



# INSTALLATION GUIDE (49mm) FORK CARTRIDGES

2014-2019 HARLEY-DAVIDSON TOURING MODELS





## ADVISORIES



Installation should be performed by a certified motorcycle technician. Damage to your motorcycle or the fork inserts can occur if improperly installed and will not be covered by the Nowaskey Extreme Performance warranty.



**This procedure requires the use of a hydraulic lift.** Extreme caution must be used when working on a vehicle supported by jack stands. Supporting the vehicle while the forks are being removed and are removed is critical for safe and proper installation. Failure to properly support to prevent tipping or dropping may result in damage to the vehicle, injury, or death. Nowaskey Extreme Performance is not liable for injury due to improper equipment installation.



Nowaskey Extreme Performance fork inserts are made to work with the original equipment forks. Use of this product on any other system will void the warranty.

## 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.

### Nowaskey Extreme Performance

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## REQUIRED TOOLS

- Hydraulic Lift
- 12mm Allen Wrench
- 19mm Allen Wrench

## INCLUDED HARDWARE

- (2) Fork Cartridges
- (2) Oil Lock Components
- (2) Top Out Springs
- (2) Fork Cartridge Oil
- (1) Preload Adjuster Tool



1 - (2) FORK CARTRIDGES

2 - (2) OIL LOCK COMPONENTS

3 - (2) TOP OUT SPRINGS

4 - (2) FORK CARTRIDGE OIL

5 - (1) PRELOAD ADJUSTER TOOL

## ADVISORY



**We strongly recommended the replacement of the following OEM parts when installing Nowaskey Fork Cartridges (not included with this kit).**

- Harley-Davidson® Fork Oil Seal OEM Part# 46514-01A (Quantity 2)
- Harley-Davidson® Fork Crush Washer OEM Part# 46615-06 (Quantity 2)
- Harley-Davidson® Fork Bottom M14 Bolt OEM Part# 45500118 (Quantity 2)

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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.

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### STEP 1 (Remove the Factory Cartridges)

1. Remove the factory front forks. Refer to the Harley-Davidson® service manual for safe and proper removal.
2. Loosen the lower leg bolt with a 12mm Allen wrench. Do not remove.
3. Remove the fork tube top nut with a 19mm Allen wrench. **Caution, this is spring-loaded and will pop.** This should be performed over a bucket to collect the oil and contents.
4. Remove the lower leg bolt and remove the contents of the fork to be recycled.
5. Remove factory fork seal ring.
6. Separate fork tube from leg.
7. Remove oil lock piece in lower leg.
8. Remove fork seal.
9. Leave factory seal washer in place.



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### STEP 2 (Reassembling the Fork with a Nowaskey Fork Cartridge)

1. Drop the supplied oil lock piece into lower fork leg with the cup side facing up.
2. **Recommended:** Replace fork oil seal (OEM Part# 46514-01A). The spring side faces down toward fork lower leg.
3. Place top out spring inside fork tube.
4. Slide a Nowaskey Fork Cartridge into the fork tube with the steel bottom adaptor down and red end cap up.
5. **Recommended:** Replace crush washer (OEM Part# 46615-06) located on the fork lower leg bolt. The factory ring may need to be removed first.
6. Install the new lower leg bolt (OEM Part# 45500118). Start the thread of the 12mm Allen bolt. Do not fully tighten.
7. Reinstall fork tube into lower fork leg.
8. Reinstall fork seal snap ring.
9. Add 150 ml (5 oz.) of shock oil to each fork leg.



**The oil volume is specific to the Fork Cartridge Kit. DO NOT OVER FILL.**

Failing to follow the instructions can lead to loss of vehicle control and/or damage to the forks. Failure due to improper installation is not covered by the Nowaskey Fork Cartridge warranty.

10. Hold the fork lower leg and fork tube in the vertical orientation. Slowly screw the Nowaskey Fork Cartridge into the fork tube with the included preload adjuster tool. Special attention should be taken to prevent damage to the O-ring. Verify that fork cartridge is completely tight.
11. Finish tightening the lower fork leg with a 12mm Allen to the correct torque found in the Harley-Davidson® service manual.
12. Reinstall the newly rebuilt forks, fender, wheel, and any other previously removed components, refer to the Harley-Davidson® service manual for this step.
13. Make sure everything is tight and re-assembled correctly.