



## Installation Instructions Monotube Kit with FST for 2014-later\* Harley Davidson FLH Models

### ATTENTION

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

#### **Warning**

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

#### **Caution**

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

#### **Note**

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

### Limited Lifetime Warranty

Progressive Suspension warrants to the original purchaser this Part to be free of manufacturing defects in materials and workmanship with a Limited Lifetime 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 expenses or 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.

#### **Warning**

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.

### IMPORTANT NOTICE

**Caution:** Removing and replacing fork internal components must be performed by a qualified mechanic or according to steps outlined in a factory authorized professional service manual that relates to your particular make, model and year motorcycle. Special tools may be needed. Please read all instructions before beginning this procedure. If you lack any of the tools or resources or are uncertain about any part of the procedure, then have the work done by a qualified mechanic.

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

Progressive Suspension Monotube kits 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 and void the warranty.

## 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.
- Support and lift the motorcycle securely so the front wheel is off the ground. The lift point should be toward the front of the engine.
- Remove forks according to instructions contained in your factory authorized shop manual.

#### **Warning**

*For maximum performance we highly recommend that the forks be disassembled, thoroughly cleaned, and inspected. When installing Progressive Suspension Monotube Cartridge fork kit, only a small amount - 300cc - of type "E" or 10wt. fork oil is required in each fork for lubricating the internal moving parts - the cartridge damper is sealed. Changing the volume or viscosity of the oil is not recommended and could cause damage and/or loss of control.*

- This kit replaces your stock fork caps, preload-spacers (if present), fork springs, top-out springs and damper-rods. Remove these components and drain the oil out of your forks per the procedure outlined in your factory authorized service manual.

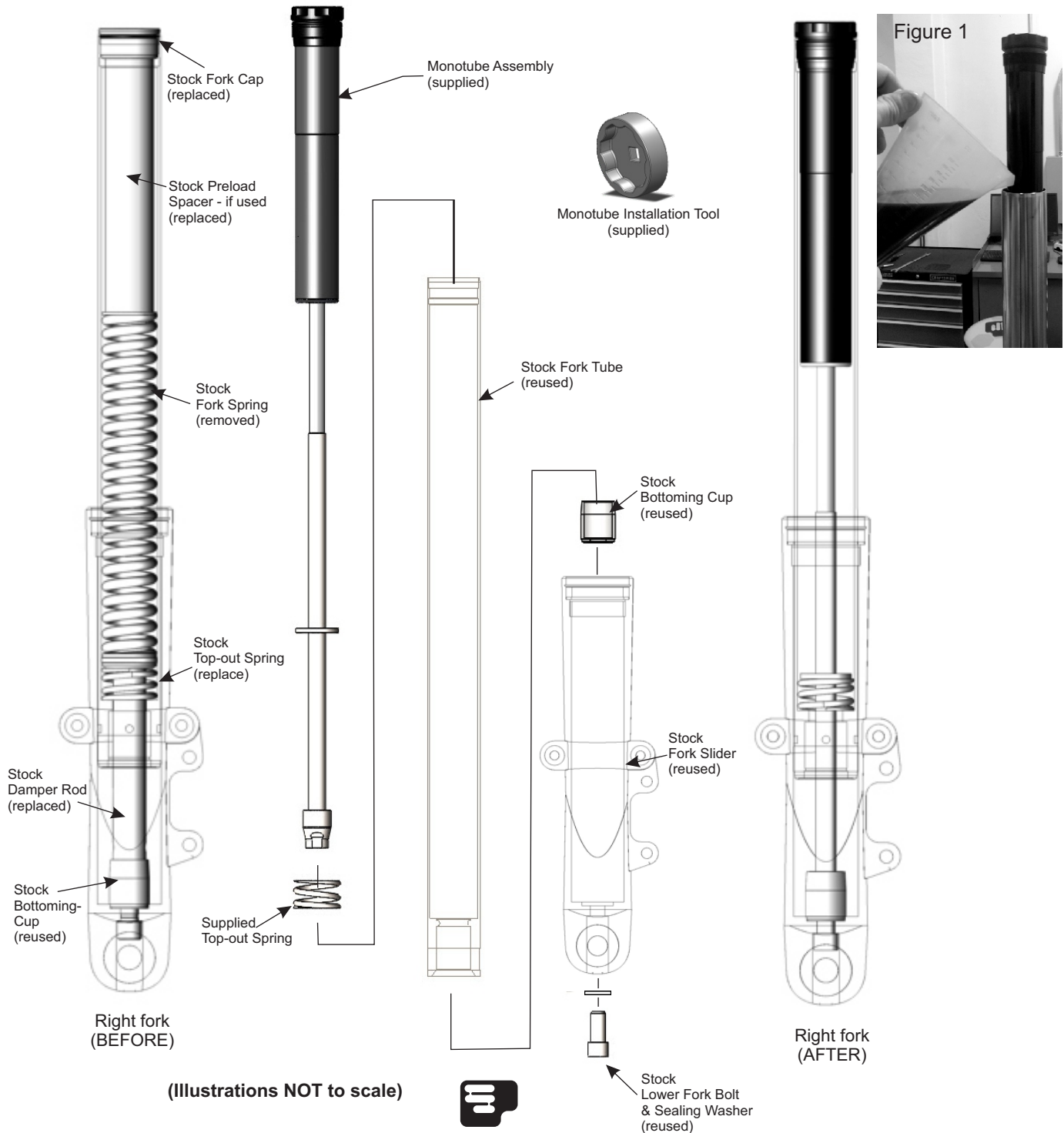
#### **Caution**

While the installation of this Monotube Cartridge fork kit will not change the compressed length of the front forks, we have found that some bikes may not have adequate clearance between the fender, fairing and / or accessories. So we recommend, with the fork springs removed from both forks, re-install the forks, fender, wheel and anything else you may have removed and lift the front forks, or lower the bike to completely compress the front forks. With the forks fully compressed, check for adequate clearance between the tire, fender, fairing, crash bar, accessories, etc. while turning left to right - lock to lock. You must correct any clearance issues prior to installing this kit to avoid vehicle damage and / or vehicle control problems.

- Starting with the right fork (referencing the illustrations below), first drop one of the supplied top-out springs into the fork, then insert the Monotube cartridge assembly. Make certain the bottoming-cup is properly seated in the bottom of the fork – in the slider – and the bottom of the Monotube cartridge assembly is seated within said bottoming-cup. Put a drop of thread locking agent on the bottom fork bolt and thread it (along with the copper sealing washer) into the bottom of the Monotube assembly. Torque the bolt to the factory recommended 30-37 ft-lbs. If the Monotube assembly tries to rotate, temporarily thread the Monotube assembly into the fork-tube and try applying pressure to the assembly to keep it from rotating by “pulling” on the fork-tube while torquing the bottom fork bolt.
- **No fork spring is installed in this (the right) fork assembly.** Pour a small amount - 300cc - of type “E” or 10wt. fork oil into the fork for lubricating purposes as seen in figure 1. Then using the supplied Monotube Installation Tool (p/n 5503-200) thread the Monotube assembly into your fork-tube and torque it to the recommended 16-43 ft-lbs. This completes the right fork assembly.

**Warning**

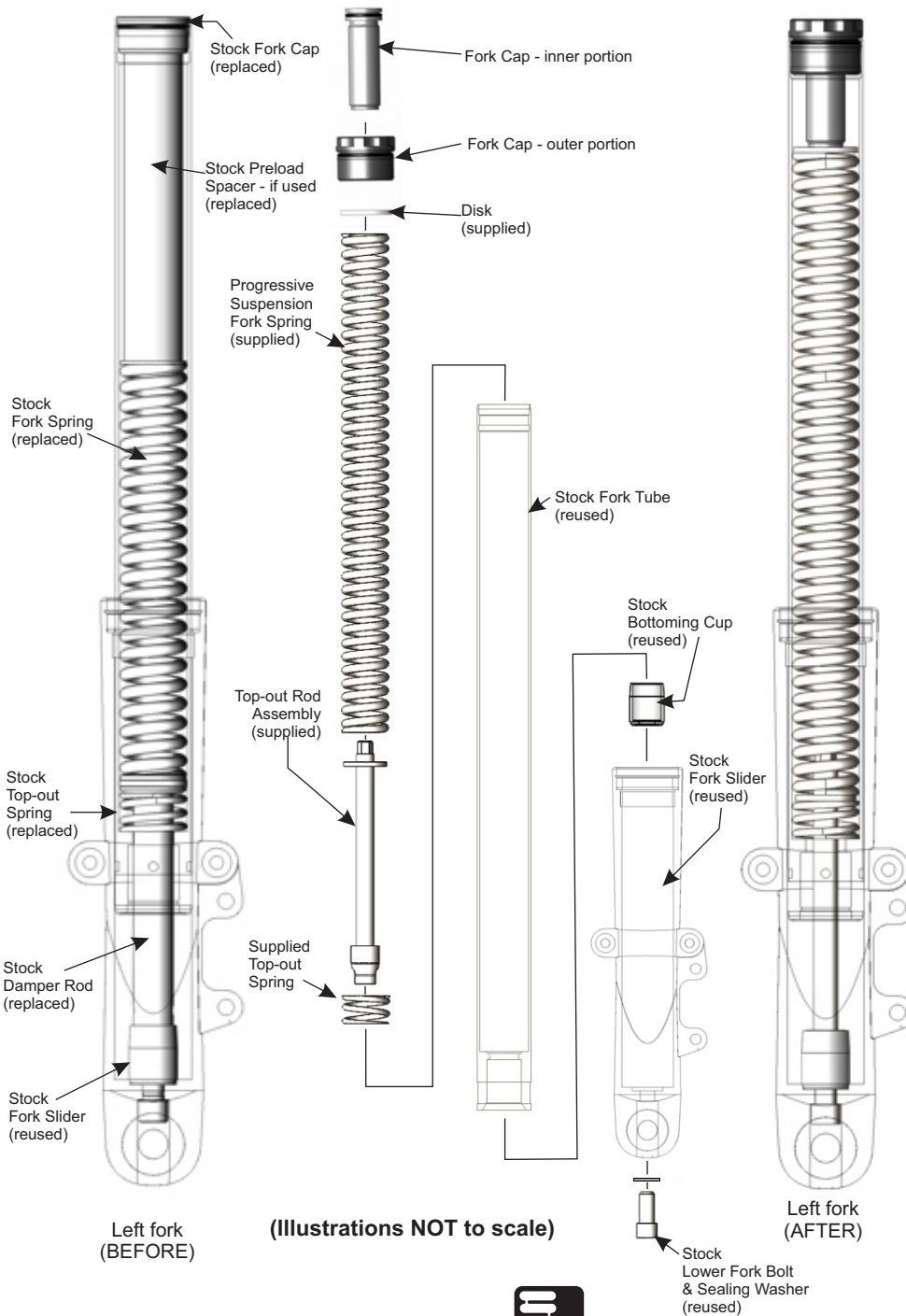
**DO NOT USE MORE THAN 300cc OF FORK OIL IN EACH FORK LEG WITH THE INSTALLATION OF THIS KIT. FILLING EACH FORK WITH MORE THAN 300cc OF FORK OIL MAY CAUSE THE FORKS TO HYDRAULIC LOCK, WHICH MAY CAUSE SEAL FAILURE, POOR PERFORMANCE AND/OR LOSS OF CONTROL.**



- For the left fork (referencing the illustrations below), drop the other supplied top-out spring into the fork-tube followed by the supplied Top-out Rod assembly. Make certain the bottoming-cup is properly seated in the bottom of the fork – in the slider – and the bottom of the Top-out Rod assembly is seated in the bottoming-cup. Put a drop of thread locking agent on the bottom fork bolt and thread it (along with the copper sealing washer) into the bottom of the Top-out Rod assembly. Torque the bolt to the factory recommended 30-37 ft-lbs. If the Top-out Rod assembly tries to rotate, try applying pressure to the assembly to keep it from rotating by “pulling” on the fork-tube while applying torque to the bottom fork bolt (same as you might on while installing a stock damper-rod) or by using a long extension and 12mm socket on the hex atop the Top-out Rod assembly.
- Next pour a small amount - 300cc - of type “E” or 10wt. fork oil into the fork for lubricating purposes. Then drop the supplied Progressive Suspension fork spring in the fork - with the tighter coils down.

**Warning**

**DO NOT USE MORE THAN 300cc OF FORK OIL IN EACH FORK LEG WITH THE INSTALLATION OF THIS KIT. FILLING EACH FORK WITH MORE THAN 300cc OF FORK OIL MAY CAUSE THE FORKS TO HYDRAULIC LOCK, WHICH MAY CAUSE SEAL FAILURE, POOR PERFORMANCE AND/OR LOSS OF CONTROL.**



- Then, with the fork either secured in a vice (or clamped back into the triple-clamps), install the supplied flat Disk on top of the spring, followed by the Progressive Suspension fork cap - **with the inner portion of the cap temporarily removed from the center of the cap** - install the outer portion of the fork cap into the fork tube and torque to 16-43 ft-lbs using the supplied Monotube Installation Tool (p/n 5503-200). Store this tool in a safe place for future fork maintenance.
- Finally, to avoid damage make sure the O-ring on the inner portion of the fork cap is greased and use the supplied aluminum hex-key to thread the drive-rod into the center of the previously installed outer portion of the fork cap, threading it all the way down until it is seated in the outer portion of the fork cap - **it will hit a hard stop and the tops of the inner and outer portions of the fork cap will be flush when the inner portion is properly seated.** Torque the inner portion of the fork-cap to 15-20 ft-lbs.
- This completes the left fork assembly.
- Finish reinstalling your left and right fork assemblies and all other components you may have removed per the procedure outlined in your authorized factory service manual.

NOTE: During the reinstallation of your forks, it is normal for the fork with the supplied Progressive Suspension spring in it to appear slightly longer due to the pre-load force.

**TECHNICAL ASSISTANCE**

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

The operator must use extreme caution when operating a modified motorcycle, particularly while getting familiar with its altered handling characteristics and ground clearance.

Compliment your Progressive Suspension Fork Monotube kit with a set of Progressive Suspension high performance shocks.

