



Installation Instructions Monotube Kit w/Adjustable Preload Harley Davidson Dyna

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 with Preload Adjuster 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 standard, 200cc lowered) 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, and damper-rods. Remove these components and drain the oil out of your forks per the procedure outlined in your factory authorized service manual.
- Also note that this kit contains components for two different fork configurations - standard length and approximately 1" inch lowered. Decide which configuration you prefer before installing, and follow the instructions carefully for that configuration.

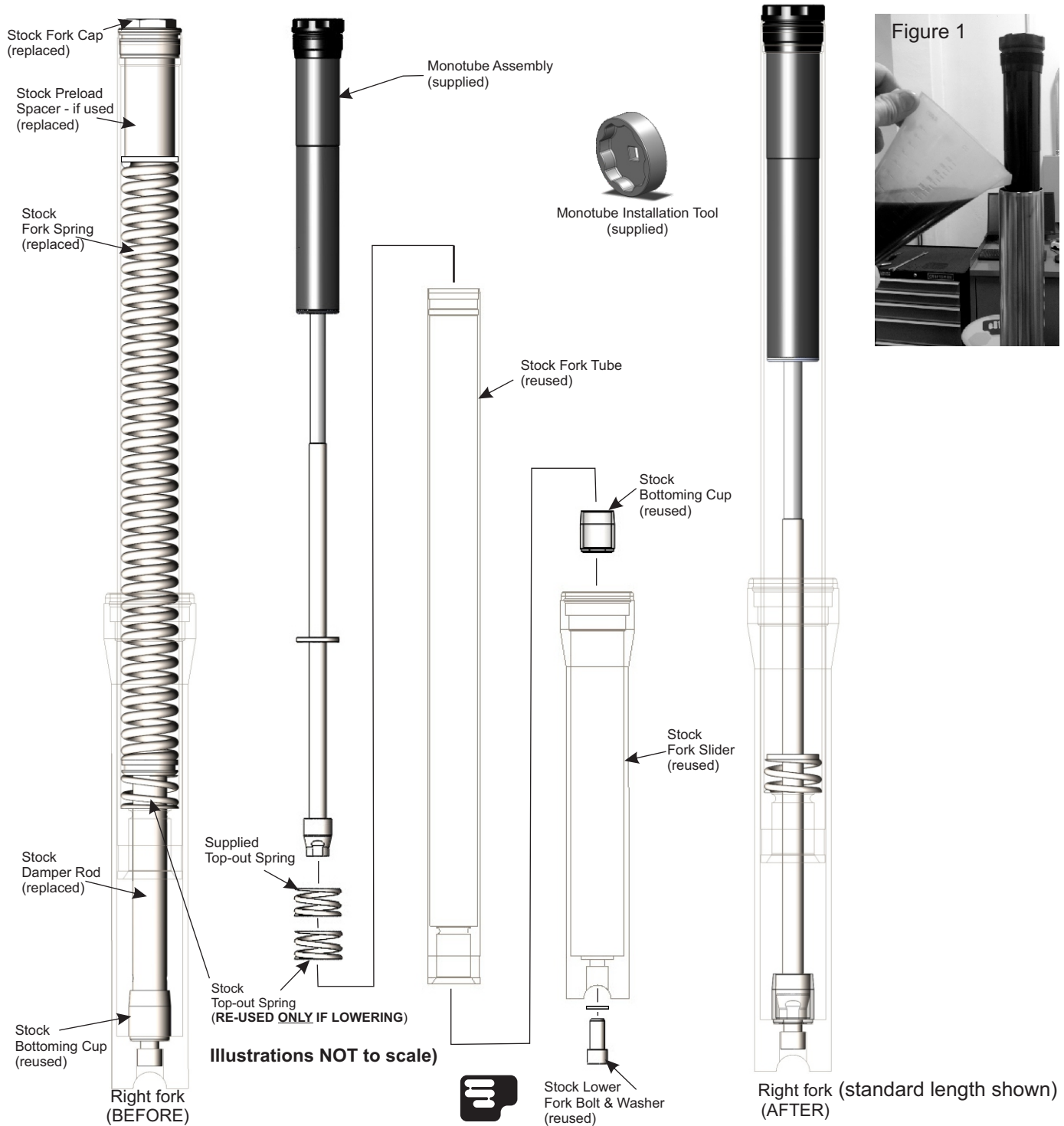
Caution

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 - **and one of the stock top-out springs if you are installing in the lowered configuration** - 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 106-159 in-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 for standard kit or 200cc for lowered configuration - to be specific - 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

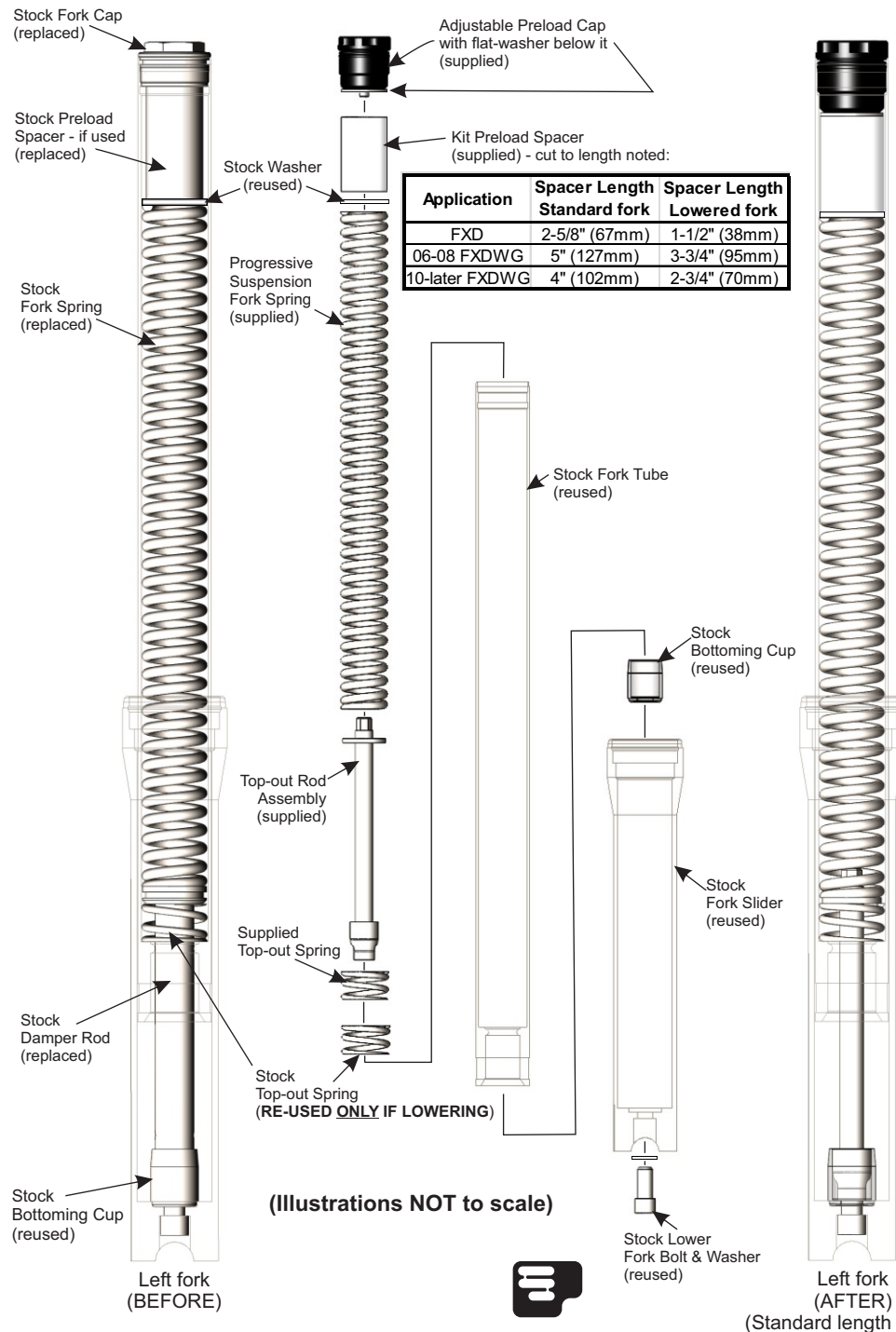
DO NOT USE MORE THAN 300cc (200cc for lowered configuration) OF FORK OIL IN EACH FORK LEG WITH THE INSTALLATION OF THIS KIT. FILLING EACH FORK WITH MORE THAN 300cc (200cc for lowered configuration) OF FORK OIL MAY CAUSE THE FORKS TO HYDRAULIC LOCK, WHICH MAY CAUSE SEAL FAILURE, POOR PERFORMANCE AND/OR LOSS OF CONTROL.



- For the left fork (referencing the illustrations below), drop the other supplied top-out spring into the fork-tube - **and one of the stock top-out springs if you are installing in the lowered configuration** - 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 106-159 in.-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 for standard, or **200cc for lowered configuration** to be specific – of type “E” or 10wt. fork oil into the fork for lubricating purposes. Then drop the supplied Progressive Suspension fork spring in the fork and stock washer.

Warning

DO NOT USE MORE THAN 300cc (200cc for lowered configuration) OF FORK OIL IN EACH FORK LEG WITH THE INSTALLATION OF THIS KIT. FILLING EACH FORK WITH MORE THAN 300cc (200cc for lowered configuration) OF FORK OIL MAY CAUSE THE FORKS TO HYDRAULIC LOCK, WHICH MAY CAUSE SEAL FAILURE, POOR PERFORMANCE AND/OR LOSS OF CONTROL.



- Referring to the preload spacer chart (at left), cut the supplied preload spacer to the recommended length appropriate for your make/model/year and intended configuration - standard or lowered kit.
- After cutting the supplied preload spacer to the proper length, put it into the left fork assembly.
- Finally, with the fork either secured in a vice (or clamped back into the triple-clamps), install the supplied flat washer and, making sure the Progressive Suspension preload cap is adjusted to its minimum (shortest) position, install the cap 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. This completes the left fork assembly.
- Reinstall your left and right fork assemblies and all other components you may have removed per the procedure outlined in your authorized factory service manual.
- Proceed to RIDE SAG & PRELOAD ADJUSTMENT section.

RIDE SAG & PRELOAD ADJUSTMENT

Optimum ride sag is approximately one-third or 33% of your total suspension travel. Depending upon the chosen installation configuration, 33% of your travel would equal 1.67" for standard the ride height configuration (no additional top-out springs installed) OR 1.33" for the lowered configuration (additional top-out springs installed). One of these two numbers is your target ride sag number, and again it depends upon your installation configuration.

STANDARD CONFIGURATION = 1.67" TARGET RIDE SAG

LOWERED CONFIGURATION = 1.33" TARGET RIDE SAG

Measuring your forks ride sag involves two steps, and will require a helper. First with the front wheel lifted slightly off the ground with the forks fully extended, measure from the axle to a fixed point on the sprung part of the chassis – the lower triple-clamp for example. Then while sitting on the bike ready to ride have your helper take the same measurement. Subtract the second measurement from the first – that is your current front ride sag.

Compare the appropriate target ride sag (1.67" if NO additional top-out springs were installed, or 1.33" if additional top-out springs WERE installed) to your current ride sag. If the current ride sag is less than the target, reduce the preload until you hit the target ride sag. Conversely if the current ride sag is more than the target, increase the preload until the target ride sag is achieved.

To adjust your preload, simply rotate the center of your left fork cap – your adjustable preload cap – with the supplied 1/2" inch Allen-wrench. Rotating it clockwise will increase your preload, counterclockwise will reduce it. NOTE: the adjusting portion of the cap does not extend or recede as an indication of how much preload is applied, it simply stops rotating at either end of the adjustment range – when the end of the range is felt STOP ROTATING THE ADJUSTER.

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 Preload Adjuster with a set of Progressive Suspension high performance shocks.

