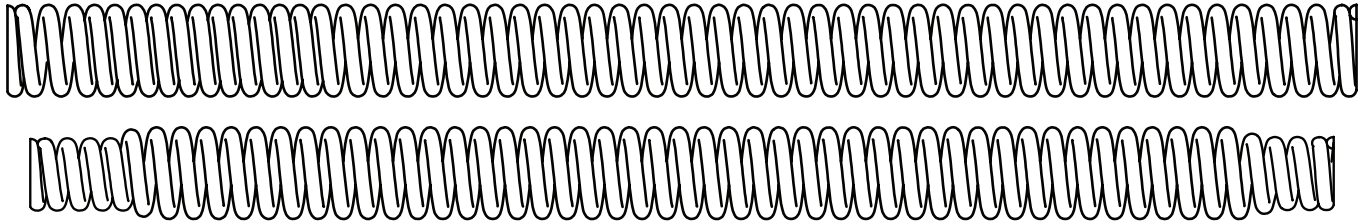




# INSTALLATION INSTRUCTIONS

## FORK SPRING KIT FOR 2016-2017 HARLEY-DAVIDSON FXDLS



### ATTENTION!

Statements in these instructions that are preceded by the following words are of special significance:



This symbol means there is the possibility of injury to yourself or others.



This symbol means there is the possibility of damage to the vehicle.

#### NOTE:

*Information of particular importance has been placed in italics.*

### LIFETIME LIMITED WARRANTY

Progressive Suspension warrants to the original purchaser this part to be free of manufacturing defects in materials and workmanship with a lifetime limited warranty. In the event warranty service is required, you must call Progressive Suspension immediately with a description of the problem.

If it is deemed necessary for Progressive Suspension to make an evaluation to determine whether the part is defective, a return authorization number will be given by Progressive Suspension. The parts must be packaged properly so as to not cause further damage and returned prepaid to Progressive Suspension with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem. If after the evaluation by Progressive Suspension the part was found to be defective it will be repaired or replaced at no cost to you. If we replace it, we may replace it with a reconditioned one of the same design.

Progressive Suspension shall not be held liable for any consequential or incidental damages resulting from the failure of a Progressive Suspension part. Progressive Suspension shall have no obligation if a part becomes defective as a result of improper installation or abuse.

### IMPORTANT NOTICE

Removing and replacing fork springs must be performed by a qualified mechanic & according to steps outlined in a professional workshop manual that relates to your particular make, model & year motorcycle.

The vehicle must be securely blocked to prevent it from dropping or tipping when the forks/fork springs are removed. Failure to do so can cause serious damage and/or injury.

Progressive Suspension Fork Springs are designed to work with the OEM (Original Equipment) forks. Use of this product on any forks other than OEM may produce an unsatisfactory ride & void the warranty.

### RECOMMENDED TOOLS

HD-41177 FORK TUBE HOLDER / EQUIVALENT  
HD-45966 FORK SPRING COMPRESSOR TOOL / EQUIVALENT  
HD-45966-2 FORK SPRING COMPRESSING TOOL COLLAR / EQUIVALENT  
(PART NUMBERS SHOWN ARE FOR HARLEY-DAVIDSON FACTORY TOOLS)





CHANGING THE CHASSIS AND/OR SUSPENSION ON ANY VEHICLE WILL CHANGE THE HANDLING CHARACTERISTICS OF THAT VEHICLE. CARE SHOULD BE TAKEN WHEN OPERATING THE VEHICLE WITH SUCH MODIFICATIONS WHILE GETTING ACCUSTOMED TO THE NEW HANDLING CHARACTERISTICS.

## INSTALLATION

Read all the instructions carefully before installing this kit on your motorcycle. Use your factory authorized service manual as a reference while installing this kit.

### NOTE:

*The left and right forks have different internals in these models.*

1. Support and lift the motorcycle securely so the front wheel is off the ground. The balance point is toward the front of the engine.



THE RIGHT FORK CAP IS UNDER HIGH SPRING FORCE,  
CARE MUST BE TAKEN WHEN REMOVING THE FORK CAP!

2. Remove the fork caps.
3. Remove the OEM fork spacer, washer & spring from the right fork, and the OEM spring from the left fork according to instructions contained in your factory service manual. The Progressive Suspension fork spring kit is a direct replacement of your OEM springs. Replace the spring from the left fork, which is tapered at each end, with the Progressive Suspension spring which is also tapered at each end along with the aluminum spacer. The right fork will use the supplied PVC spacer (**you may need to cut the PVC spacer to the recommended length of 117mm/4.6in**) and non-tapered fork spring. You must also reuse the OEM washer between the spacer and fork spring in the right fork.

### NOTE:

*For maximum performance we highly recommend that the forks be disassembled and thoroughly cleaned, inspected and new Progressive Suspension Standard (Type E) fork oil installed.*

4. Before installing the new springs & preload spacers, it is crucial that you make sure you've installed the proper fork oil and the oil level is correct. We recommend Progressive Suspension Standard 10wt (Type E) fork oil. To check the oil level properly you must have the springs and spacers removed, cycle the forks & cartridge several times to purge any trapped air and then completely compress the forks & cartridge. You then measure from the top of the fork tube to the oil level. Add/remove oil to achieve measurements. (**LEFT FORK- 150mm**)(**RIGHT FORK- 170mm**)

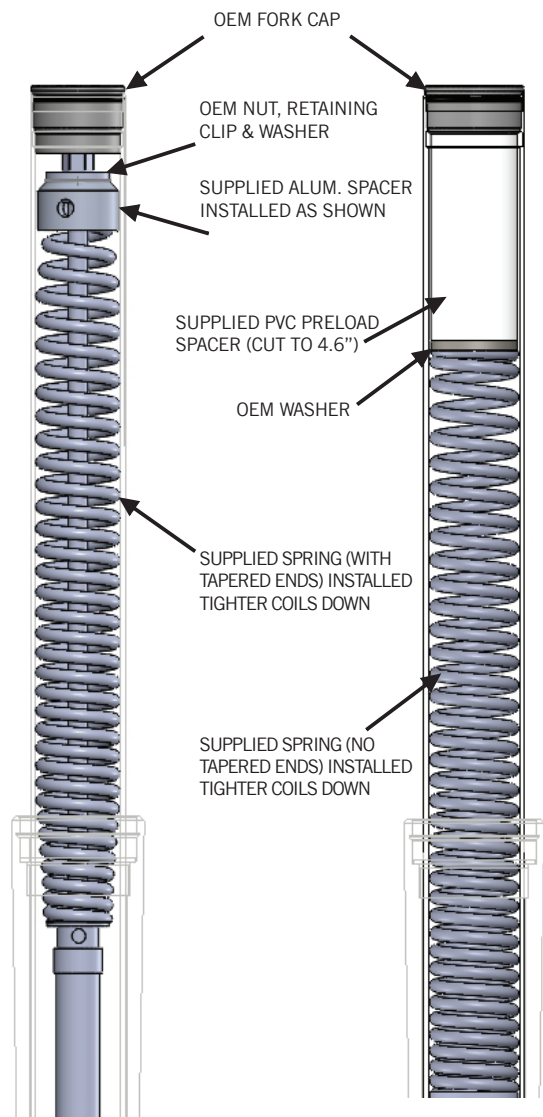


NEVER ADD TOO MUCH OIL RESULTING IN A MEASUREMENT LESS THAN 150MM IN THE LEFT FORK OR 170MM IN THE RIGHT FORK WHEN USING THE SPRING KIT!





- After confirming the fork oil level in the left fork (150mm), install the supplied fork spring with tapered ends (tighter coils down) onto the cartridge, then the supplied aluminum spacer with the concaved end covering the top of the fork spring. Secure the new spring and spacer by using the OEM nut, retaining clip and washer- essentially replacing the OEM spring with the supplied Progressive Suspension spring & aluminum spacer (see illustration). Reinstall the fork cap being certain to torque it and the cartridge nut to the factory specification noted in your factory authorized service manual.
- After confirming the fork oil level in the right fork (170mm), install the other supplied fork spring (tighter coils down), the OEM washer and the supplied PVC pre-load spacer (you may need to cut the PVC spacer to the recommended length of 117mm/4.6in, into the forks in the same manner you would install the OEM components per your factory authorized service manual- essentially replacing the OEM pre-load spacer and spring with the supplied Progressive Suspension components (see illustration). Reinstall the fork cap being certain to torque it to the factory specification noted in your factory authorized service manual.
- Reinstall the forks and any other components previously removed per a factory authorized service manual. Remove motorcycle from lift and recheck all fasteners for proper tightness per your factory authorized manual.



LEFT FORK WITH 150 MM FORK OIL LEVEL (TYPE E FORK OIL) SEE INSTRUCTIONS TO PROPERLY SET OIL LEVEL

RIGHT FORK WITH 170 MM FORK OIL LEVEL (TYPE E FORK OIL) SEE INSTRUCTIONS TO PROPERLY SET OIL LEVEL

## FINE TUNING

**FORK OIL:** Though we recommend using Type E (10wt) fork oil, oil viscosity can be changed to alter damping. Heavier oil to increase damping. Lighter oil to decrease damping. Change in 5 weight increments (i.e. from 10wt to 15wt). Oil viscosity will have more effect on rebound damping than compression damping, too high a viscosity can create harshness on sharp edge bumps. The oil level also affects the ride, too high an oil level and the forks will feel too stiff, too low an oil level and the bike will bottom and feel soft or dive excessively. As stated previously, when using this spring kit **NEVER adjust the fork oil level to produce a measurement of less than 150mm in the LEFT FORK or less than 170mm in the RIGHT FORK- measured with fork springs & spacers removed, forks & cartridge compressed, from the top of the fork tube- or damage will occur.**

## TECHNICAL INFO

Our technical staff will assist you if you have any problems or questions. Call (714) 523-8700 from 8am to 4pm PST.

