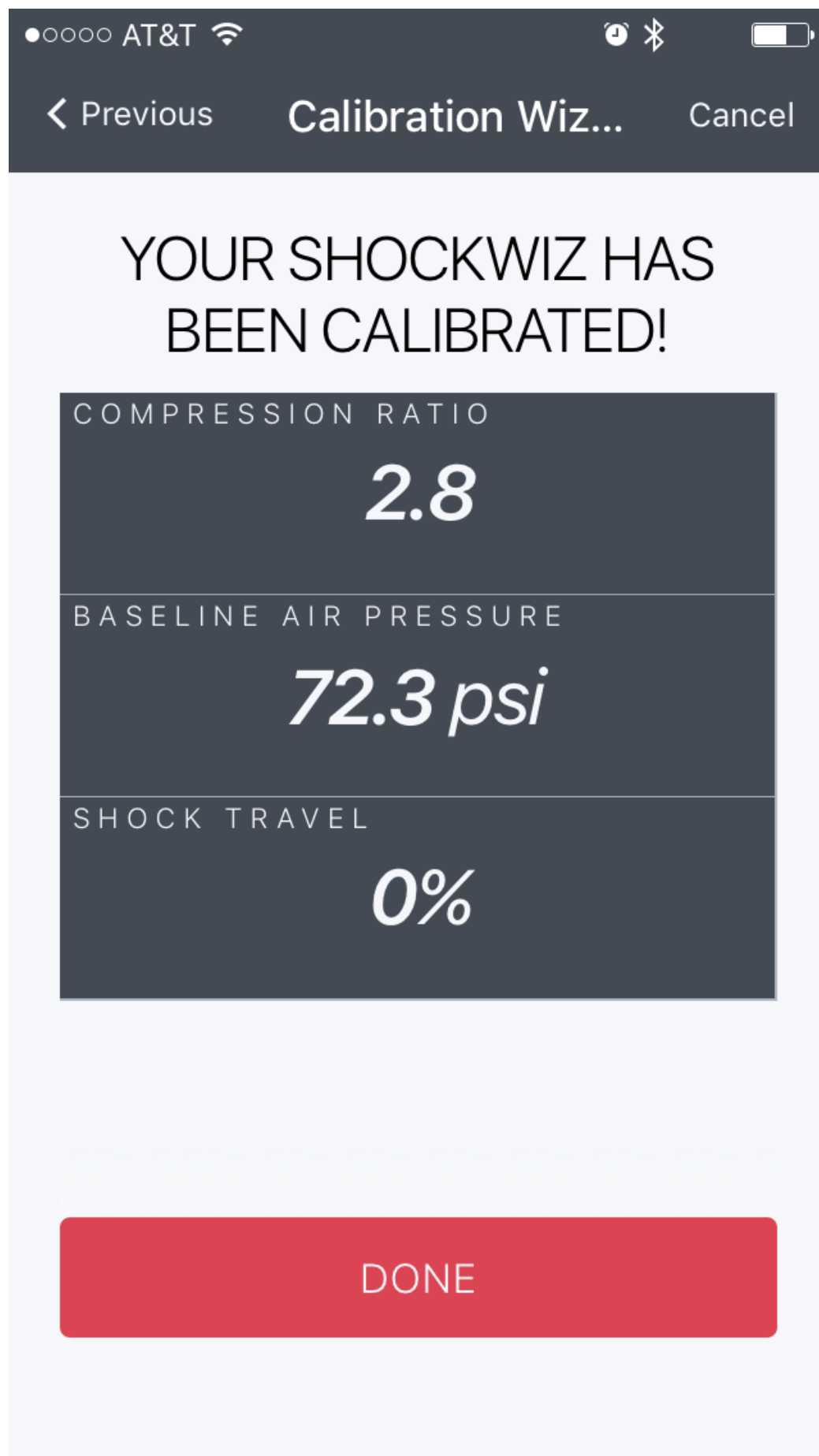
In the **SETTINGS** screen, select **Calibration Wizard**.

Calibration Wizard



Select **BEGIN** and complete the Calibration process.
Repeat the entire process if a second ShockWiz™ is installed.

Calibration Wizard



When complete, take a screenshot of your **COMPRESSION RATIO** and **BASELINE AIR PRESSURE** for future reference.

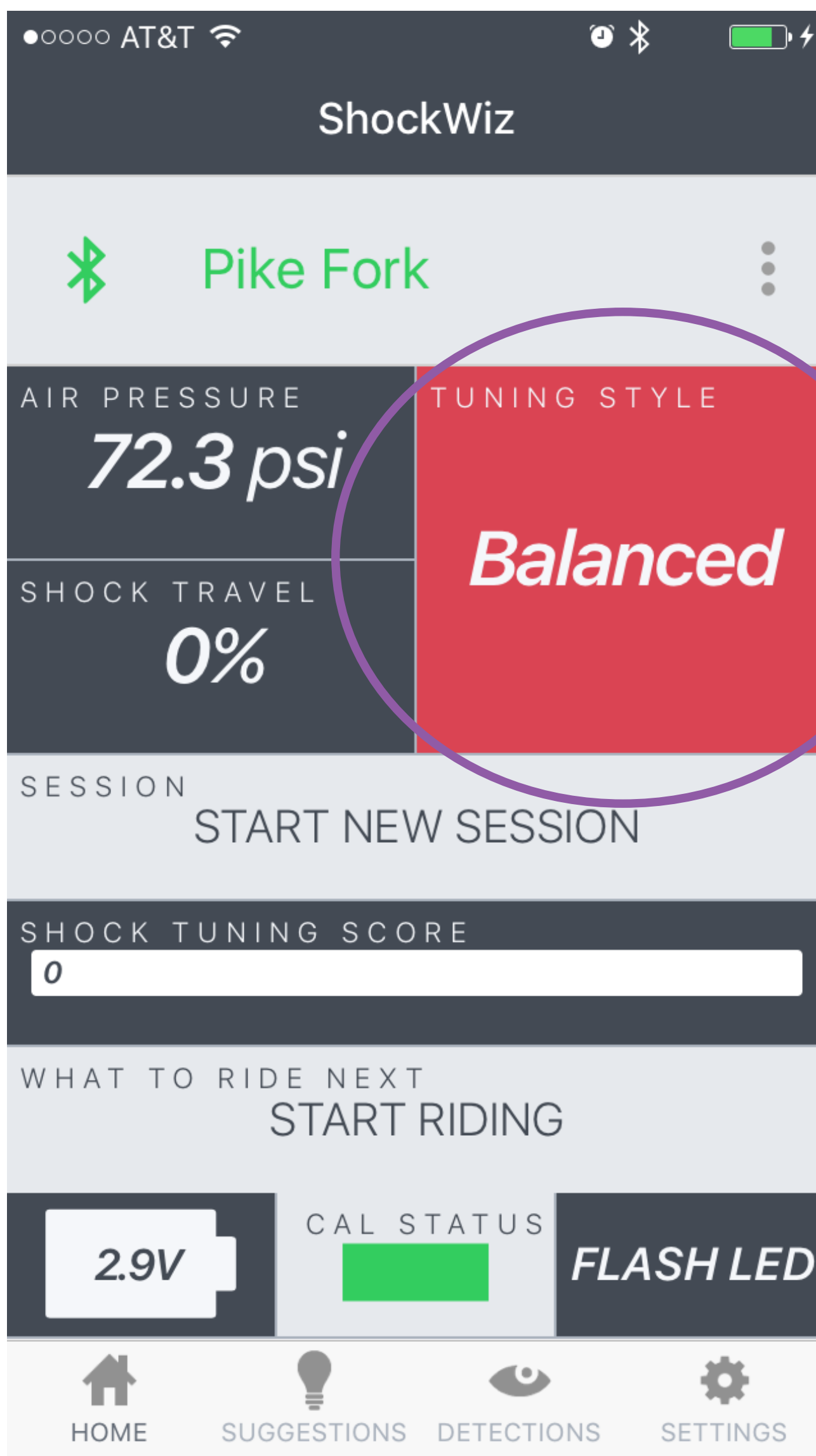
SHOCK TRAVEL displayed should read 0%.

If **SHOCK TRAVEL** displayed exceeds 3%, an error was made during calibration. The **MARK BASELINE AIR PRESSURE** process must be repeated. Go to **SETTINGS** and repeat the **Mark Baseline Air Pressure** procedure.

***SHOCK TRAVEL** readings may fluctuate slightly when the bike is idle. This is normal.*

Select Tuning Style

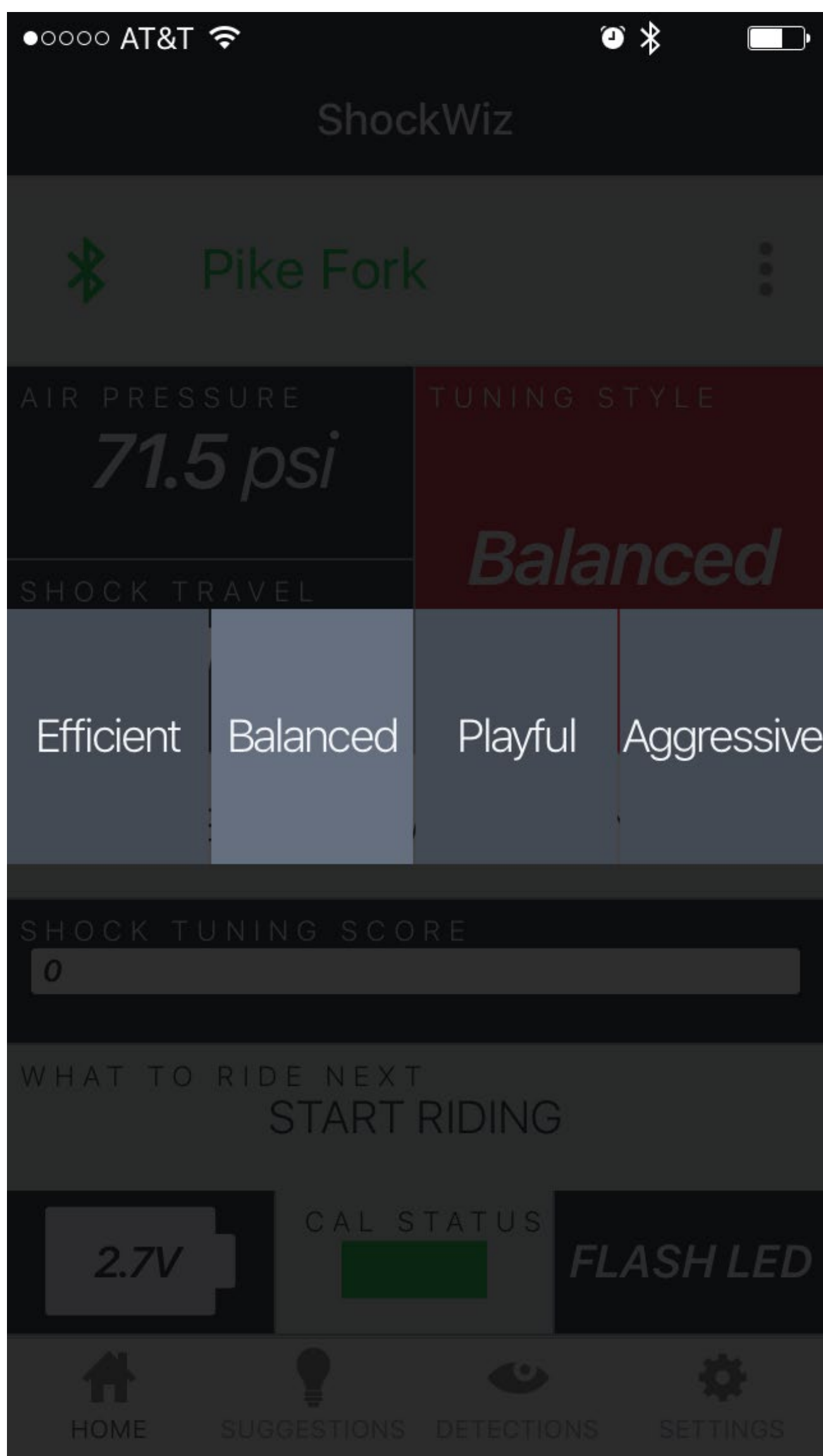
ShockWiz™ offers four tuning styles that allow you to customize the ride and feel of your bike.



Select **TUNING STYLE**.

Balanced is the default setting.

Select Tuning Style



Select your preferred **Tuning Style**.

Select Tuning Style



The selected **TUNING STYLE** will display on the **HOME** screen.

ShockWiz™ is now ready to analyze your suspension.

Ride Session

ShockWiz™ records your suspension's performance during the ride **SESSION**.

ShockWiz wirelessly transfers data to the ShockWiz app while your connected smartphone is in close proximity to the ShockWiz device.

ShockWiz must be 'on' for data to transfer to the smartphone app. Bounce the front wheel to turn ShockWiz on if idle for more than 10 minutes.

When the test ride session is complete, review the shock's performance in the app and make adjustments to the fork as recommended.

IMPORTANT

While tuning with ShockWiz, any time a damping adjustment is made to your suspension, you must restart a new ride test session within the app.

Any time air spring pressure is changed, you must reset **Baseline Air Pressure** in the **SETTINGS** screen.

Any time air spring **ramp** is changed, you must remeasure the **Compression Ratio** in the **Calibration Wizard**.

See the ShockWiz app for more information.

Refer to the suspension manufacturer for adjustments available on your suspension.

Riding with ShockWiz

ShockWiz™ requires **DETECTIONS** from suspension movement during a ride **SESSION**.

ShockWiz records the set of **DETECTIONS** during the **SESSION** and analyzes suspension performance based on **Compression Ratio, Baseline Air Pressure, Shock Travel** percentage, and each movement that occurred during the ride.

There must be a large enough set of **DETECTIONS** for ShockWiz to record and analyze in order for it to make suspension adjustment **RECOMMENDATIONS** that will improve the **SHOCK TUNING SCORE**.

For effective results, follow these ride **SESSION** recommendations:

1. Ride a trail with a variety of terrain and elevation changes including the following:
 - Pedaling • Jumps • Drops
 - Successive small, medium, and large bumps

Note: *Climbing produces insignificant detections.*

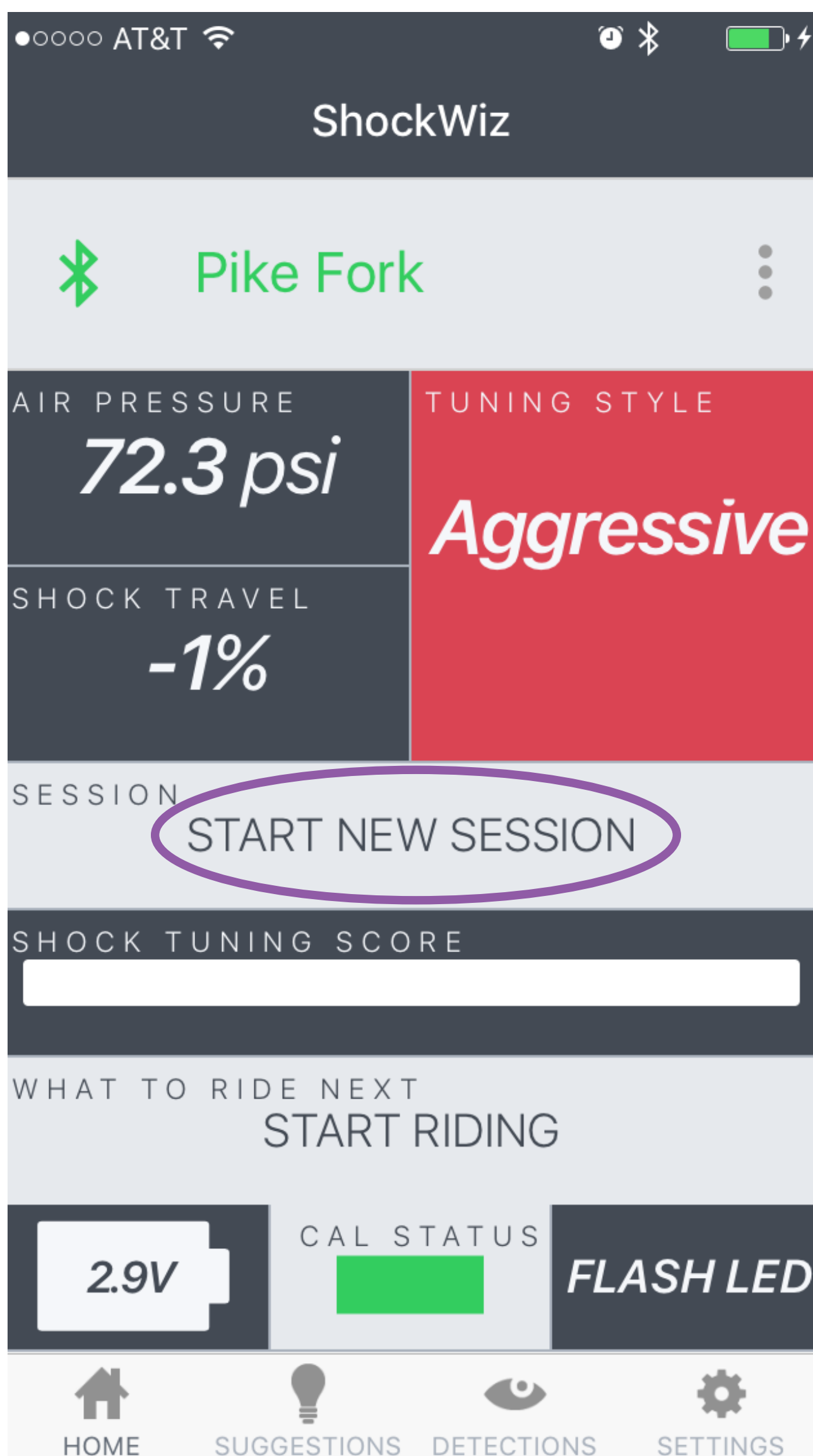
2. Do not make air pressure or damper changes to the suspension during the ride **SESSION**.

*Air pressure and damper changes should be made prior to beginning the next ride **SESSION**. If air pressure is changed, repeat the **Mark Baseline Pressure** process on the **SETTINGS** screen before starting a new **SESSION**.*

When **START NEW SESSION** is selected, ShockWiz resets the detections recorded in the prior **SESSION**.

3. Do not lock the suspension out during the **SESSION**.

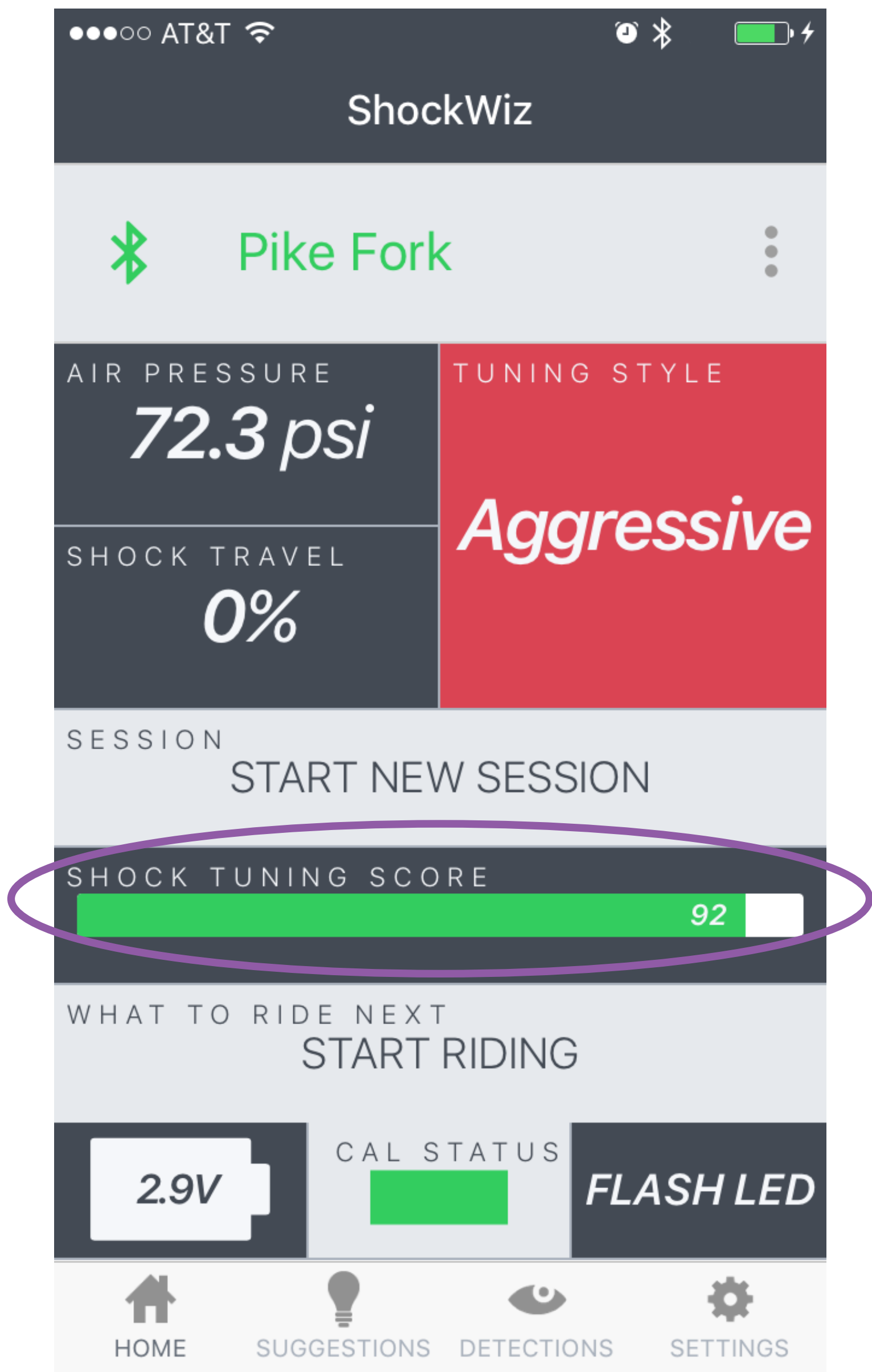
Start New Session



It's time to start a new **SESSION** and go for a ride! Select **START NEW SESSION** and go for a ride so ShockWiz™ can collect data to analyze.

Selecting **START NEW SESSION** resets the ShockWiz data set and clears all **SUGGESTIONS** and **DETECTIONS**.

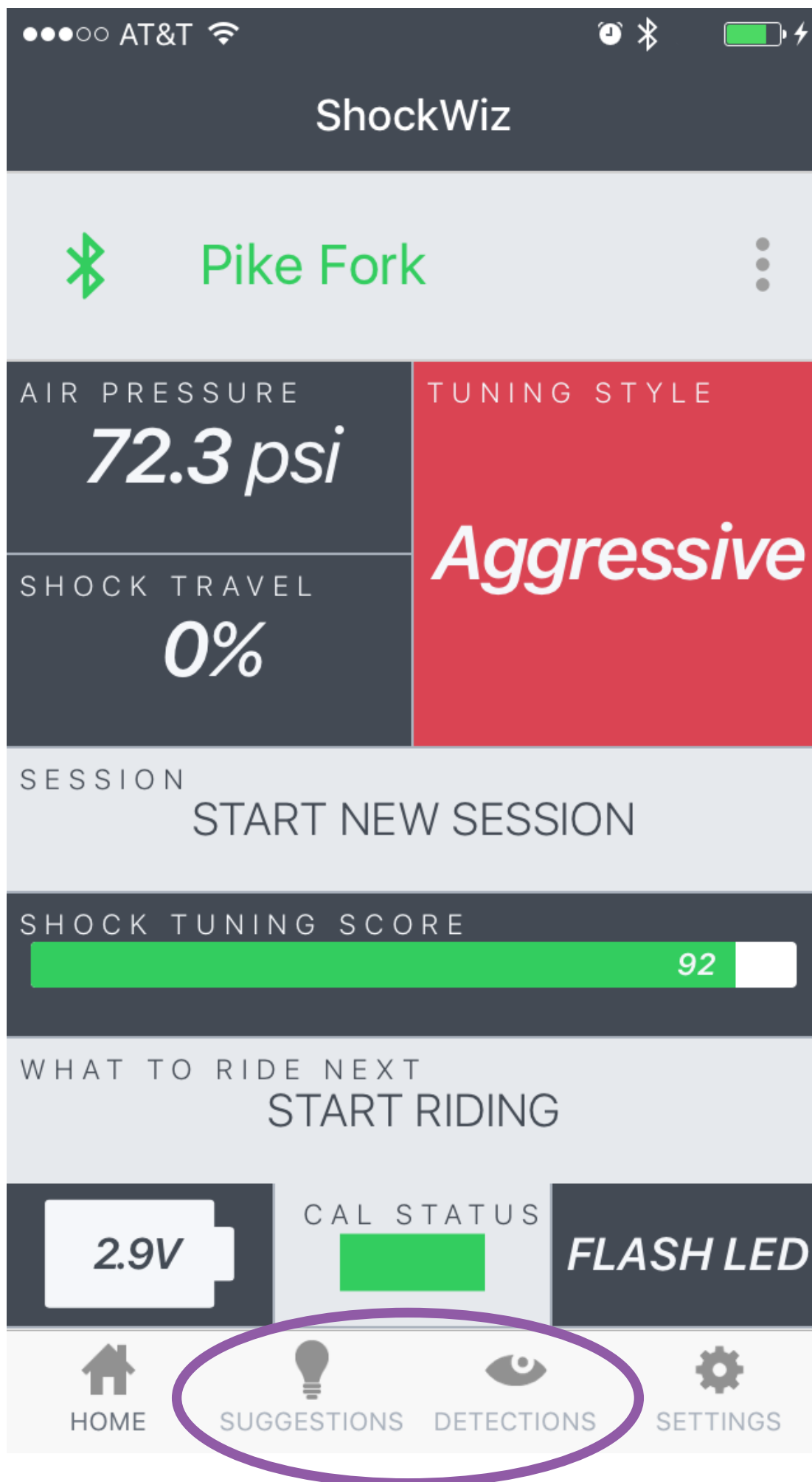
Shock Tuning Score



When the ride **SESSION** is over, open the app and check your **SHOCK TUNING SCORE**.

If you are checking the score of more than one suspension component, you must connect the app to each separately.

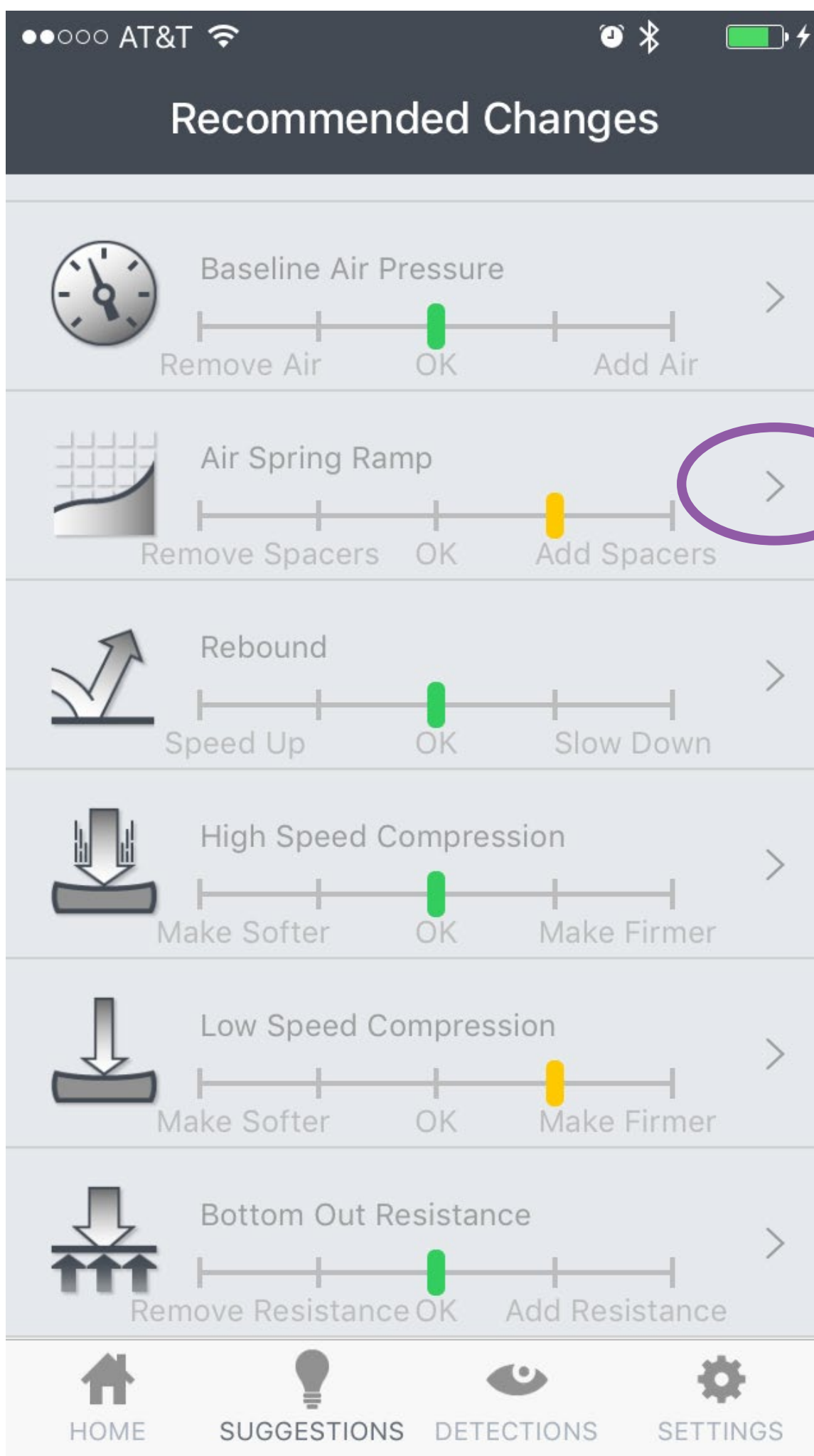
Shock Tuning Score



- 95 - 100** Exceptional
- 85 - 94** Good
- 70 - 84** Adequate
- 55 - 69** Needs Improvement
- < 55** Poor

To improve the **SHOCK TUNING SCORE**, select **DETECTIONS** to review suspension behaviors, and **SUGGESTIONS** to review recommended suspension adjustments to improve negative behaviors.

Suggestions








Changes are not recommended if a green bar is visible at **OK**. Changes are recommended if a yellow (small change) or red (large change) bar are visible.

If '**Not enough data**' is indicated, ShockWiz was unable to collect enough data during the **SESSION** to make a suggestion.

Select any **Recommended Change** for more information.

Recommended Changes

●○○○○ AT&T    

 Back Recommended Changes

Air Spring Ramp

NOTICE

Any change of Air Spring Ramp will require you to measure a new compression ratio using the Calibration Wizard.

DEFINITION

The progressiveness of the air spring at the end of the travel stroke.

FEEL

More ramp stiffens the suspension and less ramp softens the suspension at the end of the travel stroke.





ADJUSTMENT

Remove Spacers: Remove tokens, bands, volume spacers, etc. to increase the air spring volume and reduce the ramp.

Add Spacers: Add tokens, bands, volume spacers, etc. to decrease the air spring volume and increase the ramp.

INDICATORS

Green: No adjustment needed

 HOME  SUGGESTIONS  DETECTIONS  SETTINGS

Recommended Changes

It is recommended to make one adjustment per **SESSION**, starting with the first suggestion at the top of the screen.

For the best results, **Baseline Air Pressure**, **Air Spring Ramp** and **Rebound** should be 'OK' before making **Compression** damping and **Bottom Out** adjustments.

One adjustment may change the results of another after the following **SESSION**. For example, a change to **Baseline Air Pressure**, may affect **Rebound** or **Low Speed Compression**.

After one change is made, select **START NEW SESSION** in the app, ride again, and check the **SHOCK TUNING SCORE** and **SUGGESTIONS** screen for updated results at the end of the ride **SESSION**.

Repeat the entire process for each suspension component until you are satisfied with the **SHOCK TUNING SCORE** and the ride quality of each suspension component.

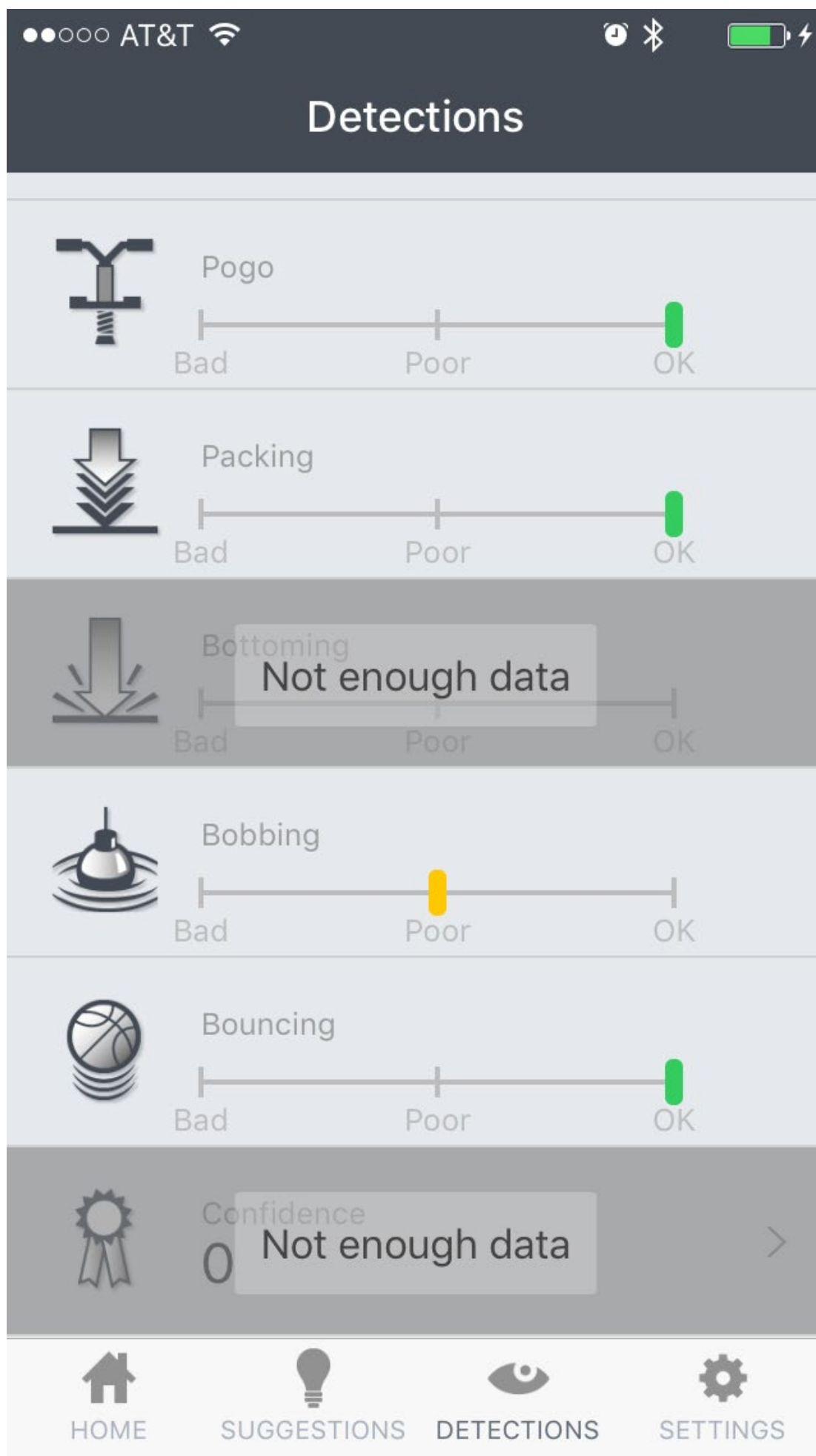
IMPORTANT

While tuning with ShockWiz™, any time an adjustment is made to the suspension component, you **must** start a new **SESSION** within the app before riding and collecting new data.

Any time air spring pressure or air spring volume is changed, the **Mark Baseline Pressure** process must be repeated on the **SETTINGS** screen before starting a new **SESSION**.

Suspension adjustments vary. Refer to the suspension manufacturer for adjustments available on your suspension.

Detections

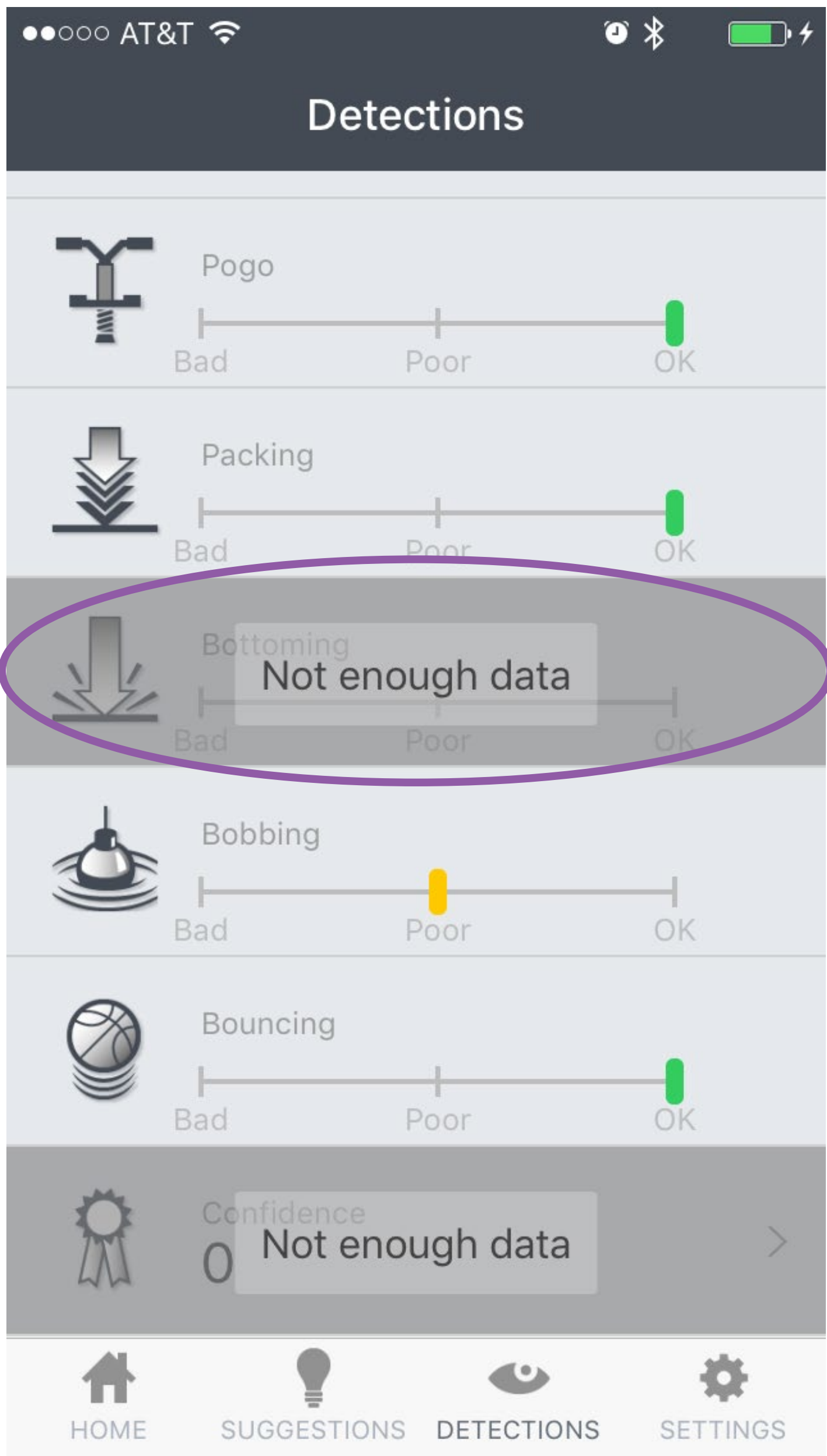


To further review your suspension performance, additional **DETECTIONS** are available.

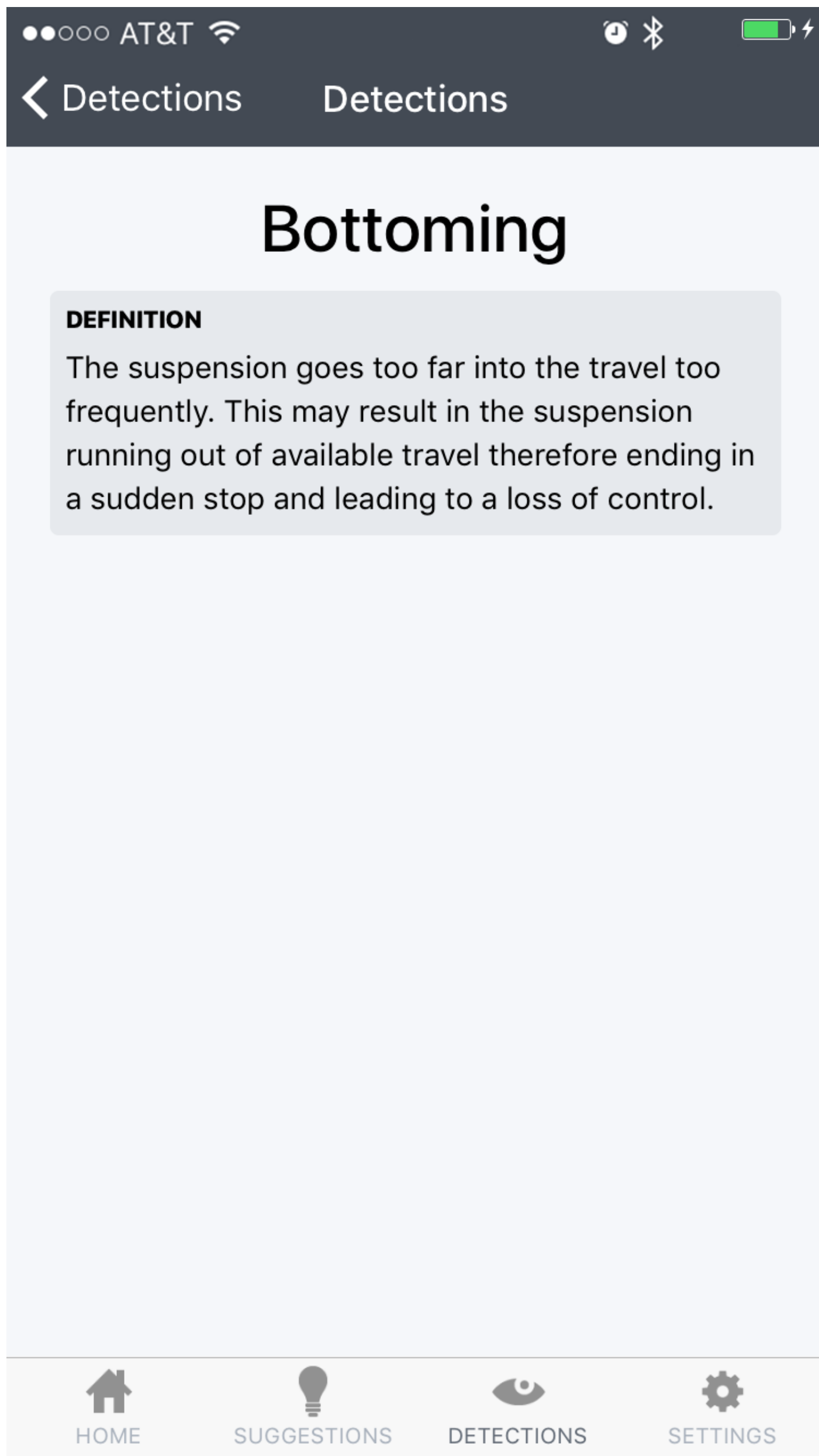
DETECTIONS are undesirable suspension performance behaviors. When detected, a **SUGGESTION**, or suspension adjustment, is made to improve that negative performance behavior.

If ShockWiz™ did not collect enough data during a **SESSION** for a particular **DETECTION**, 'Not enough data' will be reported. More ride data is needed for that particular **DETECTION**.

Detections



Select any **DETECTION** for more information about the suspension behavior associated with it.



Removal

ShockWiz™ should be removed from the suspension when air spring and damping adjustments are complete and you are satisfied with the fork and rear **SHOCK TUNING SCORE** and suspension performance.

Unthread the ShockWiz hose connector from the suspension fork or shock air inflation valve.

*The ShockWiz hose connector must be removed from the fork or shock **first** to avoid fork air pressure loss.*

Install the fork or rear shock air inflation valve cap.

Cut the cable ties and remove ShockWiz from the fork or rear shock.

Install the ShockWiz air inflation valve caps onto the ShockWiz air inflation valves and store ShockWiz in a safe location.

NOTICE

Do not leave ShockWiz attached to the suspension during normal riding. ShockWiz is intended to be used to analyze suspension performance and to suggest adjustments that will improve performance.

Maintenance

Clean ShockWiz™ after use.

Remove the rubber mounting boot and use a damp cloth to wipe off dirt and debris.

Remove the battery to extend battery life.

NOTICE

Do not use a pressure washer.

Do not use acidic or grease dissolving agents. Chemical cleaners and solvents can cause permanent damage to the electronics.

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