

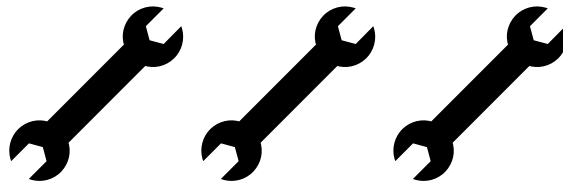
## 25-008-21 – V-Strom DL800DE Fork T-Valve Kit



This kit has been developed and refined using our dynamometers and test rider feedback to make sure you get the best bang for you buck using our own in-house designed high flow pistons.

Difficulty Rating:

3/5 Thrown Spanners



## Introduction

This fork piston kit includes the following assemblies:

- 2x Main Piston Assembly
- 2x Base Valve Assembly
- 2x Fork Bottom Piston Retainers
- 2x M6 Fuji Lock Half Nuts

## You will also need

- 2L of 2.5wt fork oil

The factory forks are often criticized for being too soft and diving under brakes. Some people enjoy the plushness and it's just fine for long highway tours, but if you're playing in the dirt the lack of front-end feel can be concerning.

Once this kit is fully installed (and if you still have the stock fork springs), wind the preload in 8-10mm (or 8-10 turns, as each turn is 1mm more preload). To start with, set the rebound adjuster on the fork caps at 2 turns out from full hard, and the compression adjuster on the bottom of the fork at 5 clicks out from full hard.

These instructions assume that you have the tools and knowledge required to disassemble and reassemble the forks. You're also going to need to drill some holes on page 6 so have a look there and check you're up for it. If not no worries we can't all be watch makers, see your workshop manual or nearest suspension specialist.

## Bottoming Piston Retainer

The standard bottoming retainer is peened on and is best removed on a lathe by cutting the peened side (see below) slowly until it releases from the circlip. Remove the circlip from the shaft.



Cut the peened side until the retainer releases from the circlip



The retainer should be free from the circlip, allowing you to remove the circlip from the shaft

Alternatively, the retainer can be removed by using a punch and a soft mallet, however, care should be taken not to damage or bend the thin shaft.

With the retainer free, remove the circlip holding the bottoming cone onto the body, keeping only the bottoming cone. From here you can remove the shaft from the cartridge exposing the main piston.

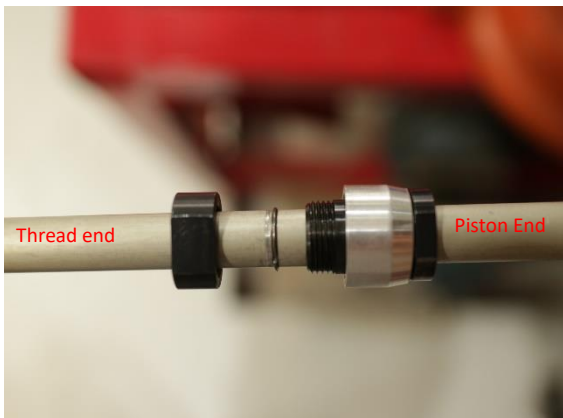
At this point, please refer to the instructions for the main piston below, and once complete, the new fork bottoming piston retainer can be installed once the piston is back in the cartridge.



Remove the circlip and remove the bottoming cone

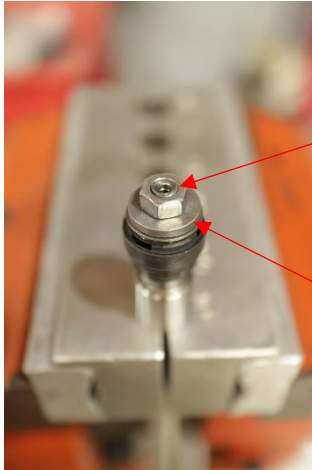


Slide the bottoming cone onto the new retainer included in the kit and place this assembly onto the shaft, in the direction shown below. Put the circlip back on and screw the cap onto the retainer, with the circlip sandwiched inbetween. Tighten the cap down with a 14mm spanner.



## Main Piston

The nut holding the factory main piston assembly is peened on and will require the use of a belt sander or file to remove the peened edge.



Sand or file this face until  
the nut can be removed

Keep this spacer

Once the nut is removed, remove the factory piston assembly from the tower, keeping only the thick spacer that was directly under the nut. Remove the nylon nut from the new main piston assembly whilst keeping a hold on the bottom plate as the assembly is under spring pressure. Place the nylon bolt on top of the tower and slide the entire assembly off the bolt, and onto the tower

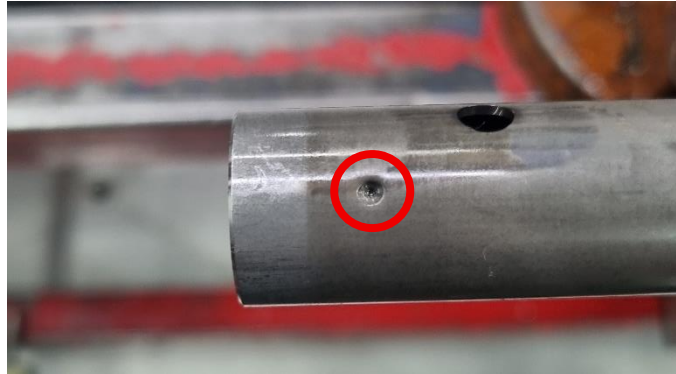


Place the spacer that you kept from before on top and tighten the whole assembly down with the supplied lock nut. Depress the bottom shim stack with a pick, it should move with only a small amount of force. If it does not move easily then the shim may be caught on the tower, loosen the assembly and align the shims on the seat and re-tighten.



## Base Valve

The base valve is held in with a circlip but it has also been peened in and you will need to drill out the dimples circled in red below.



To do this we like to clamp the cartridge and then drill it out with a spot drill but any drill bit will work. Don't be afraid of drilling to far, if you do you may put a divot into the groove which the peening secures the base by but it will not change the function of the forks in any way what so ever and the circlip you'll remove and reinstall soon will hold it in just fine. If you're doing this at home and haven't done something like this before, you've come this far so I believe in you. You've got it bro/sis.



Once you've removed the peening you can push the base

valve in a little bit then remove the circlip.

Once the circlip is out you can either push it out using the cartridge rod or screw an M8 bolt in and pull it out. If its not coming out easily check the peening is fully gone, if not use a larger drill bit and drill the hole where the dimple use to be out further. Just remember you're not going to damage anything doing this unless you're trying to on purpose.

Like the main piston, undo the socket head bolt holding the base valve together. Remove the nylon nut from the new assembly and apply a small amount of Loctite to the thread. Reassemble.

Depress the shim stack with a small pick to check that the shims were not caught during the assembly process.



Now you can refit everything the way you pulled it apart, refill and bleed the forks using 2.5wt oil and set the oil gap to 120mm without the spring installed. Now you can reinstall the springs and put the forks back in the bike.



*We know suspension, that's what we do!*

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## Problems?

If you're having problems or are unsure of what to do, please contact Teknik by visiting our website.

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