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## FORK GOLD VALVE INSTALLATION

*DIRT Marzocchi 26mm*

FK code

<IP FMGV 2606w.doc> FMGV 2606 P Thede © 12.5.15

**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), Hi-Strength Loctite (included), Metric calipers, Metric micrometer 0-25mm.

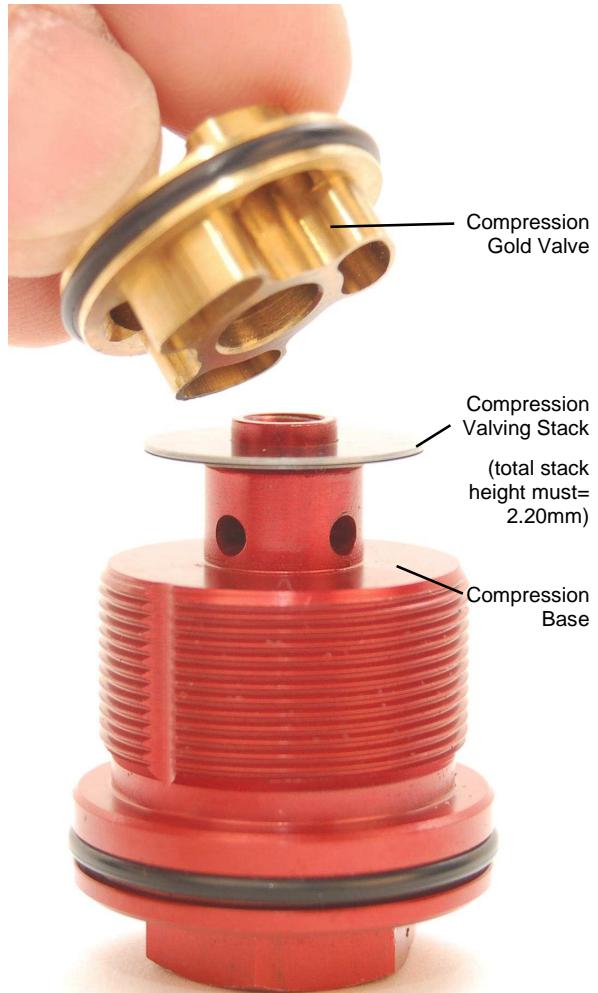
**NOTE:** Many riders require different fork springs. Please consult [www.racetech.com](http://www.racetech.com) or call Race Tech.

### DISASSEMBLY

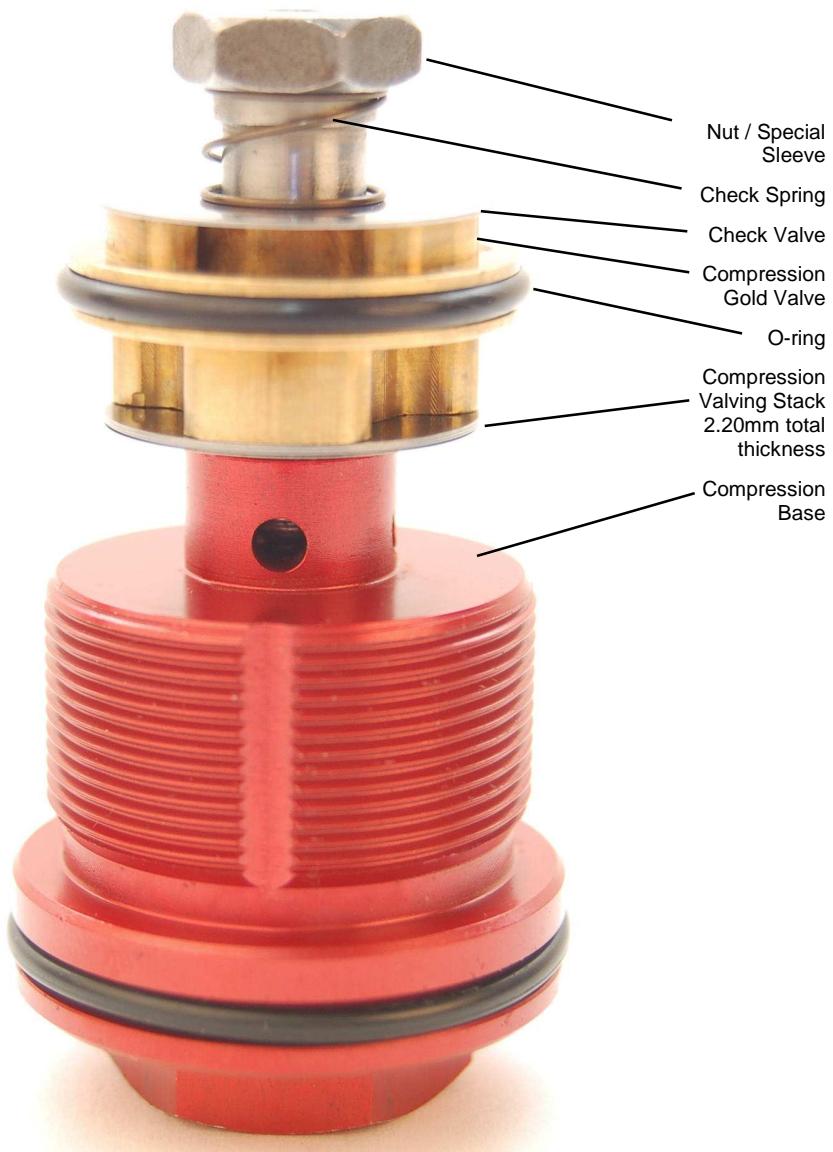
- D1 Completely disassemble and clean your front forks. If you are unfamiliar with this process, **STOP!** Do not proceed. Seek out a qualified suspension technician to complete the installation. *NOTE: On most dirt bikes, simple installation is achievable without complete disassembly. The Gold Valve can be installed by removing the compression adjuster at the bottom or top of the forks.*
- D2 Remove the nut
- D3 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 of the parts. (*You may need some of the original valving for spacing purposes, do not discard.*)

### VALVING

- V1 To obtain custom valving settings go to Digital Valving Search, insert your Access Code, input your personal specifications and print the custom setup information. If you do not have access to the web, contact our Technical Support Hotline 951.279.6655 for recommendations. Note: The Access Code is good for one limited-time use.
- V2a Single Stage - Put the valving on the shaft in the order listed, starting with the smallest diameter shim of the Hi-Speed Stack and ending with the largest diameter closest to the Gold Valve. You will not use a Lo-Speed Stack.
- V2b Two Stage - For Two Stage Stacks the total valving stack is a combination of a Lo-Speed Stack and a Hi-Speed Stack. Put the valving on the shaft in the order listed, starting with the smallest diameter shim of the Hi-Speed Stack. Then the Lo-Speed Stack gets placed on top of the Hi-Speed Stack starting with the small diameter and ending with the largest diameter shim closest to the Gold Valve.



- V3 Make sure the o-ring is on the Gold Valve. This valve has two different recesses, the small recess on the piston facing up, the big recess goes down first towards the valving.
- V4 **Place the check valve sleeve on the shaft**, then the check plate (*large ID washer*) and the spring. Be sure the sleeve fits into the recess in the piston and the check plate is free.
- V5 **Check to see that the check plate (*large ID washer*) is free** and can move up and down against the spring.
- V6 **CAUTION!** The threads can be damaged without extreme care. They are made out of aluminum and strip easily. To install the nut you must use Loctite. The 6mm nut (10mm wrench) 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.
- V7 **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 the stack and look for burrs to surface and/or dirt in the valving. Reassemble and check again.



## ASSEMBLY

- A1 **Reassemble the forks according to the procedure in your manual.** Torque the compression valve body to manufacturer's specs. For most forks this is 43 to 60 ft-lbs (58 - 82 NM). Consult owner's manual for specs. Bleed the cartridge and set the oil level using Ultra Slick USF-05.
- A2 Use Loctite on the damping rod threads at the cap and **torque it to manufacturer's specs** (typically 16 to 21 ft-lbs [21.7 – 28.5 NM]). 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.
- A5 **If you have any questions** please call our Technical Support Hot-line at 951.279.6655. Feel free to experiment and please call if you need us. Have fun!

## TUNING NOTES

- Damping depends on vertical wheel velocity, not position in the stroke.
- If the forks feel too soft all the way through, increase compression damping with the external adjuster. If that is not enough, change the compression stack internally.
- The compression damping adjuster controls the lowest speed damping and affects the entire range. NOTE: The closer to maximum damping (full clockwise) the more effect one click makes. In other words going from 3 to 2 out has a lot more effect than going from 14 to 13. Adjusters are numbered from all the way clockwise (the slowest or firmest setting).
- Spring rate affects ride height, dive and bottoming. Typical spring preload should be 3-5mm (0.1–0.2").
- Oil level can drastically alter bottoming resistance and only affects the last part of the travel (near bottoming). If you like the action but the forks bottom too easily, raise your oil level by 10mm.

## **BUILDING the VALVING STACK - DIRT 26mm Marzocchi**

Welcome to the wonderful world of Gold Valving. To obtain your personal Custom Suspension Settings:

1. Go to Digital Valving Search (DVS)
2. Input your Access Code when prompted (your Code is printed on top of page 1 of these instructions)
3. Input your personal specifications
4. Print your DVS Custom Suspension Setup Sheet

If you do not have Internet access, contact our Technical Support Hotline 951.279.6655. Note: The Access Code is good for one bike, limited-time use.

### **EXAMPLE Valving Stack Thickness:**

This valve requires 2.20mm total valving thickness to maintain the number of clicks of adjustment.

If the Valving Stack is cL7 and cH5 the thickness = 1.45mm

$2.20 - 1.45 = .75\text{mm}$  additional thickness needed

#### **Lo-Speed Stack – cL7**

(1) 0.15x21  
(4) 0.10x21  
(1) 0.10x12

=.65mm thick

#### **Hi-Speed Stack – cH5**

(2) 0.10x21  
(1) 0.10x19  
(1) 0.10x17  
(1) 0.10x14  
(1) 0.10x13  
(1) 0.10x12  
(1) 0.10x11

=.80mm thick

Add required additional spacing shims:

(3) 0.20x14  
(1) 0.15x14

=.75mm thick

= 2.20mm total thickness required

**OIL LEVEL, EXTERNAL ADJUSTERS, SPRING RATE, and PRELOAD are all listed on the Digital Valving Search on [www.racetech.com](http://www.racetech.com).**

NOTE: All measurements are metric (for inches divide by 25.4). The valving list starts at the piston face and goes towards the base plate. Valve specs are listed by (QUANTITY) THICKNESS x DIAMETER. A number in parentheses means quantity. If there is no number in parenthesis the quantity is one. Example: (2).15x17 means quantity two, 15 hundredths of a millimeter thick by 17 millimeters in diameter.