

RACE TECH

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GOLD VALVE INSTALLATION HONDA GROM 26mm BPF

Fk Code

<IP FMGV S260802C.doc> FMGV S260802C P Thede © 6.6.14 4 pgs

TOOLS & SUPPLIES 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), Metric Calipers, 0-25 mm Metric Micrometer, Loctite (included), USF-05 Suspension Fluid, Propane Torch, TFSH 31 Fork Tube Holding Tool, TMWA 14 Allen Tool, gloves.

NOTE: In stock form both forks are identical internally. When this modification is completed the compression leg will create only compression damping, while the rebound leg will create only rebound damping.

THIS IS A DIFFICULT INSTALLATION THAT REQUIRES SPECIAL TOOLS AND THE APPLICATION OF HEAT. DETAILED PHOTO INSTRUCTIONS ARE ON RACETECH.COM IN THE 'HOW TO' SECTION.

DISASSEMBLY - BOTH LEGS

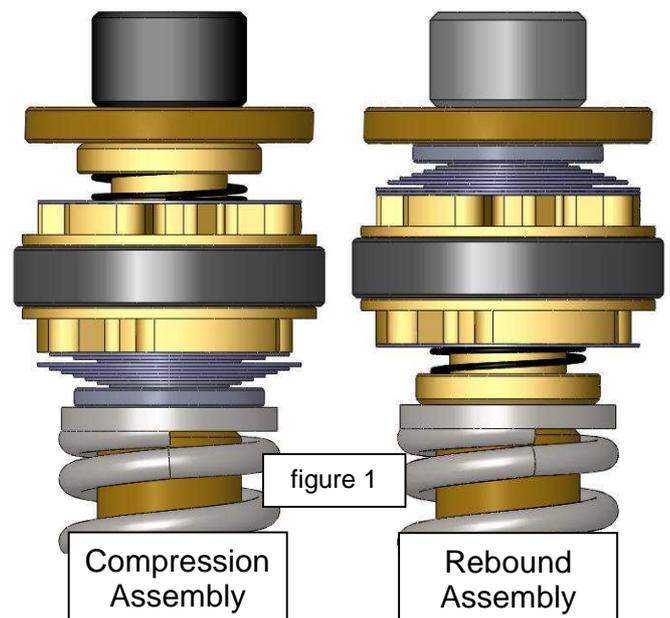
- D1 **CLEANLINESS IS CRITICALLY IMPORTANT.** Completely disassemble and clean your front forks. If you are unfamiliar with this process, STOP!!!! Do not proceed. Seek out a qualified suspension technician to complete the installation.
- D2 Remove the Fork Cap, Allen Bolt, Bottom-out Bumper, Washer, and Clip. Drain and dispose of the oil properly.
- D3 This installation can be done without complete disassembly. You do not need to split the tubes. Extend the Fork Tubes all the way. This will expose four holes in the Inner Fork Tube.
- D4 Remove the Fork Tube from the Fork Bottom. This is a LEFT-HAND THREAD. Hold the tube in a vise with TFSH 31 with the tool pin in one of the holes in the Inner Fork Tube. The Inner Fork Tube has thread locking compound on the Fork Bottom threads. Use a propane torch to heat the middle of the Fork Bottom to 350°F to help release the Loctite. Move the flame evenly and do not overheat. Use gloves so you don't burn your hands. Insert the Front Axle in the hole in the Fork Bottom to unscrew (clockwise) the Seal Head. Keep in mind that this is a LEFT HAND THREAD!
- D5 Continue to hold the Inner Fork Tube in the Shaft Holding Tool in a Vise. Use a TMWA 14 and socket to remove the Plug at the bottom of the Fork Tube. Remove the Fork Spring and Rod Assembly. Pour out the Oil and dispose of it properly. Slide the Top-out Spring off the Damping Rod Assembly.
- D6 Identify the new Compression and Rebound Assemblies by referring to figure 1. On the Compression Valve notice the shim stack goes on the shaft before the Gold Valve Piston while the Rebound Assembly is reversed.

The Valving Stacks come pre-valved. The standard pre-valved Compression Valving is a combination of cL32 and cH55. The pre-valved Rebound Valving is rL1005 and rH45 with no Rebound Crossover.

Go to the DVS Digital Valving Search at racetech.com. Select your bike and input the Access Code printed at the top of these instructions. Compare the recommended settings to the pre-valved settings. Change the valving if required.

If no valving change is required, install the stock Top-out Spring on the new Damping Rod.

⇒ If a valving change is required follow the instructions in the next section "CHANGING VALVING" otherwise go to "ASSEMBLY".



CHANGING VALVING - Welcome to the wonderful world of Gold Valving.

To obtain your personal Custom Suspension Settings:

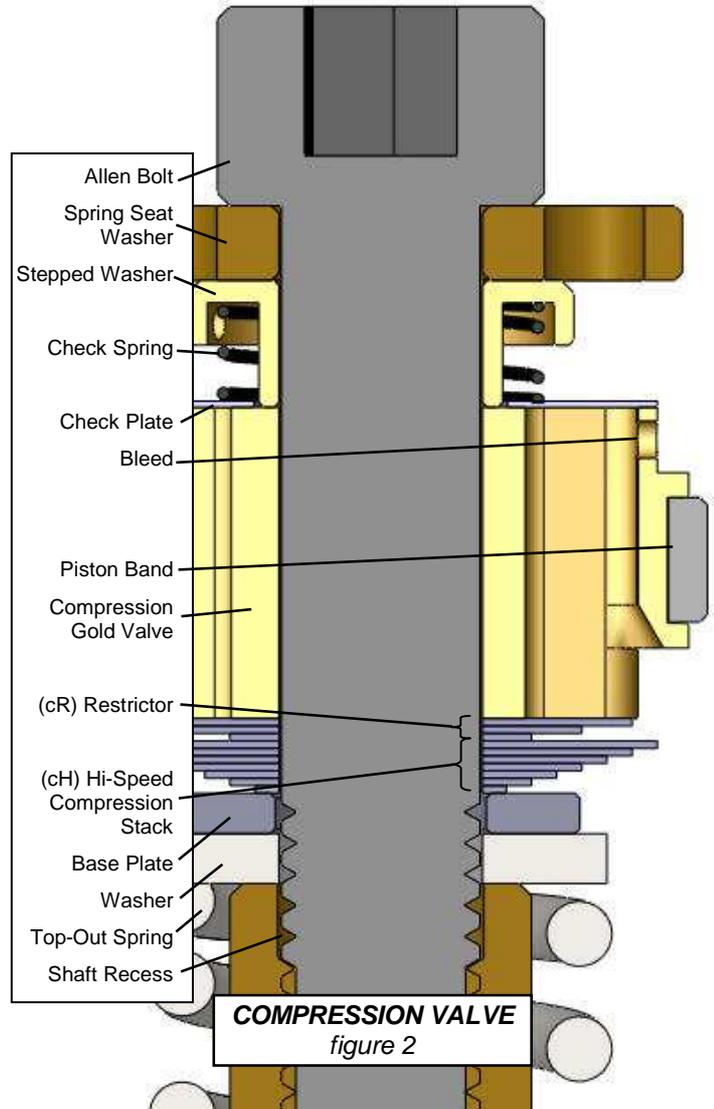
1. Log on to our website at www.racetech.com
2. Go to Digital Valving Search (DVS)
3. Input your Access Code (top of page 1) when prompted
4. Input your personal specifications
5. Print your DVS Custom Suspension Setup Sheet

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

COMPRESSION LEG (left)

(figure 2)

- C1 Remove the Allen Bolt and disassemble the valving stack. Lay out the parts in the order and orientation they were assembled on the Bolt.
- C2 Refer to the Compression Valving Charts. Select the DVS recommended Valving Stacks. You will reuse most of the pre-installed shims.
- C3 Begin reassembly on the Allen Bolt by installing the Spring Seat Washer, Stepped Washer, Check Spring, Check Plate, and Gold Valve with the 3 non-ribbed ports against the Stepped Washer. Note that both sides are flat, there is no recess in the piston.
- C4 Install the Restrictor Stack and the Hi-Speed Compression Stack. **Notice that the largest shim does not cover the ports in the Piston.**
- C5 Install the Base Plate.
- C6 Install the Allen Bolt. Use Loctite (provided) and **torque to 48 in-lbs (0.56 kgf-m).**
- C7 **Inspect the assembled stack.** Hold the valving stack up to the light and look for proper assembly. If there are any problems, disassemble and look for burrs to surface and/or dirt in the valving.



COMPRESSION VALVING CHART

<FCS260802C-140205>

LO-SPEED COMPRESSION *STIFFER* →

cL31	cL32	cL33	cL34
.10x20	.10x20	.10x20	NONE
.10x16	.10x16		
.10x12			

HI-SPEED COMPRESSION *STIFFER* →

cH50	cH51	cH52	cH53	cH54	cH55	cH56	cH57	cH58	cH59
.10x20	.10x20	.10x20	.10x22	(2) .10x22	.15x22	.15x22	.15x22	.15x22	(2) .15x22
.10x16	.10x16	.10x18	.10x20	.10x20	.10x20	.10x22	(2).10x22	(3).10x22	.10x20
.10x12	.10x14	.10x16	.10x18	.10x18	.10x18	.10x20	.10x20	.10x20	.10x18
(3).10x10	.10x12	.10x14	.10x16	.10x16	.10x16	.10x18	.10x18	.10x18	.10x16
	(3).10x10	.10x12	.10x14	.10x14	.10x14	.10x16	.10x16	.10x16	.10x14
		(3).10x10	.10x12	.10x12	.10x12	.10x14	.10x14	.10x14	.10x12
			(3).10x10	(3).10x10	(3).10x10	.10x12	.10x12	.10x12	(3).10x10
						(3).10x10	(3).10x10	(3).10x10	
cH60	cH61	cH62*	cH63*	cH64*	cH65*	cH66*	cH67*	cH68*	cH69*
(2) .15x22	(2) .15x22	(3) .15x22							
.10x22	(2).10x22	10x20	.10x22	(2).10x22	(3).10x22	.10x20	.10x22	(2).10x22	(3).10x22
.10x20	.10x20	.10x18	.10x20	.10x20	.10x20	.10x18	.10x20	.10x20	.10x20
.10x18	.10x18	.10x16	.10x18	.10x18	.10x18	.10x16	.10x18	.10x18	.10x18
.10x16	.10x16	.10x14	.10x16	.10x16	.10x16	.10x14	.10x16	.10x16	.10x16
.10x14	.10x14	.10x12	.10x14	.10x14	.10x14	.10x12	.10x14	.10x14	.10x14
.10x12	.10x12	(3).10x10	.10x12	.10x12	.10x12	(2).15x11	.10x12	.10x12	.10x12
(3).10x10	(3).10x10		(3).10x10	(3).10x10	(3).10x10		(2).15x11	(2).15x11	(2).15x11

* SHIMS NOT PROVIDED IN STANDARD KIT (please call)

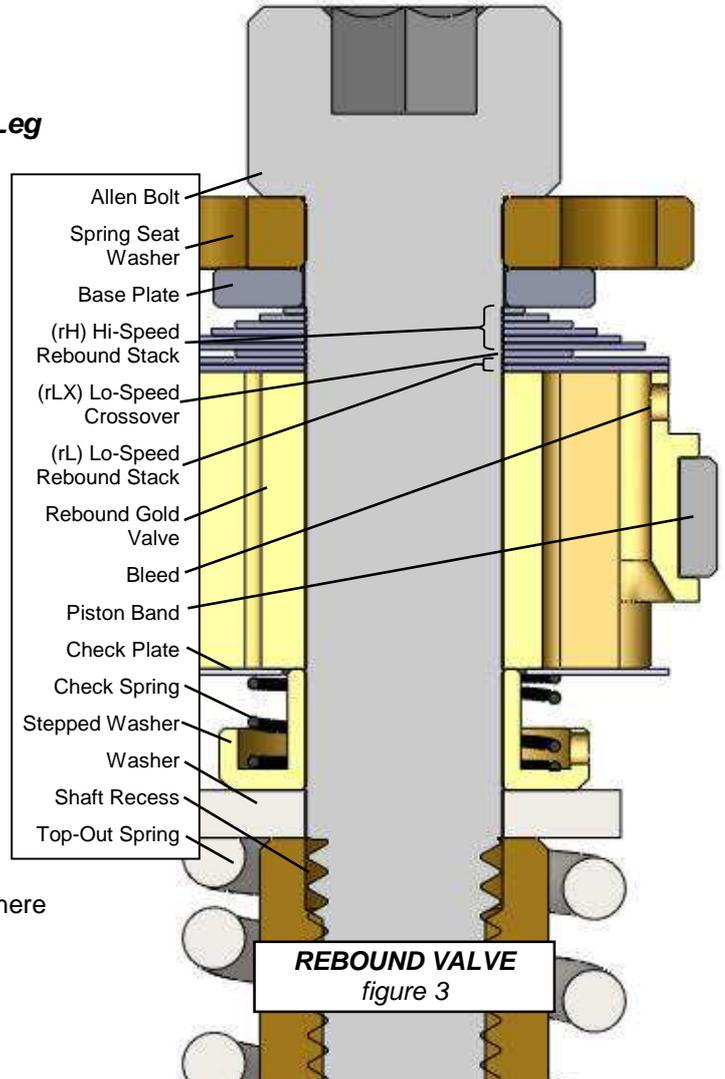
NOTE: All measurements are metric (for inches divide by 25.4).

REBOUND LEG (right)

(figure 3)

The Rebound leg is similar to the Compression Leg except the entire valve stack/piston assembly is inverted.

- R1 Remove the Allen Bolt and disassemble the valving stack. Lay out the parts in the order and orientation they were assembled on the shaft.
- R2 Refer to the DVS Valving Sheet and Rebound Valving Charts. Select the required Valving Stacks. You will reuse many of the pre-installed shims.
- R3 Begin reassembly on the Allen Bolt by installing the Spring Seat Washer and Base Plate. Install the Hi-Speed Rebound Stack starting with the smallest diameter shim and ending with the largest.
- R4 Install the Rebound Crossover (if required) and the Lo-Speed Rebound Stack. **Unlike the Compression Stack notice that the largest shim does cover the ports in the Piston.**
- R5 Install the Gold Valve with the 3 non-ribbed single ports facing towards the Bolt Head. Install the Check Plate, Check Spring, Stepped Washer and the Washer.
- R6 Install the Allen Bolt. Use Loctite (provided) and torque to **48 in-lbs (0.56 kgf-m)**.
- R7 **Inspect the assembled stack.** Hold the valving stack up to the light and look for proper assembly. If there are any problems, disassemble and look for burrs to surface and/or dirt in the valving.



REBOUND VALVING CHART

<FRS260802C-140205> © P Thede
LO-SPEED REBOUND SLOWER →

rL1001	rL1002	rL1003	rL1004	rL1005	rL1006	rL1007	rL1008	rL1009	rL1010
(1).10x22	(2).10x22	.15x22	.15x22	.15x22	.15x22	(2).15x22	(2).15x22	(2).15x22	(2).15x22
			.10x22	(2).10x22	(3).10x22		.10x22	(2).10x22	(3).10x22

LO-SPEED REBOUND CROSSOVER SLOWER →

rLX1012*	rLX1014	rLX1016	rLX1018*
.10x12	.10x14	.10x16	.10x18

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HI-SPEED REBOUND SLOWER →

rH41	rH42	rH43	rH44	rH45	rH46	rH47	rH48	rH49*
.10x22	.15x22							
.10x18	.10x18	.10x20	.10x20	.10x20	.10x20	.10x20	.15x20	.15x20
.10x14	.10x16	.10x18	.10x18	.10x18	.10x18	.15x18	.15x18	.15x18
.10x12	.10x14	.10x16	.10x16	.10x16	.15x16	.15x16	.15x16	.15x16
(3).10x10	.10x12	.10x14	.10x14	.15x14	.15x14	.15x14	.15x14	.15x14
	(3).10x10	.10x12	.15x12	.15x12	.15x12	.15x12	.15x12	.15x12
		(3).10x10						

* SHIMS NOT PROVIDED IN STANDARD KIT (please call)

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.

ASSEMBLY

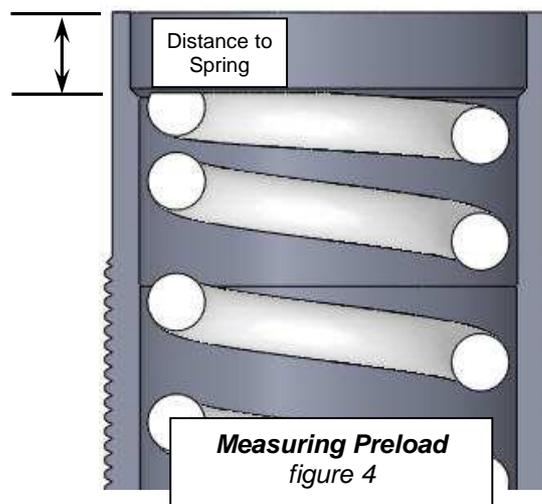
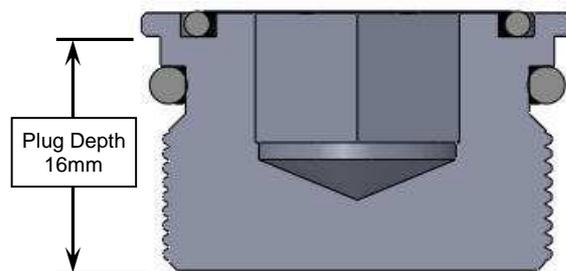
- A1 Hold the Fork Tube inverted. Insert the Compression Damping Rod Assembly with the Top-out Spring already installed on the Rod. **Check the Fork Spring Preload (figure 4)**. Insert the Fork Spring and rest the Fork Spring on the Damping Rod Assembly. **Measure the Distance to the Spring from the end of the chrome Inner Fork Tube. The Plug Depth is 16mm.**

Preload = 16mm — Distance to Spring

Add Washers until you have 4 to 8mm Preload. The Spring should rest on steel.

Repeat with the Rebound (right) leg.

- A2 Screw the Plug into the Fork Tube and tighten it with TMWA 14.
- A3 Clean the external Fork Tube Thread with a wire wheel then contact cleaner. Make sure the Face O-ring is on the Plug. Use Loctite (included) on the Fork Tube Thread and screw it into the Fork Bottom (remember that these are Left Hand Threads). Clamp the Fork Bottom in a vise, use TMWA 14 and torque the Fork Tube to 50 ft-lbs (68 NM). When holding the Fork Bottom in a vise and turning the Fork Tube with the Allen Hex it will be turned clockwise to tighten.
- A4 **Only if you have done a complete disassembly and have split the tubes:** Install the Dust Seal, Seal Clip and Oil Seal along with the Seal Washer, Outer Bushing and Fork Tube Piston Ring on the Inner Fork Tube.
Install the Outer Fork Tube and use a Seal Driver to insert, first the Bushing and, then the Oil Seal into the Outer Tube. Install the Seal Clip and the Dust Seal.
- A5 **Fill the Fork with Ultra Slick USF-05 (5w)**. It helps to hold your palm over the end of the Outer Fork Tube and compress the fork. This forces the oil into the Lower Fork Tube.
- A6 Install the Round Wire Circlip into the groove near the top of the Rod. Install the Bottom-out Plate, Rubber Bottom-out Bumper and then the Fork Cap.
- A7 Use Loctite on the M8 Allen Bolt at the cap. **Screw the Allen Bolt onto the Damping Rod and tighten it. Tighten the Fork Cap.**
- A8 Install the forks on the bike.
- A9 If you have **any questions** please call Tech Support at 951.279.6655.



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 .
- **If your valving needs to be stiffer**, move to the right on the Compression Valving chart. If the forks are too firm, go to the left.
- **Spring rate affects ride height and dive.**
- **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 on the outer chamber by 5cc.