



Installation Manual

GeezerEngineering Shocks for Harley touring models

Touring models 2008-earlier

Touring models 2009-2013

Touring models 2014-up

Thank you for purchasing GeezerEngineering Nitrogen Shocks!

A lot of development time and testing went into this product. Our goal was to make it a complete kit and to make it fit like an OEM product – and upgrade your motorcycle to today’s level of motorcycle performance and beyond. Top quality is another important goal, so we used highest quality materials only. This contributes to making your ride safe and comfortable. We are confident you will be able to feel it on your first rides!

Your new shocks come with spanner tools for preload adjustments and 4 shims. Model-specific reservoir mounts can be purchased separately.

Warning: The installation of this product requires the skills of qualified motorcycle technicians and should only be performed by qualified, professional workshops equipped with access to all OEM service manuals and all required tools.

Please always refer to the correct OEM service manual for the motorcycle model and year being worked on to ensure correct procedures are used for disassembly and reassembly.

GeezerEngineering instructions are intended to be used in conjunction with OEM service manuals for your model year motorcycle.

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A couple of things to consider....

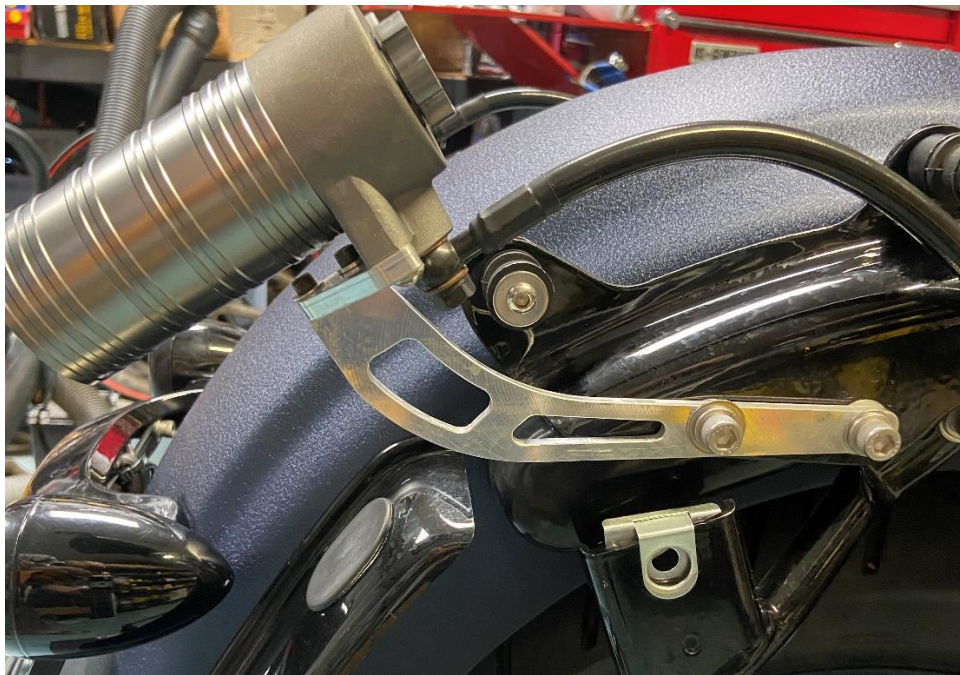
It is important to keep your motorcycle level when changing suspension components. Raising just the front or just the rear or raising at different rates changes angles – think of wheel axles as a pivot points. For example: raising just the front end using longer fork legs will increase the front end angle, or rake. This will change trail, which could negatively affect handling characteristics. So, if you want more ground clearance to gain better lean angles make sure to raise both ends by the same amounts.

Front and rear suspension are obviously independent components, but they work as one system. Adjustments can be time consuming but worth the effort. We think it helps to make adjustments in small steps and on just one setting at a time. It's all about finding the optimal setting for YOUR riding style and preferences. Setting up your new shocks using these instructions is like setting a baseline – preferences and riding styles vary widely. Based on the initial settings you can fine-tune your suspension to match your preference.



1. Removal of your old shocks
 - a. Secure your bike on a scissor lift that's strong enough for your bike's weight
 - b. Support your rear wheel with a second lift or blocks so its weight is supported.
 - c. Remove your old shocks according to your OEM service manual.

2. Installation of GeezerEngineering shocks
 - a. Have a friend hold or wrap the reservoirs to avoid damage during installation.
 - b. Install the shocks onto the mounting points according to your OEM service manual.
 - c. Install reservoir mounts:
 - i 2009-up models – exposed installation:





ii 2014-up models – hidden installation:



iii 2008-earlier models – exposed installation (requires custom turn signals):



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3. Preload

- a. Determine unloaded length of the installed shock with the rear wheel off the ground. Measure the distance of center lower shock bolt to center upper shock bolt.
- b. Put the bike back on the ground. With the help of at least 2 persons sit on the bike (upright) with your feet on the floorboards and hands on the handlebars. Measure center on center distance of the shock bolts again.
- c. The second measurement should be 1" shorter than the unloaded length. Using the spanners loosen the lock nut and adjust the preload nut to the correct length. Turning counter-clockwise (looking from the top of the shock) decreases preload and clockwise increases preload. This length works as a preload baseline. Less than 1" makes the ride stiffer - more than 1" makes it softer.
- d. Check all bolts and other parts for correct installation and do a test ride. If the ride is too stiff or too soft adjust preload first and test ride again.

4. Compression dampening

- a. Once preload is set properly turn the compression dampening counter-clockwise to zero. Then turn 5 clicks as a starting point. Adjust up or down for your preferred setting.



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