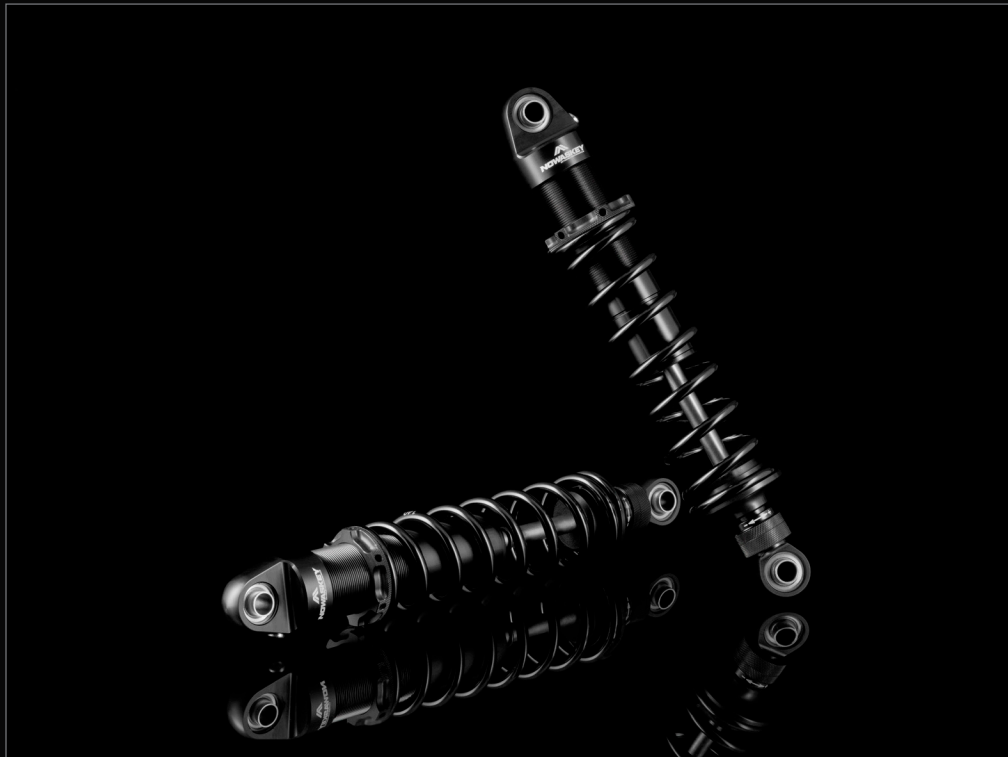




# INSTALLATION & TUNING GUIDE

## 12" & 13" DUAL ADJUSTABLE SHOCKS





## ADVISORIES



Installation should be performed by a certified motorcycle technician. Damage to your motorcycle or the suspension parts can occur if improperly installed and tuned.



Replacing the stock suspension will significantly change the responsiveness and handling of your motorcycle. Please see our tuning guide and appropriately adjust the suspension based on your weight, payload, and riding style.

## LIMITED LIFETIME WARRANTY

All Nowaskey Extreme Performance products are guaranteed to the original retail purchaser only that the Products furnished hereunder shall be free from material defects in material and workmanship under normal use and service, when properly installed, maintained and used for the purposes for which it is designed. Warranty coverage is limited lifetime.

In the event warranty service is required, notice of any such alleged defect must be given to NEP within ten (10) days after the discovery thereof, and provided that inspection by NEP confirms the existence thereof to the sole satisfaction of NEP. Instructions for filing a warranty claim can be found at <https://www.nowaskey.com/warranty/>. Coverage terminates if the original retail purchaser sells or otherwise transfers or alters the Products. This limited lifetime warranty does not cover (i) normal wear of parts; (ii) road hazards, abuse, neglect, accidents, collisions, fire, theft, freezing, vandalism, riot, explosion, or objects striking the Product; (iii) misusing the Products such as driving over curbs, or overloading; (iv) altering, disassembling, tampering or modifying the Product; (v) acts of God, natural disasters, force majeure events, and other similar causes beyond the reasonable control of NEP; or (vi) damage due to external causes, including accident, abuse, misuse, neglect, improper storage, modification, or any services not performed by NEP or its authorized representatives. Further, this warranty is voided if the Products are used for any form of racing. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. NEP DISCLAIMS ALL OTHER WARRANTIES, CONDITIONS, OR REPRESENTATIONS, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE. NEP SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, INCIDENTAL, AND SPECIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, ANY LOSS OF PROFIT, LOSS OF USE, DOWNTIME, LOSS OF PRODUCTION OR LOSS OF DAMAGE TO RAW MATERIALS OR FINAL PRODUCTS) OR FOR ANY CLAIM BROUGHT AGAINST THE PURCHASER BY ANY OTHER PARTY. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to a particular original retail purchaser. NEP's exclusive liability and original retail purchaser's exclusive remedy under this limited warranty is limited to replacement at NEP's factory or warehouse. This limited lifetime warranty is void unless the original retail purchaser completes the online warranty registration at <https://www.nowaskey.com/warrantyregistration/> within thirty (30) days from the date of purchase. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. TO THE EXTENT PERMITTED BY LAW, THE WARRANTIES AND REMEDIES IDENTIFIED ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW. THIS WARRANTY IS NOT ASSIGNABLE TO ANY PERSON OTHER THAN THE ORIGINAL BUYER AND IS ONLY VALID TO THE PERSON TO WHOM THIS WARRANTY IS ORIGINALLY GRANTED AND WHOSE NAME APPEARS ON THE ORDER.

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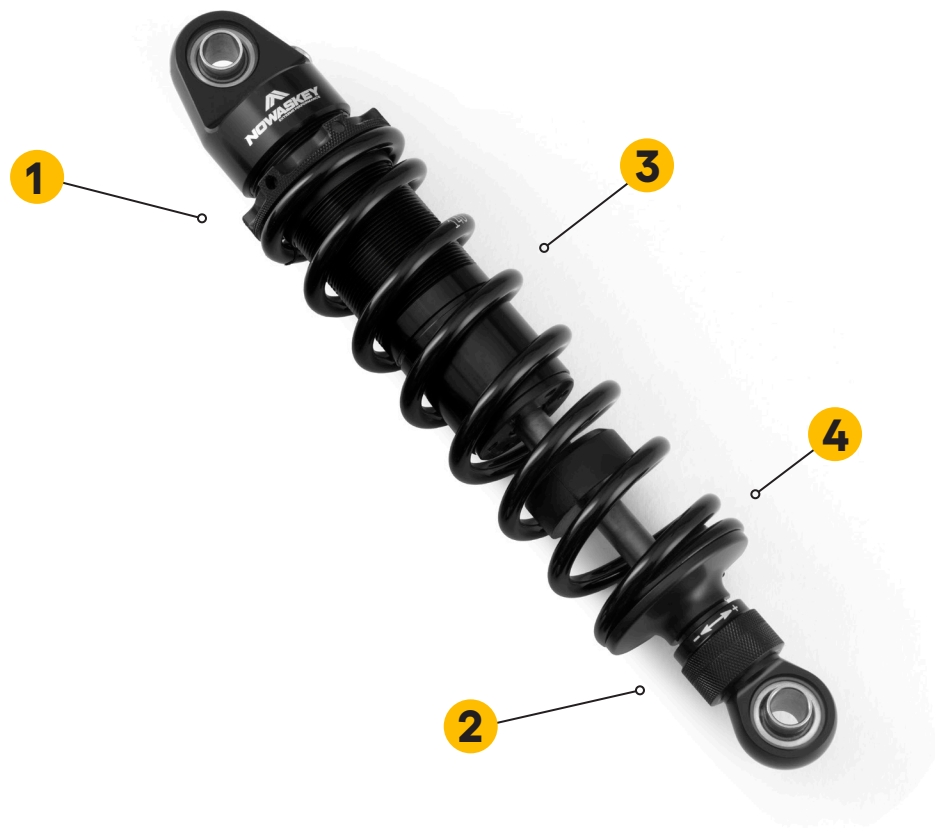


## RECOMMENDED TOOLS

- Jack Stand
- 3/4" Socket/Wrench
- Spanner Wrench
- Red Loctite®

## INCLUDED HARDWARE

- (4) Mounting Bolts
- (4) Lock Washers
- (4) Spacers



### 1 - SPRING PRELOAD ADJUSTER

Adjusts the amount of spring preload, which determines the amount of sag.

### 2 - REBOUND ADJUSTER

Adjusts how quickly the shock returns to its original position.

### 3 - SHOCK SPRING

Spring rates available 130lbs/in, 140lbs/in, 150lbs/in

### 4 - BOTTOM OUT BUMPER

Prevents hard bottoming out.

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## INSTALLATION GUIDE



Read the installation instructions and fully understand them before installing this suspension on your motorcycle. Use the factory authorized service manual as a reference during the installation.

### STEP 1

- Securely place the motorcycle on a stand with the rear wheel elevated (Figure 1).
- **Do not use a stand that supports the swing arm.**
- Remove any motorcycle parts (if needed) to expose the shock mounting points.
- Remove the stock shocks.

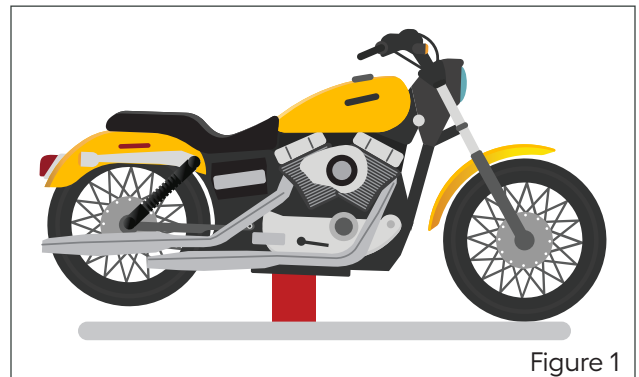


Figure 1

### STEP 2

**Check to see if the top and bottom mounting points are parallel:**

- Install a new shock on each side using a mounting bolt and spacer in the bottom mounting point (Figure 2).
- Line up the top mounting points and snug the bolt on each side.
- Determine if top of the shock is flush with the top mounting point (Figure 3). If not, measure the gap to determine the spacers needed (Figure 4).

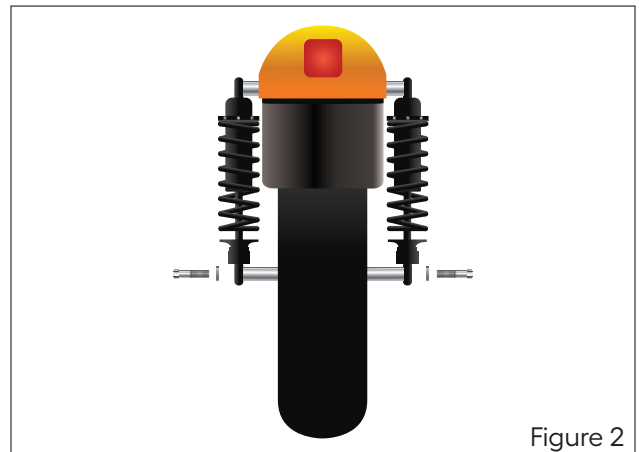


Figure 2

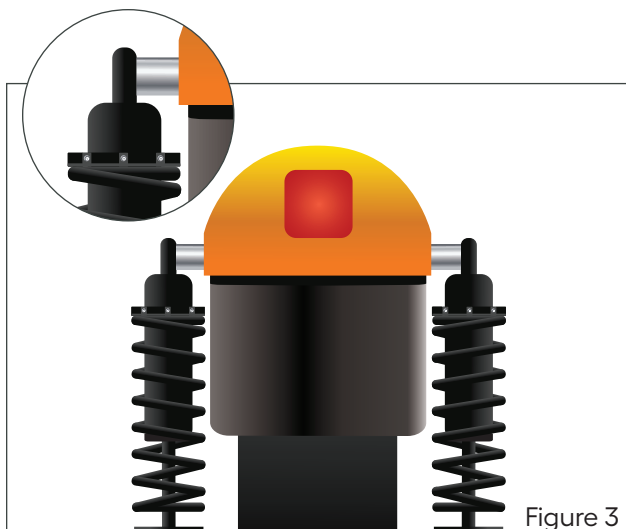


Figure 3

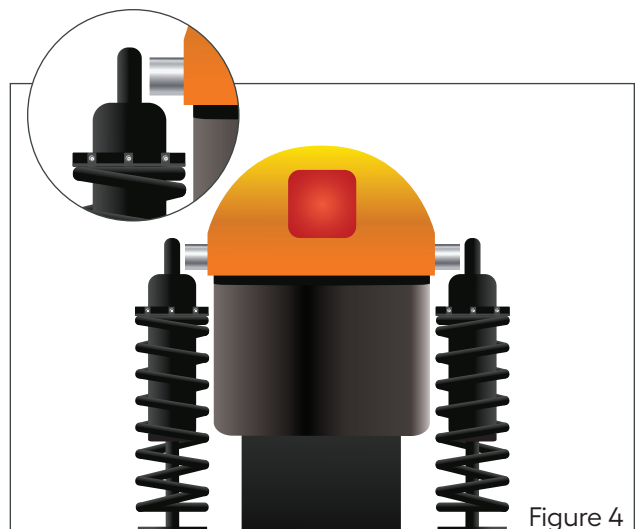


Figure 4

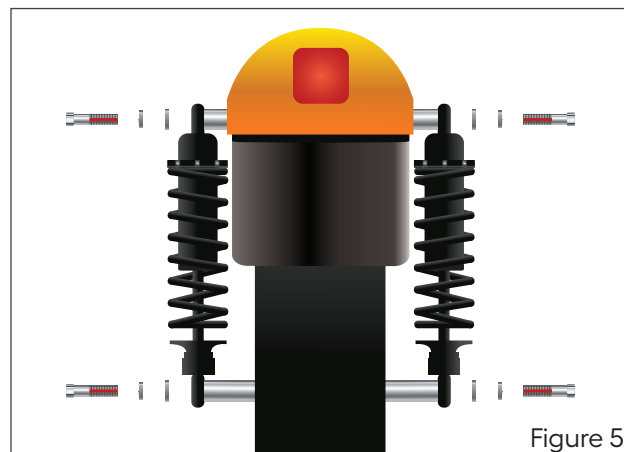
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### STEP 3

- Remove the shocks.
- Add the locking washer and spacer to each mounting bolt. Add red thread locker to the mounting bolt threads.
- Install the shocks and tighten the mounting bolts to 70 ft-lbs (Figure 5).



### WARNING



**Never install the dual adjustable shocks at an angle.** This will cause product damage and failure. Improper installation also creates an unsafe riding condition that can lead to serious injury and death.





## STEP 5

### Setting the Sag:

1. Elevate the rear tire and measure the distance between the center of each mounting bolt (Figure 5). **This is measurement "A".**
2. Mount the motorcycle on level ground and measure the distance between the center of each mounting bolt (Figure 6). **This is measurement "B".**
3. **Subtract measurement "B" from measurement "A". This number is your total sag.** Typical total sag numbers are 1 1/8" to 1 1/4" (28-32mm).
  - If the sag is greater than 1 1/4", preload the spring by turning the adjustable spring collar clockwise on each shock.
  - If the sag is less than 1 1/8", remove preload by turning the adjustable spring collar counter clockwise on each shock.

### The Importance of Adjusting the Preload:

Adjusting and fine-tuning the spring preload will help you achieve the optimal performance of your motorcycle (Figure 7). It also allows you to adjust the spring tension based on an additional passenger and payload.

- The spring collar can be turned by hand. To ensure that each shock has the same setting, either count the threads above the collar or measure the length of the threads. A spanner wrench can be used as well (not included).
- **Turn the spring collar counterclockwise for a softer ride** (less spring tension).
- **Turn the spring collar clockwise for a stiffer ride** (more spring tension).

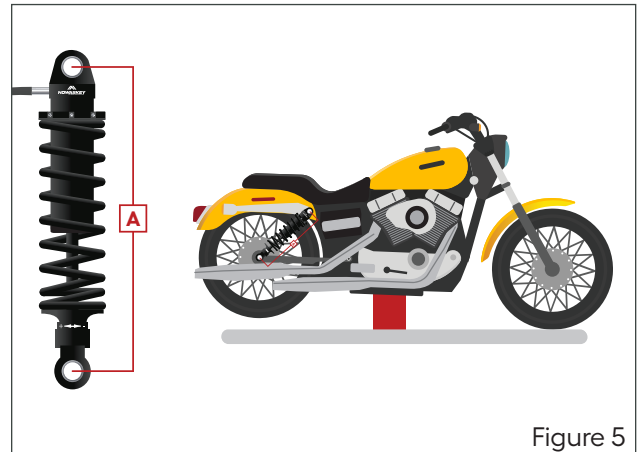


Figure 5

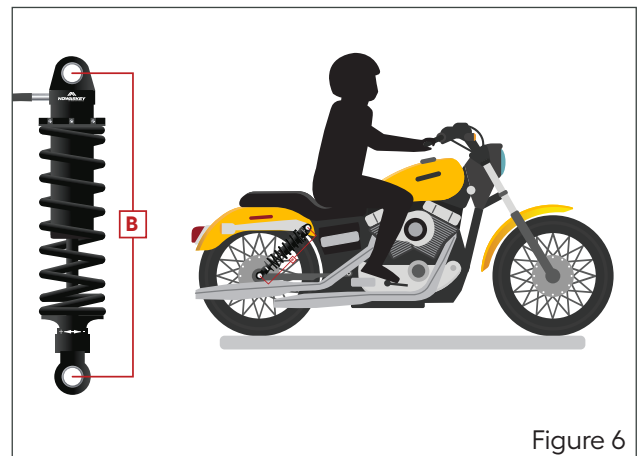


Figure 6

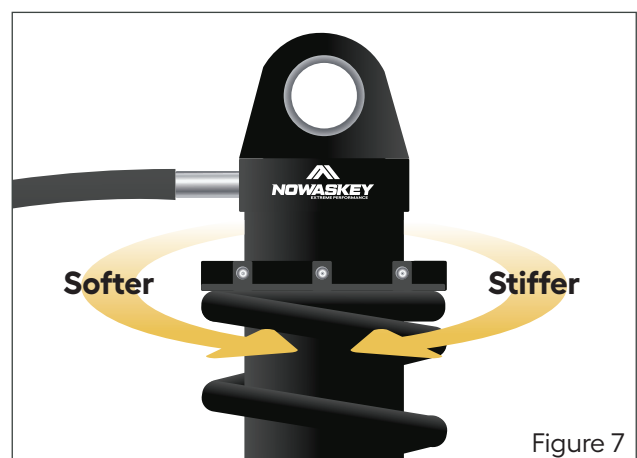


Figure 7



## TUNING GUIDE



Ultimately, you want to determine the best settings based on up to four different scenarios: 1. Riding solo, 2. Riding with a passenger, 3. Riding solo with a payload, 4. Riding with a passenger and a payload.

Your Nowaskey Extreme Performance Shocks come preset with baseline preload and damping settings. You may need to make changes to tailor the shocks to your riding preference.



### **Make one adjustment at a time.**

Evaluate each adjustment with a test ride, then make a note of each change if you are satisfied with performance and responsiveness.

## ADJUSTING THE DAMPING

The sweep valve allows you to set the softness and firmness of the shock movement (Figure 8).

- For firmer movement of your shock, turn the adjuster toward the “+” sign.
- For softer movement of your shock, turn the adjuster toward the “-” sign.

**Do not turn the sweep valve dial with excessive force as it may cause damage to the shock.**

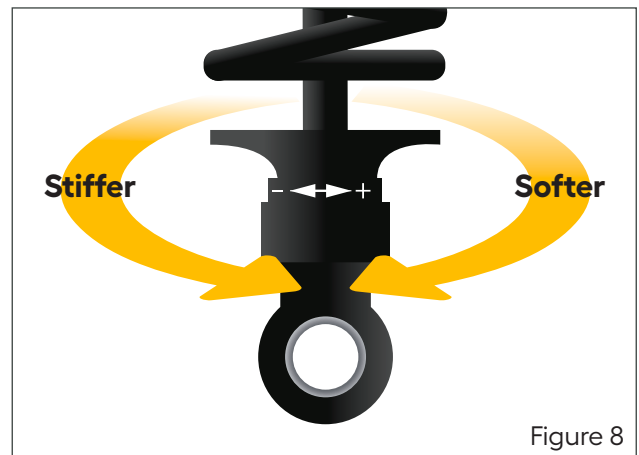


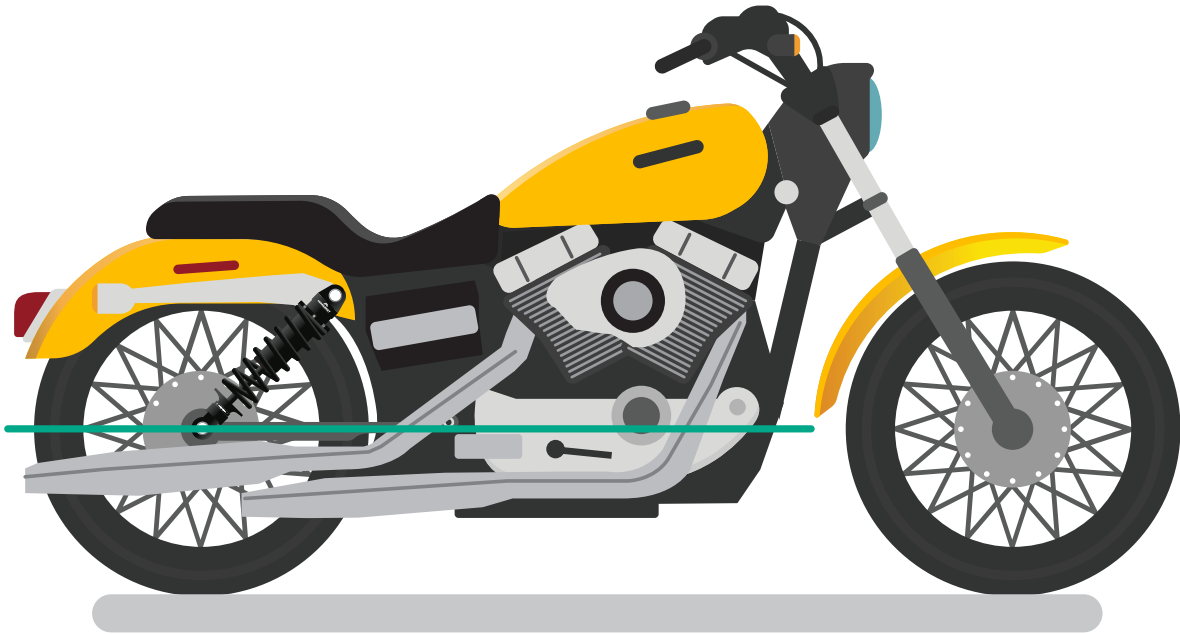
Figure 8



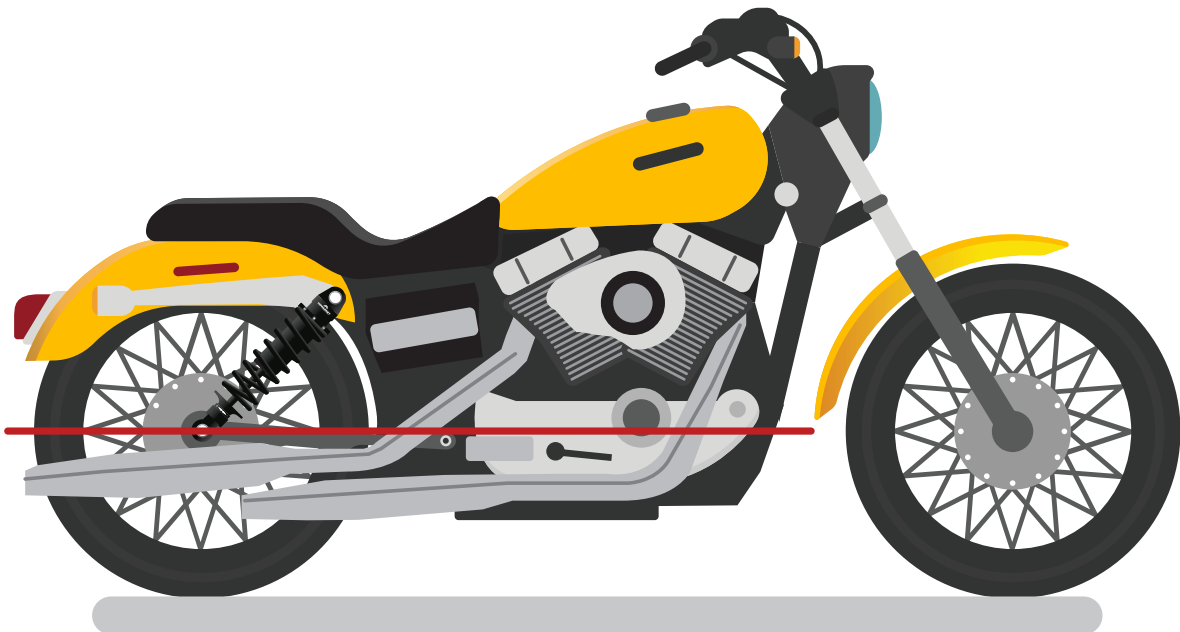
## WARNING



Never install the shocks so that the rear axle is above the swingarm pivot.



**CORRECT:** The rear axle is below the swingarm pivot.



**INCORRECT:** The rear axle is above the swingarm pivot.

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