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# FORK GOLD VALVE INSTALLATION

MARZOCCHI - DIRT 35mm FMGV 350603

<IP FMGV 350603w.doc> FMGV 350603 P Thede @ 6-19-22

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

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

### DISASSEMBLY

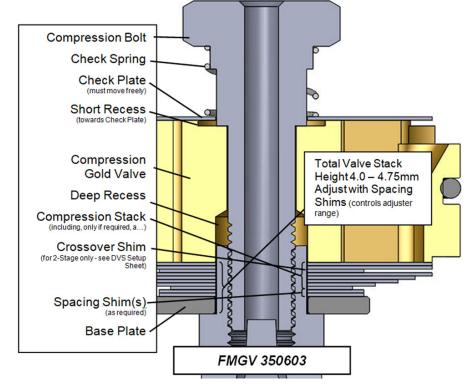
- D1 Completely disassemble and clean your front forks. If you are unfamiliar with this process, STOP! Do not proceed. Seek out a qualified suspension technician to complete the installation.
- **NOTE**: The Damping Rod Clip Tool (TFHP 01) easily holds the damping rod when taking off the bottom bolt. When removing the damping rod from the cartridge carefully inspect the thread on the end of the damping rod for sharp edges. **These edges can easily tear the shaft seal. File as necessary.** As a further precaution pack the thread with heavy grease before you slide the damping rod out.
- D2 Remove the Compression Bolt. The stock Check Spring and Check Plate will be re-used.
- D3 *Disassemble the valving stack*. Lay out the pieces in the order they come off the Bolt. Clean and inspect all the original parts. Be careful to maintain the original order and orientation of the parts

#### VALVING SELECTION

- 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 your valving **begin** assemby.
  - Start with the Base Plate then install the Compression Stack. It will be installed in the reverse order listed on the DVS Setup Sheet. This

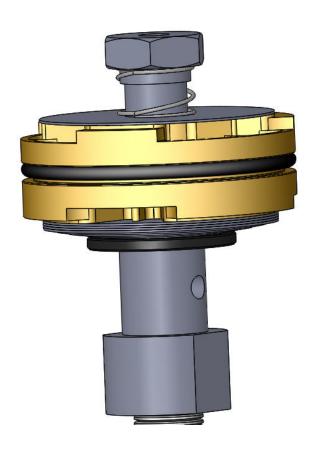
means start with the smallest and end with the biggest shim.

in diameter than the smallest diameter shim in the stack.



V3 Check to see the total valve stack thickness is between 4.0 and 4.75mm including the Base Plate. It cannot be greater than 4.75mm including the Base Plate. This distance changes the number of available adjuster clicks. To get the proper total valve stack thickness you may need to place some Packing Shims just above the base plate. NOTE: All shims added must be larger

- V4 Put the Check Spring and Check Valve Plate on the Compression Bolt. **Put the Gold Valve on the Bolt** with the Short Recess towards the Check Plate. Make sure the o-ring is on the Gold Valve.
- V5 Be sure the check valve plate is free to move on the stepped sleeve washer before you tighten the Bolt.
- V6 CAUTION! The thread can be damaged without extreme care. To install the nut you <u>must</u> use Loctite (provided). The nut <u>must</u> be torqued with a torque wrench to 35 in-lbs (2.9 ft-lbs or 0.41 kgf-m), <u>NO MORE!</u> Do not take this step lightly.
- V7 **Inspect your work**. For two stage stacks, hold the compression stack up to the light and look for the gap at the crossover between the lo-speed and hi-speed 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.



## MID-VALVE AND REBOUND

<u>Rebound Gold Valve Kits are highly recommended</u>. You can expect significant improvement in plushness, anti-dive, and traction with the Rebound Gold Valve Kit. They work hand-in-hand. This is a great time to install it.

## **ASSEMBLY**

- A1 **Install the damping rod into the cartridge.** Reassemble the forks according to the procedure in your manual. For Twin-Chamber Forks the damping rod shaft seal <u>must</u> be protected. Pack the thread with heavy grease before inserting it into the cartridge.
- A2 **Fill and bleed the cartridge.** Before installing the compression assembly which includes the reservoir piston and cap make sure the oil level is 125mm (4.9") down from the top of the cartridge with the damping rod fully extended. If you don't set this oil level it will be very difficult to assemble the cartridge.
- A3 **Back out the Pressure Spring adjuster all the way.** This is where it should be set. When you install the compression assembly it should require quite a bit of force when you push it in to the cartridge with your hand. Once you have tightened the cap, compress the damping rod all the way. This will push out any extra oil from inside the cartridge and should be poured out of the holes in the top of the reservoir. When the damping rod is released it should extend all the way by itself. This indicates that there is enough oil inside the cartridge. Torque the cap to manufacturers specs. Consult service manual for specs.
- A4 Install the Fork Springs. Check and set the Fork Spring Preload <u>See racetech.com,>Instructions>Forks</u>. This is critical that the preload is correct. See the DVS (normally between 3-5mm).
- A5 Use the TFHP 01 tool to hold the damping rod while installing the bottom rebound bolt. Use Loctite (provided) on the damping rod thread at the Rebound Adjuster Bolt and *torque it to manufacturers specs*.
- A6 Pour the DVS recommended volume of USF-05 oil into the fork. Install the cap.
- A7 Adjust the compression and rebound adjusters, spring preload, and oil level according to the DVS Setup Sheet.
- A8 *Install the forks on the bike*. When the forks are put on the bike it is very important to align the fork tubes. First make sure there are no burrs on the axle and it is free to slide through the axle clamp. Tighten the axle all the way. Align the tubes 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. See Tech Support at racetech.com.
- A9 If you have any questions call our Technical Support Hotline at 951.279.6655. Have fun!