

Cogent Dynamics Pre-load Adjustable Fork Caps

Suzuki DR650SE Instructions

Cogent Dynamics adjustable fork caps are designed to work with standard length DR650 forks (1996 to present). The spacers provided are pre-cut to replace the Suzuki OEM heavy steel spacer (nominal 40mm long) and work with the OEM springs or Cogent Dynamics springs 0.52, 0.58 and 0.63 Kg/mm that have an overall length of 524 to 530 mm free length (un-installed length) when used with the Cogent Dynamics DDC valves.

To install your new caps, loosen the top triple clamp pinch bolts, fully extend the fork and unthread the OEM fork cap. *You may wish to remove the top handlebar clamp and move the handlebar for added clearance.*

- 1.) Remove the existing OEM heavy steel spacer (40mm nominal length).
- 2.) Drop in the new grey plastic spacer supplied with the kit.
- 3.) Make sure your new adjustable caps are set to their minimum internal length (most lines showing on the blue stem). A 12mm box end wrench or socket fits the hex at the top of the stem.
- 4.) Install the new caps taking care not to cross thread your caps. In most cases the caps can be started using your fingers. Using a 24mm deep well socket and a "T" handle driver will assist in maintaining proper thread alignment preventing cross threading the caps during the installation process. In most cases the cap will not engage the spring until it is close to being fully threaded in (the OEM spring will engage sooner as they run more preload).
- 5.) Tighten the fork caps to an easy snug setting (these do not need to be very tight; 20 N/m is recommended).
- 6.) Tighten the upper triple clamp bolts to the Suzuki factory recommended torque (Cogent believes this value to be 29 N/m or 21 lb/ft).

Notes on using your new adjustable caps:

Most appropriately matched, straight rate springs will provide the best performance when run with an installed pre-load range of 2-12 mm. The pre-load is the measure of the amount the springs are compressed within the fully extended, assembled forks. We recommend running the caps at the middle range setting and more or less pre-load can be adjusted to suit rider preference and ride needs.

Other applications:

These caps will also work with most any combination of spring and or valve setup using custom spacers. The caps extend into the tubes about 1" or 25.5mm when retracted. This minimum dimension is nominally 7.5 mm over the OEM Suzuki fork caps. The adjustment range provided by the Cogent adjustable caps is about 15mm.

The Cogent Dynamics adjustable caps are 8mm longer than the OEM caps at minimum. With some applications, custom cut spacers may be needed. These custom spacers are available directly from Cogent Dynamics for \$14.95 a set. We will need to know your measurement from the top of a fork tube to the top of the washer over the spring (forks extended).

Thank you for your business!

Cogent Dynamics Inc. 828-628-9025 www.Motocd.com raceparts@motocd.com