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FORK REBOUND GOLD VALVE INSTALLATION - ROAD RACE 24/25mm

<IP FRGV SR2401.doc> **FRGV SR2401** P Thede © 2.4.14 2 pgs

TOOLS REQUIRED: In addition to the tools required for disassembly and assembly. TFSH 10 Shaft Holding Tool, Hi-strength Loctite (included), 400 grit (very fine) or finer Sandpaper.

CAUTION: THIS PROCEDURE SHOULD ONLY BE DONE BY A QUALIFIED SUSPENSION TECHNICIAN. IF YOU ARE NOT FAMILIAR WITH THIS PROCEDURE, STOP! CONTACT RACE TECH OR A QUALIFIED SUSPENSION TECHNICIAN.

DISASSEMBLY

D1 **Disassemble the forks** and remove the cartridge.

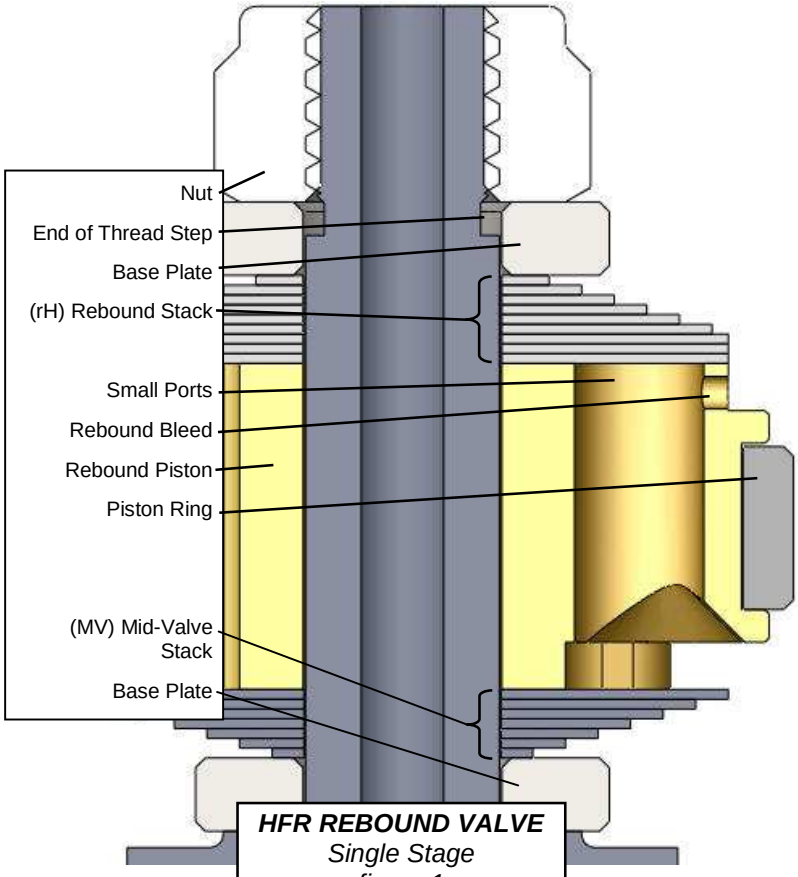
D2 **Remove the compression valve**. If you are installing compression Gold Valves at this time, follow the instructions for installation in the kit.

D3 **Remove the rebound rod** from the cartridge.

D4 **Lightly file the peening off the end of the shaft** that holds on the nut. Remove the nut holding on the rebound valving and disassemble the valving stack. Lightly deburr the end of the thread and clean everything.

VALVING

V1 **To obtain custom valving settings for your particular application log on to www.racetech.com, go to Digital Valving Search, 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. You do not need an additional Access Code for this kit.**



HFR REBOUND VALVE
Single Stage
figure 1

V2 **Put the Mid-Valve Stack on the shaft** in the order listed, starting with the smallest diameter shim. You will not use the original Cupped Washer, Check Spring, and Check Plate.

V3 Next **install the Rebound Gold Valve** on the shaft (the large ports towards the Mid-Valve). Note: Some applications require Single-Stage Mid-Valve Stacks, some are 2-Stage.

V4 **Put the Rebound Valving on the shaft** in the order listed, starting with the smallest diameter shim.

V5 Put the Base Plate on the shaft. This is a critical part of the installation If there is a step at the end of the threads you must be very sure that the Base Plate straddles this step. If it does not, the valve may come off. To get the proper total valve stack thickness you may place some of the original shims on the shaft below the Base Plate. Be sure that the Base Plate straddles the step!!!

V6 Use Loctite and **torque the Nut** to 30 in-lbs (0.35 kgf-m).

ASSEMBLY

A1 **Reinstall the rod into the cartridge** being careful not to damage the Piston Ring. Tip: Pre-bend the piston ring by rolling it up and use assembly grease to “stick” it into the groove.

A2 **Install the compression assembly and reassemble the forks**. Bleed the cartridges and set the oil height to the level recommended in the DVS specification.

A3 **Install the fork cap**. Use Loctite on the damping rod threads at the cap and torque it to manufacturers specs. Some models require careful positioning of the rod in the cap so the proper number of rebound clicks are available for adjustment. If the rod is threaded too far into the cap there will not be the full number of clicks. If the cap is not threaded on far enough, it will not touch the adjuster and it could come off the shaft. On this type, set the total number of available clicks to 15 to 20 (or 4 turns if there are no "clicks"). Consult shop manual for the proper procedure. On most models screw the adjuster out all the way, and then screw it in 3 to 4 turns. Then, install the cap onto the rod until it starts to feel tight (the adjuster needle is bottomed out). Hold the position of the cap in relation to the rod, back out the adjuster 5 clicks (so the needle isn't damaged when the slop is taken up in the threads) and torque the jam nut to proper specs (consult manual). Check to see you have the proper number of clicks.

A4 **Set the adjustments to the setting on the DVS Setup Sheet**. This should be a good starting point. Enjoy!

Rebound Valving Selection – STREET / ROAD RACE 24/25mm

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

1. **Log on to www.racetech.com and go to Digital Valving Search (DVS)**
2. **Input your personal specifications**
3. **Print your DVS Custom Suspension Setup Sheet**

If you do not have Internet access, contact our Technical Support Hotline 951.279.6655 for recommendations.

Once you have your valving settings, build the valving stacks.

EXAMPLE:

If the **Total Valving Stack** is rH24:
Starting from the Gold Valve piston face

Rebound Stack – rH24

(1) 0.10x21
(1) 0.10x19
(1) 0.15x17
(1) 0.10x14
(1) 0.10x12
(3) 0.10x10

Visit www.racetech.com, go to Digital Valving Search for your personal computer calculated valving setup!

OIL LEVEL, EXTERNAL ADJUSTERS, SPRING RATE, and PRELOAD are all listed on the Digital Valving Search on 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 parentheses the quantity is one. Example: (2).15x17 means quantity two, 15 hundredths of a millimeter thick by 17 millimeters in diameter.

FORK REBOUND GOLD VALVE CHART - ROAD RACE 24/25mm

REBOUND VALVING <FR2521-070305> ***SLOWER →***

rH21	rH22	rH23	rH24	rH25	rH26	rH27	rH28	rH29	rH30
(1) .10x21	(1) .10x21	(1) .10x21	(1) .10x21	(1) .10x21	(1) .15x21	(2) .15x21	(3) .15x21	(4) .15x21	(5) .15x21
.10x19	.10x19	.10x19	.10x19	.15x20	.15x20	.15x20	.15x20	.15x20	.15x20
.10x17	.10x17	.10x17	.15x17	.15x17	.15x17	.15x17	.15x17	.15x17	.15x17
.10x14	.10x14	.15x14	.15x14	.15x14	.15x14	.15x14	.15x14	.15x14	.15x14
.10x12	.15x12	.15x12	.15x12	.15x12	.15x12	.15x12	.15x12	.15x12	.15x12
(3).10x10	(3).10x10	(3).10x10	(3).10x10	(3).10x10	(3).10x10	(3).10x10	(3).10x10	(3).10x10	(3).10x10

Shim Dimensions - (QUANTITY) THICKNESS x DIAMETER in mm *(for inches divide by 25.4)*

MID-VALVE <FMV2521-070305> ***STIFFER →***

MV35	MV36
.10x21	.10x21
.10x14	.10x19
.10x19	.10x16
.10x16	.10x14
.10x14	.10x12
.10x12	.10x10
.10x10	(2).15x8
(2).15x8	

If you would like assistance please contact RT Tech Support at 951.279.6655