

RACE TECH

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FORK GOLD VALVE INSTALLATION

DIRT WP 21mm

FMGV 2150

<IP FMGV 2150w.doc> FMGV 2150 P Thede © 6-16-22

TOOLS REQUIRED - (In addition to those required for fork disassembly.) In-lb Torque Wrench that accurately measures 0 to 50 in-lbs (0.58 kgf-m), 3mm Allen Socket or 17mm Hex Socket, Hi-Strength Loctite (included), Metric Calipers, Metric Micrometer 0-25mm.

NOTE: Many riders require different fork springs. Please consult racetech.com/ProductSearch.

DISASSEMBLY

D1 **Completely disassemble and clean your front forks. If you are unfamiliar with this process, STOP! Do not proceed. Seek out a qualified suspension technician to complete the installation.**

D2 **There are two types of WP forks EARLY and LATE Model. LATE Model forks have the Compression adjustment on the top of one fork leg and Rebound Adjustment on the top of the other leg.**

EARLY MODEL - Remove the compression valving from the cartridge by unscrewing the holder from the bottom of the cartridge. This calls for a special holding tool but usually comes out very easily without one.

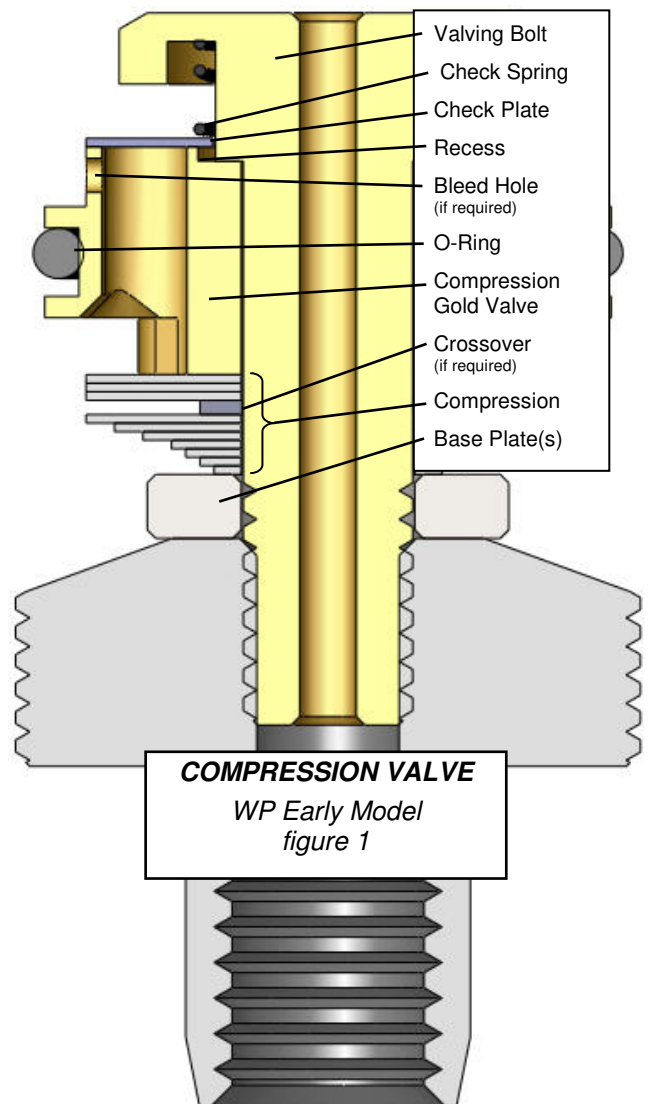
LATE MODEL - (NOTE: Be careful to keep all the parts from the Compression leg separate from the Rebound leg. Do not mix up the parts.) **Remove the compression valve body** from the cartridge. Push the compression valve holder into the cartridge about 5mm (0.2") to allow access to the wire retaining clip. Remove the clip with a small screwdriver, it comes out easily. Once the clip is out, pull the holder out by screwing the bolt back in and pulling. Be careful when holding the cartridge tube as it is easy to dent or distort.

D3 Remove the bolt (or nut) and **disassemble the valving stack**. Lay out the pieces in the order they come off the shaft. Clean and inspect all the original parts. Be careful to maintain the original order and orientation.

D4 **EARLY MODEL** – (figure 1) Put the new check valve spring on the bolt, then the new check valve plate (17mm OD by 8mm ID). **Put the Gold Valve on the shaft with the recess going on first**. Make sure the new o-ring is on the Gold Valve.

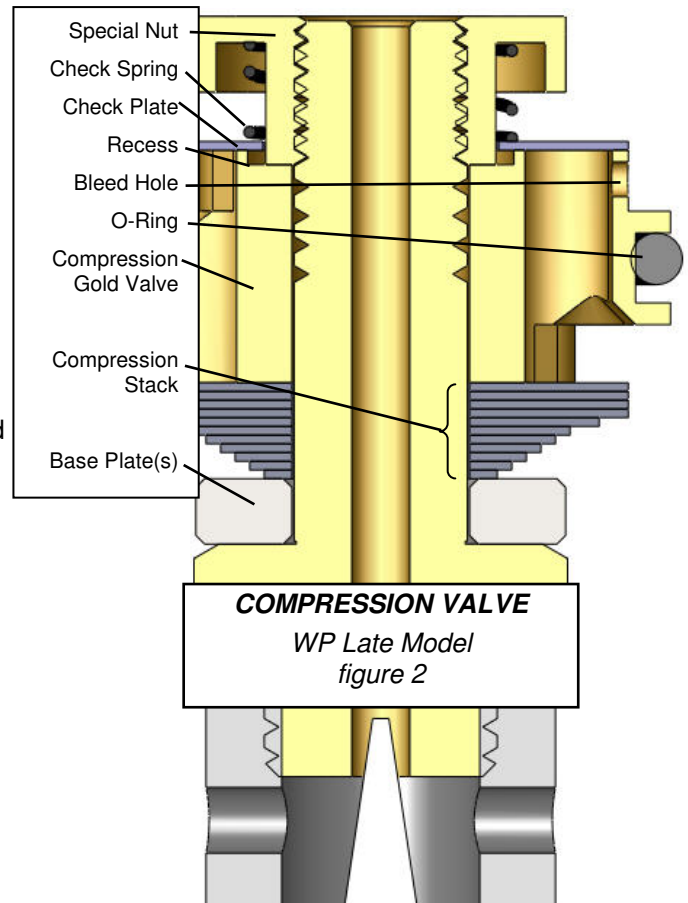
LATE MODEL – (figure 2) You may need to drill a bleed hole in the Gold Valve. See the DVS Setup Sheet. If it is needed drill it **horizontally**, through one of the port walls just above the step for the o-ring. Placement is not critical.

The assembly order is the reverse of the Early Model because the valve body has the shaft built in to it. Put the Base Plates on the shaft, then the Compression Stack, the Gold Valve (recess up), the Check Valve Plate, the Check Spring and the Nut.



VALVING

- V1 **To obtain custom valving settings for your particular application log on to racetech.com, go to DVS Valving Search, insert your Access Code, input your personal specifications and print your DVS Custom Setup Sheet**
- V2 Once you have selected your valving **begin assembling the valve.** (figures 1 and 2) Place the original Base Plate (*thick washer*) on the shaft of the compression valve. You may need to use the additional base plates provided (*thick washers*) to achieve the proper total valve thickness.
- V3 **Put the valving on the shaft** in the order listed, starting with the smallest diameter shim and ending with the largest diameter shim closest to the Gold Valve.
- NOTE: On some models you will need to use the additional Base Plates provided to achieve the proper total valve thickness (check for full engagement of the threads). Also, you may end up with additional parts, don't worry.
- V4 **Check to see that the check valve plate (large ID washer) is free** and can move up and down against the spring.
- V5 **CAUTION! The threads can be damaged without extreme care. Install the bolt into the holder and tighten it. You must use Loctite. The 6 mm bolt must be torqued with a torque wrench to 30 in-lbs (2.5 ft-lbs or 0.35 kgf-m), **NO MORE!** Do not take this step lightly.**
- V6 **Check your work.** For two stage stacks, hold the compression stack up to the light and look for the gap at the cross-over between the lo-speed and hi-speed stack (*the small shim near the top of the stack*). This gap should be visible, if it isn't, disassemble and look for burrs and/or dirt in the valving. Reassemble and check again.
- V7 **Install the compression assembly** into the cartridge.



FORK ASSEMBLY

- A1 **Reassemble the forks according to the procedure in your manual.** Install the suspension fluid, bleed the cartridge and set the oil level.
- A2 Use Loctite on the damping rod threads at the cap and **torque it to manufacturer's specs.** Consult owner's manual for specs.
- A3 **Adjust the compression and rebound adjusters, spring preload, and oil level** according to the Digital Valving Search Setup Sheet.
- A4 **Install the forks on the bike.** When the forks are put on the bike it is very important to **align the fork tubes.** This is done by first tightening the axle all the way. Then the tubes are aligned by pumping the forks up and down with the right-hand axle clamp loose. This will line the tubes up so they won't bind. Finally, tighten the axle clamp.
- If you have any questions** please call our Technical Support Hotline at 951.279.6655.

NOTE: The Gold Valve is a Compression Valve. Do not use the Gold Valve on the Rebound. Do not use the stock triangular 2mm thick compression valving restrictor plate if there is one stock.