

6900 Marlin Circle, La Palma, CA 90623 (714) 523-8700, Fax (714) 523-3220

Harley Davidson Fork Lowering Kit

Installation Instruction

Warning: All work must be performed by a qualified mechanic or according to steps outlined in an authorized service manual. Installing lowering kit will decrease initial ground clearance. The motorcycle will be lower to the ground and care should be taken to avoid bottoming, especially over bumps or turns. To maintain proper balanced geometry, we recommend lowering the motorcycle in the rear the same amount as the front (see Harley Davidson application chart).

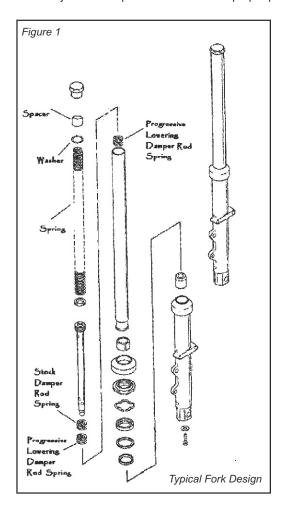
Fork Lowering Kit Supplement

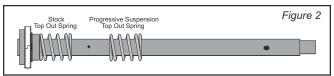
The installation of a fork lowering kit does not affect the compressed length of the fork. However, we have found that some motorcycles may not have adequate clearance between the fender, fairing and/or accessories. Therefore, we recommend that this be checked and if there is not adequate clearance, the interfering parts be removed or modified to eliminate the situation. After installation of new top out springs onto the damper rod, we recommend that the forks be installed on the motorcycle complete with wheel/fender, but without the main springs and completely bottomed out. This is done to check clearance between the fender and fairing/crash-bar/accessories, etc.

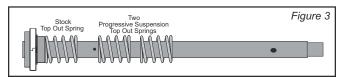
Never attempt to remove the fork cap or nut without placing a quality jack or sufficient blocks under the motorcycle to securely lift the front wheel off the ground. Failure to do so could result in damage and/or serious injury

- 1. Remove and disassemble forks (including removal of damper rod) according to steps outlined in an authorized service manual for your particular model and year Harley Davidson (see figure 1 for reference).
- 2. To achieve a one inch (1") lowered height, leave the stock top out spring on the damper rod and install one Progressive Suspension top out spring on the damper rod with the stock top out spring (see figure 2). Proceed to step 4.
- 3. To achieve a two inch (2") lowered height, leave the stock top out spring on the damper rod and install two Progressive Suspension top out springs on the damper rod with the stock top out spring (see figure 3).
- 4. Reinstall damper rods into forks per shop manual.
- A. Add the proper amount of fork oil as recommended in your shop manual. Make sure the viscosity is the recommended weight.
- B. Install your Progressive Suspension fork springs with the close wound end up.

C. Cut the supplied white PVC tubing to the specified length shown on the pre-load diagrams. Make sure to find the correct diagram for your particular fork. NOTE: If lowered 2" some models may not need spacers to achieve the proper preload.







Using the proper diagram, cut to the shorter length shown for lighter riders or a softer ride. Cut to the longer length for heavier riders or a firmer ride. (Also see "Fine Tuning", Section 7)

Install cut PVC spacers and washers in the correct position shown.

- D. Install your fork caps and reinstall your forks on your Harley according to the shop manual.
- 5.Test ride motorcycle at reduced speeds to develop a "feel" for how the motorcycle handles due to the different geometry due to the lowered suspension.

6. Fork braces

We have found numerous cases of binding forks due to improperly mounted fork braces. Our experience has led us to conclude that even the slightest misalignment while installing the fork brace will cause the forks to bind. If, after installing the springs, a harshness exists (especially on small bumps and freeway expansion joints) remove the fork brace and ride the bike again over the same route. If harshness has disappeared, refer to the fork brace installation instructions for proper and concise installation to eliminate the misalignment. If harshness still exists, your front end (wheel/forks) may be misaligned. Consult your shop manual for proper wheel and fork alignment instructions.

7. Fine Tuning

Pre-load: Spacer length can be decreased to lower the ride height and soften the ride or increased to raise the ride height and firm up the ride. Adjust in 1/4" increments.

Fork Oil

Unless otherwise noted we recommend the stock oil viscosity and level. Oil viscosity can be changed to alter damping. Heavier oil will increase damping. Lighter oil will decrease damping. Change in five weight increments (i.e. from 10 weight to 15 weight). Oil viscosity will have more effect on rebound damping than compression damping. Too high of 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 and the bike will bottom out, feel too soft and tend to dive.

41 mm Fork Tube "Wideglide" 78-86 FL-FLH 0 to ½" 80-86 **FXWG** (with or without spacer) 84-09 **FXST/FLST All** White PVC 93-05 **FXDWG** Space 80-01 FLH/FLT All (if needed) 02-06 ←Washer **FLHR** 06-09 FLH/FLT/FLHT All NOTE: If lowered 2" some models may not need spacers to achieve the proper preload. (spring alone may protrude 0-1/2" as needed)

Air Pressure: Progressive Suspension recommends a starting point of zero air pressure. Add air to suit your particular riding requirements. However excessive air pressure can cause seal "sticktion" which contributes to a harsh ride on small bumps and freeway expansion joints and also reduces seal life.

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

