

Vintage CB750

Progressive Type Front Fork Spring Installation Instructions

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

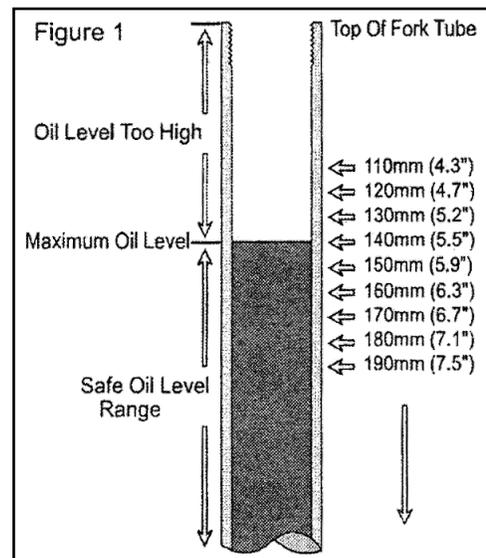
Warning: Never attempt to remove the fork cap nut without first placing a quality jack or sufficient blocks under the motorcycle to securely lift the front wheel off the ground. Failure to do so could result in serious injury!

1. Remove fork springs according to instructions contained in your shop manual. For maximum performance we highly recommend that the forks be thoroughly cleaned, inspected and new fork oil installed.

Note: If your motorcycle comes equipped with two fork springs in each leg (long & short), remove and discard both springs and the flat washer between the springs. If a stock spacer exists, remove it. If there is a short spring on the damper rod, do not remove it!

2. Use the recommended fork oil viscosity as noted in your owners manual. Fork oil level/volume should be checked according to the steps outlined in your authorized shop manual. Measurement of your fork oil by level is the preferred method. However, some manuals only specify a volume measurement. Due to the design of a progressive wound fork spring it will displace more oil thus requiring a maximum oil level of 5.5" (140mm).

Note: If your manual specifies an oil level higher than 5.5" (140mm) set the oil level at 5.5" (140mm). (Oil level is the distance from the top of the fork tube to the top of the oil with the fork completely collapsed and the fork spring removed see figure 1.)



3. Install your new fork springs into the forks. Mechanically, it makes no difference which way the springs are installed. Some manuals will state; install the spring with the close wound end towards the bottom. This is done because sometimes there will be less spring noise. The springs will perform exactly the same regardless of which direction they are placed

Next, Calculate pre-load. What is pre-load? Pre-load is the distance the spring compresses when the fork cap is installed. You may or may not utilize a spacer to achieve proper pre-load. The spacer in itself is not "pre-load". It just helps to achieve it. Why is pre-load important? It determines the proper ride height which in turn affects how the bike handles.

Calculating pre-load

You will need to calculate pre-load to determine if you need a spacer and the length it must be.

Most motorcycles need between $\frac{3}{4}$ " and 1" of pre-load. As a rough rule of thumb, the fork spring (figure 2) or fork spring and spacer combination (figure 3) should be at least flush (or above) the top of the fork tube with the forks fully extended.

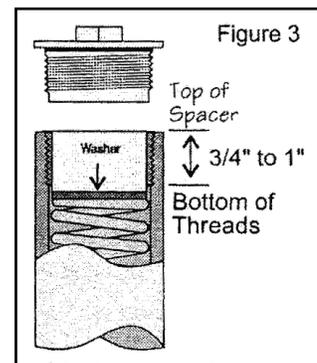
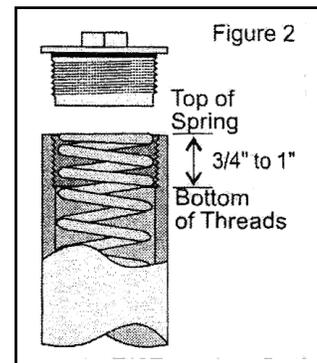
This is true for most motorcycles because their fork caps are between $\frac{3}{4}$ " to 1" long meaning that they will screw into the fork tube the same distance.

For fork caps longer than 1", you must calculate the pre-load length so the fork spring or fork spring/spacer combination will be below the edge of the fork tube.

If your fork caps have adjustable pre-load settings or are recessed below the edge of the fork tube (circlip type), then they are usually much longer than the $\frac{3}{4}$ " to 1" caps and must be measured accordingly.

The stock spacer in some cases can be modified to fit. Cut the included PVC Piping to make the required spacer.

Warning: if installing a spacer, a flat washer must be installed between the spacer and the spring!



4. After installing the fork cap, we recommend no air pressure for a starting point. See fine tuning at the end of these instructions for more information.

5. 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.

6. Fork damper adjustments: Our testing has shown that bikes equipped with fork damping adjusters should be set at the minimum setting for freeway and surface street riding for maximum comfort. On motorcycles equipped with antidive or adjustable pre-load, we recommend starting at the minimum settings for each.

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 stiffen 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 to increase damping. Lighter oil to decrease damping. Increase in 5 weight increments (i.e. from 10 weight to 15 weight.) 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 height and the bike will bottom and feel soft or dive.

Air pressure: Progressive fork springs are designed to be used with no air pressure under normal conditions. A few pounds of air