RACE TECH

FORK COMPRESSION & REBOUND GOLD VALVE INSTALLATION
HONDA ST1300 2003+
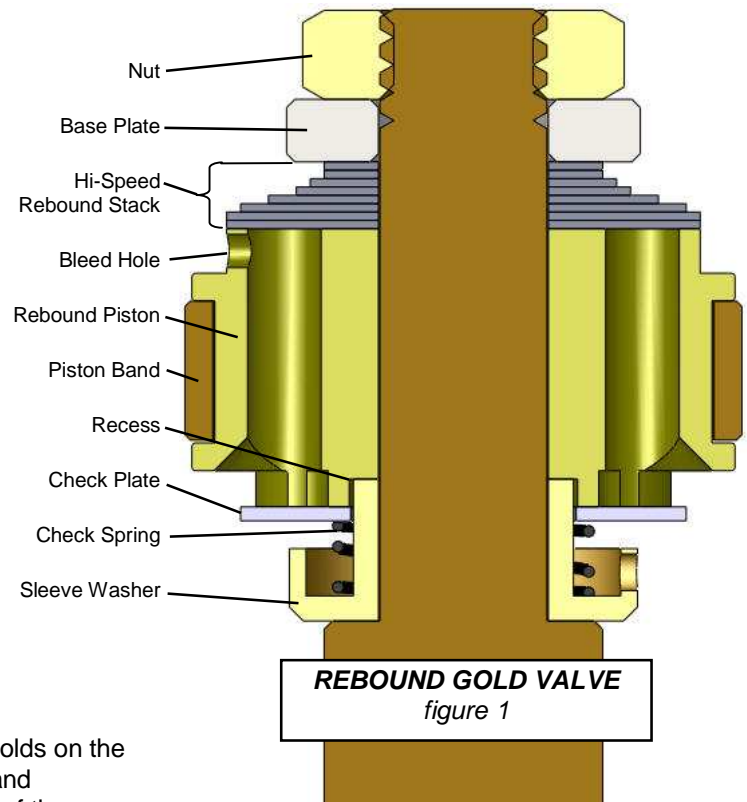
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<IP FMGV S2052C, FMGV S2057C.doc> P.Thede 2.4.14   3 pgs

TOOLS REQUIRED: In addition to the Service Manual along with common hand tools required for disassembly and assembly we recommend; TFSH 10 Shaft Holding Tool, TFBT 1014 Bleed Tool, TFSD 46 Seal Driver, Hi-Strength Loctite (provided), 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.** Push the compression valve into the cartridge about 1" (25mm). This allows access to the retaining clip. Remove the clip with a small screwdriver. Next screw the bolt back into the base to pull it out.

D3 **Remove the rebound rod from the cartridge.** On some early models there is a Bottom-out Piston attached to the Damping Rod on the outside of the cartridge that must be removed. Being very careful not to damage the rod, hold the rod using the TFSH 10 Shaft Holding Tool. The Bottom-out Piston is held onto the rod with peening over a circlip on the rod (the circlip is not visible until the piston is removed). Spread the peening over the circlip by tapping down on the piston using a hammer and a 12" (300mm) length of ½" (12mm) electrical conduit (or some other piece of pipe) as a driver (or you can use a small chisel). This will spread the peening. Save the circlip and piston, they will be reused. Slide the rod out of the cartridge tube.

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.

Nut
Base Plate
Hi-Speed Rebound Stack
Bleed Hole
Rebound Piston
Piston Band
Recess
Check Plate
Check Spring
Sleeve Washer

REBOUND GOLD VALVE
figure 1

VALVING

V1 **To obtain custom valving settings log on to www.racetech.com, go to Digital Valving Search, insert your Access Code (printed on the top of the first page), input your personal specifications and print the DVS Custom Setup Sheet. 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.**

V2 **Assemble the Rebound Gold Valve**. Start with the Sleeve Washer, Check Spring, Check Plate, and Rebound Gold Valve (recess towards the Check Plate). Next install the **Rebound Valving Shim Stack (*in supplied shim packs).*** Install the Base Plate and Nut). Use Loctite and torque the Nut to 30 in-lbs (0.35 kgf-m).

Note: ALL GOLD VALVES supplied in this kit come with PRE-DRILLED BLEED HOLES for the ST1300.

Polish the damping rods with 400 grit (very fine) or finer sandpaper. This will drastically improve bushing life and reduce drag as well. The important part is the lower half of the rod as that is the part that contacts the damping rod bushing.

V3 **Install the Gold Valve Compression Assembly** into each cartridge. Insert the circlip into the groove, screw the bolt back in and pull to seat the assembly on the circlip. *Valving and bleeds are <u>pre-assembled with cH34 standard valving</u> for aggressive riding/firm fork feel. For a plusher ride, more touring oriented riders may prefer to use optional <u>cH32 valving</u> from the Compression Valving Chart below.*

REASSEMBLY

R2 **Reassemble the forks according to your manual.** NOTE: *2003 Models use kit FMGV S2052C with a Short Compression Base. 2004 and later use FMGV S2057C with a Long Compression Base. See page 3 for comparison. Make sure you have the correct kit for your model OR swap the Gold Valve Assembly over to the Stock Compression Base.*

R3 **Set the fork spring preload.** *Follow the instructions in your Race Tech Fork Spring Kit.*

Note: You must have washers on both ends of the spacer. <u>The spacer must not rest directly on the spring or the cap</u>*.*

R4 **Install the fork fluid.** Pump the cartridge rod using the TFBT 1014 Bleed Tool to bleed the air out.

> ***Set the oil level to 4.3" (110mm) using USF-05 Suspension Fluid*** (or 5wt equivalent) with the fork and cartridge rod completely bottomed and the spring out.

R5 **Install Fork spring** with a washer, spacer, and washer.

R6 **Install the cap on the cartridge rod.** Use Loctite on the damping rod thread at the cap and torque it to manufacturer's specs.

FORK INSTALLATION

NOTE: When the forks are reinstalled on the bike it is very important to **align the fork tubes on the axle** so they won't bind. First, tighten the axle all the way, and then pump the forks with the right-hand axle clamp loose. Finally, tighten the axle clamp.

Valving Charts

Compression - <u>Pre-assembled with cH34 on the base valve for a Sporting ride.</u>
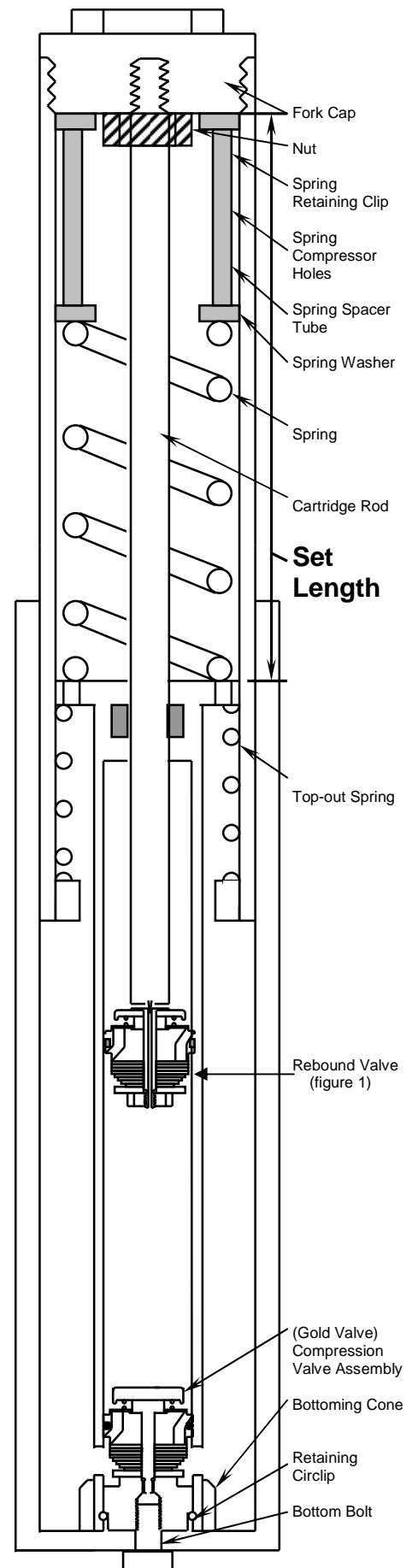*Use **optional cH32 valving** for a plusher/softer ride. **Stiffer →***

cH32 (plush)	cH33	**cH34 (Standard)**	cH35
(2).15x17	(3).15x17	**(4).15x17**	(5).15x17
.10x15	.10x15	**.10x15**	.10x15
.10x13	.10x13	**.10x13**	.10x13
.10x12	.10x12	**.10x12**	.10x12
.10x11	.10x11	**.10x11**	.10x11
.10x10	.10x10	**.10x10**	.10x10
.10x9	.10x9	**.10x9**	.10x9

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

Rebound - rH19 Standard - contained in the shim pack, please verify correct order upon installation at the rebound valve. ***Slower →***

rH17	rH18	rH19	rH20
(6) .15x17	(7) .15x17	(8) .15x17	(9) .15x17
.10x15	.10x15	.10x15	.10x15
.10x12	.10x12	.10x12	.10x12
.10x9	.10x9	.10x9	.10x9

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

Fork Cap
Nut
Spring Retaining Clip
Spring Compressor Holes
Spring Spacer Tube
Spring Washer
Spring
Cartridge Rod
Set Length
Top-out Spring
Rebound Valve (figure 1)
(Gold Valve) Compression Valve Assembly
Bottoming Cone
Retaining Circlip
Bottom Bolt

2004+ Race Tech Complete Compression Valve Assembly Kit FMGV S2057C (Long Base)

2003 Race Tech Complete Compression Valve Assembly Kit FMGV S2052C (Short Base)

For assistance call Tech Support 951.279.6655

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Visit www.racetech.com, go to Digital Valving Search with your Access Code (from the top of page 1) for your personal computer calculated valving setup!