### Harley Fork Cartridge Installation



### 2014 - 2019 FLH models



Important Notice: The procedures discussed in this document must be performed by a qualified mechanic or service technician. Failure of product due to improper installation is not and will not be covered by JRi Shocks 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 and/or injury. JRi Shocks is not liable for injury due to improper equipment installation.

JRi Harley Fork Cartridges are made to work with the original equipment forks. Use of this product on any other system will void the warranty.



Caution: Installation of the JRi Harley Fork Cartridge should only be attempted by a qualified professional. Please consult the JRi website or contact JRi Shocks to find a certified dealer.

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2014-2019 FLH



#### JRi Harley Fork Cartridge kit comes with the following:



#### Installation of the JRi Harley Fork Cartridge requires the use of the following tools:

• 12 mm Allen wrench

• 19 mm Allen wrench

It is strongly recommended to replace the following parts while installing the JRi Harley Fork Cartridge: (not provided in the kit)

- Harley Davidson Fork Oil Seal PN# 46514-01A (quantity 2)
- Harley Davidson Fork Crush Washer PN# 46615-06 (quantity 2)
- Harley Davidson Fork Bottom M14 Bolt PN# 45500118 (quantity 2)

#### **Removing Factory Internals from Fork:**

- 1. Remove the factory front forks, refer to the Harley Davidson service manual for this step
- 2. Break loose the lower leg bolt with a 12 mm Allen wrench, but do not remove.
- Remove the fork tube top nut with a 19 mm Allen wrench. Caution, this is spring loaded and will pop. Additionally, this should be done over a bucket to collect 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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#### Re-assembling the Harley Fork with JRi Cartridge:

- 10. Drop the supplied oil lock piece into lower fork leg with the cup side facing up.
- 11. \*Recommended\* Replace fork oil seal (OEM part # 46514-01A). The spring side faces down toward fork lower leg.
- 12. Place top out spring inside fork lower leg flat on spring perch.
- 13. Slide a JRi Harley Fork Cartridge into the fork tube with steel bottom adaptor down and red end cap up.
- 14. \*Recommended\* Replace crush washer (OEM part # 46615-06) located on the fork lower leg bolt. Factory ring may need to be removed first.
- 15. Install the new lower leg bolt (OEM part # 45500118) & start the tread of the 12 mm Allen bolt. Do not fully tighten.
- 16. Reinstall fork tube into lower fork leg.
- 17. Reinstall fork seal snap ring.
- 18. Add 150 mL (5 oz.) of shock oil to each fork leg.

The oil volume used here is specific to the JRi Harley Fork Kit. DO NOT OVER FILL. Not following the instructions can lead to loss of vehicle control and/or damage to the forks. Failure due to improper installation is not covered by JRi Shocks warranty.

- 19. Hold the fork lower leg and fork tube in the vertical orientation. Slowly screw the JRi fork cartridge into the fork tube with the JRi preload adjuster tool provided in the kit. Special caution should be taken to prevent damage to the Oring. Verify that fork cartridge is completely tight.
- 20. Finish tightening the lower fork leg with a 12 mm Allen wrench to the correct torque found in the Harley Davidson service manual.
- 21. Reinstall the newly rebuilt forks, fender, wheel, and all other parts removed previously, refer to the Harley Davidson service manual for this step.
- 22. Make sure everything is tight and re-assembled correctly.



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