



WORLD CLASS SUSPENSION

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INSTRUCTION MANUAL PD FORK VALVE



IMPORTANT INFORMATION ABOUT YSS PD VALVES:

YSS PD Valves control compression flow, rebound is controlled by the OEM damper rods, you may find small holes at the top of the damper rod these are for rebound and are not to be modified. To change the rebound of your forks this is done by changing the oil viscosity.

- I. *YSS Australia oil viscosity & volume\air-gap recommendations have been calculated based on the rebound of OEM damping rods specific to your bike.*
- II. *The SPECIFICATIONS TAB on the YSS Australia website for your product will list all relevant information regarding the installation of your YSS PD Valves or YSS Fork Springs & PD Valve Kit or YSS Fork Upgrade Kit*

Key Notes:

- Installation and Enlarging compression feed ports
- Adjusting\Checking fork spring preload
- Adjusting\Checking PD Valve Settings

Tools\Materials required:

- Model specific tools required to strip & rebuild your specific forks
- 8mm (5/16") -OR- 6mm (1/4") drill and drill motor
- Ruler -OR- tape measure
- Measuring bottle -OR- air-gap tool (similar) to measure oil height\volume
- Tube cutting tool
- PVC\Steel\Alloy Spacer tube *See model specific notes if this is required

TUNING TIPS & INFORMATION FOR YSS PD VALVES:

YSS PD Valve Spring and tension:

- Relates to overall firmness of the fork and primarily to control front end brake dive
- Stock setting is 1 turn of preload for road\off-road bikes, 1.5-2 turns for road racing.
- Valve spring tension is measured from no tension (spring just before engaging)
 - To check\adjust valve spring tension, unscrew the valve spring and locknut until the spring is disengaged.
 - Set valve spring to 0 or just before engaging tension
 - Turn valve spring screw 1 full rotation, torque locknut to valve spring screw.

YSS PD Valve Low Speed Compression Bleed

- Relates to slow compression fork movement
- Stock setting is 1 x 2mm Port and is adequate in most cases
- To decrease low speed compression damping drill out the remaining 3 Guide holes on the YSS PD Valve plate.
 - **If you are decreasing low speed compression damping it is highly recommended to drill 1 hole only and test between each change**

Rebound Damping Control

- Rebound is controlled by oil viscosity
- Heavier viscosity oil will slow rebound and vice versa

GUIDE FOR YSS PD VALVES INSTALLTION:

NOTE: *It is recommended that YSS PD Valves be installed by a qualified suspension technician. YSS Australia is not responsible for any damages to materials, motorcycle, or persons. Incorrect fitment of YSS PD valves will void warranty.*

1. Remove forks from motorcycle
2. Remove fluid and fork internals including:
 - a. Springs
 - b. Washers
 - c. Spacer tube
 - d. Damper rod and top-out spring
3. It is not necessary to replace fork seals. If fork seals are being replaced, please refer to your owner's manual
4. Fit the YSS PD Valve (and collar if supplied as part of your kit) to the damper rod orifice
 - a. Check the YSS PD Valve covers the damper rod orifice completely with no leaks\gaps (refer to images 2a, 2b)
 - i. You may need to use a collar to achieve desired result
5. Time to drill. **You will need 4x Compression feed ports in total**
 - a. **Including the ports that are already present, drill as many more as you require to achieve 4 in total. (refer to images 1a, 1b)**
6. Compression feed ports are located at the lower end of the damping rod
 - a. For damper rod diameter 17.5mm OR Greater you will need to drill your ports to 8mm
 - b. For damper rod diameter less than 17.5mm you will need to drill your ports to 6mm
 - c. **Chamfer & deburr inside & outside of compression ports remove and sharp edges!**
7. Assemble forks as per your motorcycle manual or follow the disassemble process in reverse
8. Dry assembly: Insert YSS PD Valve inside the fork with YSS PD Valve spring facing up
 - a. Next, insert fork spring, insert washer, and then insert spring spacer
 - b. Due to increased height from YSS PD Valve installation you will need to cut\modify your existing spacer or make a new spacer.
 - c. Trim your spacer the amount of the YSS PD Valve height (and collar if using one) this is usually between 15-20mm.
 - i. If you are using a YSS Fork Upgrade Kit there is no need for Dry Assembly, skip Step 8 – your parts are all ready for final installation.
 - ii. Please refer to YSS Australia website for the parts you are fitting, under the SPECIFICATIONS TAB we will list specific instructions (if any) relating to spacer cutting or if you are required to make a spacer.
 - d. Dry assembly is to check installed preload, including your fork cap as part of the spacer you will be aiming for 5-10mm of preload for Linear Spring and 20-25mm preload for a progressive spring.
9. Remove Spacer, spring & YSS PD Valve. Compress the fork leg and pour in recommended fork fluid.
10. Pump fork 20 times, then drop in the YSS PD Valve (and collar if using a collar) in correct direction. Then set the air gap with YSS PD Valve submerged in the fluid.
 - a. If you are using Oil Volume: pour in correct volume of oil, pump 20 times and then install YSS PD Valve.
11. Install spring (and washer and spacer if using them) and close the fork
12. Install fork into motorcycle as per your owner's manual

YSS PD VALVE DIAGRAM

