

# HONDA CRF 150/230 F OWNERS MANUAL







# CONGRATULATIONS

Thank you for choosing FOX 1.5 PODIUM RC2 FACTORY SERIES shock absorbers for your motorcycle. In doing so, we believe that you have chosen the finest suspension products in the world. FOX shocks have been designed, tested and manufactured in the USA for more than 40 years.

As a consumer and supporter of FOX products, you need to be aware of the importance of setting up your shocks correctly to ensure maximum performance. This manual provides step-by-step instructions on how to set-up and maintain your shocks. It is a good idea to keep your proof of purchase with this manual and refer to it for service and warranty issues.

# **CONSUMER SAFETY**

WARNING: Riding a Motorcycle can be dangerous and can result in DEATH OR SERIOUS INJURY.

Take responsibility for yourself and others seriously, and read the following safety tips:

- Keep your bike and its suspension systems in optimal working condition.
- Always wear protective clothing, eye protection and a helmet.
- Know your limits and ride within them!

THE FOX 1.5 PODIUM RC2 shock contains a high-pressure nitrogen charge. The shock should only be opened by a FOX technician.

IMPORTANT: Orienting the shocks improperly can cause interference with the action of the bikes suspension resulting in possible loss of control, injury or death. If you do not possess the tools or the technical knowledge to mount your FOX shocks, have it performed by an authorized dealer.

WARNING: Opening a nitrogen pressurized shock can be dangerous and can result in SERIOUS INJURY OR DEATH. NEVER attempt to disassemble the damper of your 1.5 Podium RC2 shock. Do not puncture or incinerate the shock absorber damper portion. Always wear eye protection when installing and adjusting your shock absorber.



### 1.5 PODIUM RC-2



FOX 1.5 PODIUM RC2 shock absorbers set the industry standard for performance and durability. Equipped with external low speed compression and high speed compression (DSC) adjuster, external rebound adjuster, inside is a velocity-sensitive, shimmed damping system. The damper contains high pressure nitrogen gas and FOX high viscosity index shock oil separated by an Internal Floating Piston system. This helps to ensure a consistent, fade-free damping in most riding conditions.

1.5 PODIUM RC2 shocks are built using 6061-T6 aluminum for light weight and strength. The heat treated steel chrome plated damper shaft is super-finished for low friction and long seal life. All of the seals and wipers are engineered specifically for the 1.5 PODIUM RC2. The body and reservoir are Genuine Kashima coated for reduced friction and long seal life.



# **INSTALLATION**



**STEP 1** Remove seat, left side plate and stock shock. Pull out battery box if equipped. Install Podium RC-2. During installation support shock absorber at all times. Note: **DO NOT SUSPENDED WITH HOSE.** 

**STEP 2** Install upper eyelet mounting bolt. Reservoir will exit left side of motorcycle. Re-install the lower link and mounting hardware. Torque all hardware to manufacturers specifications as noted in owners manual.

**STEP 3** Slide reservoir mounting bracket over the reservoir. Note: **DO NOT TORQUE AT THIS POINT.** 



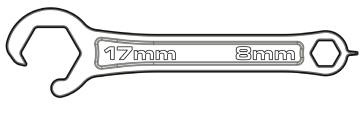


FOX reservoir mounting plate. Torque all hardware to manufacturers specifications.

STEP 4 Replace left rear engine mounting plate with STEP 5 Position reservoir and apply 45±5 inch lbs of torque to reservoir clamp.

STEP 6 Re-install battery box, side plate and seat.

# **OPTIONS**



398-00-619 DSC ADJUSTER WRENCH



# **TUNING THE 1.5 PODIUM RC2**

Go out and ride. Tune your senses to what the rear suspension is doing. Sometimes you know the motorcycle isn't handling quite right but, for example it maybe hard to tell whether the problem is too little rebound damping of too much compression damping. Sometimes the difference is in "feel" is subtle.

Some of the distinctions are minute. If the damping doesn't feel quite right, make your best guess as to what change will help, then try it. If the handling doesn't improve, make a change in the opposite direction. Keep experimenting with the adjusters until the ride feels the best.

It is a common practice to perform static tests on your shock absorber by one of two ways.

For Low Speed Adjustments only perform one of the following tests.

UN-installed shock absorber stroke the shock absorber by hand and notice the damping resistance.

Installed shock absorber push down on the back of the motorcycle and observe the shocks response. Both tests are useful but limited to the Low Speed circuit in the shock absorber.

# **TUNING RECOMMENDATIONS**

The percentage change in damping when going from one click to the next is fairly small. This is so you can fine tune your shock. Therefore, FOX recommends making changes of two to three clicks at a time. For example, if after testing you feel the compression is too soft, try a two click change (clockwise on the compression adjuster) if that feels just right, then you have it tuned. On the other hand, if it feels too stiff, the you have it "bracketed", go back one click (counterclockwise) and it should feel just right. These recommendations apply to both rebound and compression damping.

# **REBOUND DAMPING**

Rebound damping controls the rate at which the shock returns after it has been compressed. The proper rebound setting is a personal preference, and changes with rider weight, riding style and conditions. As a rule of thumb, the rebound should be as fast as possible without kicking back and pushing the rider off the seat. The rebound adjuster screw is located on the shaft end of the shock absorber, and can be adjusted with a flat blade screwdriver.

For slower rebound, turn adjuster clockwise. For faster rebound turn counterclockwise.



REBOUND DAMPING TROUBLESHOOTING					
Symptom	Remedy				
- Bucking	Set slower rebound				
- Tops out to hard					
- Packing in repetitive bumps	Set faster rebound				
- Chatter					

REBOUND ADJUSTER 605-01-160 rev A



#### Symptoms of Too Much Rebound Damping

The rear suspension tends to washout or slide-out on hard-packed sweeper turns with small bumps. Especially off chamber "washboard" turns. The rear suspension skips around too much when braking on washboard sections and the rear tire does not develop good braking power. Poor rear wheel traction when accelerating over small repetitive bumps (washboard) sections. The rear suspension gets harsh and hard to control when hitting series of medium or large rolling bumps at high speed. The first few bumps in the series don't seem bad, but after that the rear suspension gets harsher and starts to jump around.

TOO MUCH REBOUND DAMPING PREVENTS THE WHEEL FROM EXTENDING QUICKLY ENOUGH BEFORE HITTING THE NEXT BUMP (PACKING) AFTER THE FIFTH OR SIXTH BUMP, YOU MAY HAVE MINIMAL TRAVEL LEFT.

#### Symptoms of Too Little Rebound Damping

These symptoms are similar to the ones in previous section: there is a tendency to slide-out on washboard turns and poor braking over washboard sections. The critical difference in this case is that the back of the motorcycle is bouncing up and down to much, whereas with too much rebound damping it had poor traction. There is too much kicking up. Especially when braking on downhill sections with small bumps or washboard surface.

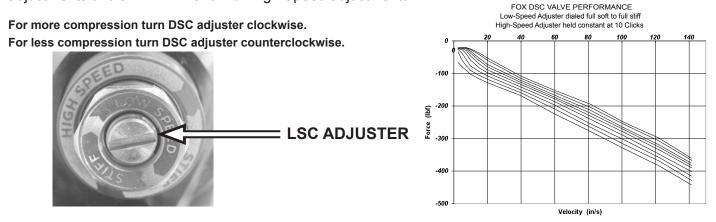
The rear suspension kicks up when hitting large rolling-type bumps at high speeds. Kick-up is especially noticeable on steep downhills with rolling bumps. Also, the ear end of the bike may kick up after landing a jump.

THE SHOCK WILL EXTEND TOO QUICKLY IF THERE IS NOT ENOUGH REBOUND DAMPING TO CONTROL THE SPRING EXTENSION FORCE.

# **COMPRESSION DAMPING**

In our continuous efforts to improve our products, we have added a new DSC (dual speed compression) adjuster. The DSC adjuster along with the entire shock system will allow you to fine tune your ride to a wider range of riding conditions. Compression damping controls the rate at which the shock compresses when the motorcycle encounters a bump. The proper compression setting is a personal preference and changes with rider weight, riding styles and track conditions.

Tune the DSC compression adjuster with DSC wrench or use a flat blade screwdriver for Low Speed adjustments and a 17mm wrench for High Speed adjustments.

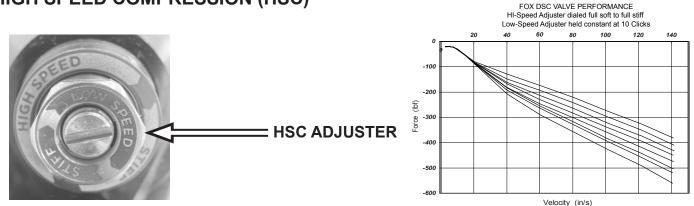


# FOR REDEFINE YOUR LIMITS

### LOW SPEED COMPRESSION (LSC)

The LSC adjuster primarily affects the compression damping during slow suspension movements such a g-outs or smooth jump landings. It also affects wheel traction and the harshness or plushness of the vehicle. Note:(low speed has nothing to do with the speed of your motorcycle). Choose the LSC setting that provide the best traction without excessive harshness or excessive wallow.

#### **HIGH SPEED COMPRESSION (HSC)**



The HSC adjuster mainly affect the compression damping during medium to fast suspension movements such as steep jump faces harsh flat landings and aggressive whoops. The goal is to run as little high-speed compression damping as possible without bottoming.

Note: BE CAREFUL NOT TO OVER TIGHTEN THE HIGH SPEED ADJUSTER IF YOU ARE USING A 17mm WRENCH. DOING SO WILL DAMAGE THE DSC (DUAL SPEED COMPRESSION) ADJUSTER.

COMPRESSION DAMPING TROUBLESHOOTING					
Symptom	Remedy				
- Rigid, harsh ride	Set less compression				
- Bottoms-out easily	Set more compression				

#### Symptoms of Too Much Compression Damping

Rear suspension is harsh over small bumps.

Shock seems to stay almost rigid instead of absorbing the bumps. Especially noticeable on downhill bumps. Rear suspension is harsh at high speeds over large or medium square edge bumps.

The shock stays too rigid and does not use enough travel to absorb the bumps.

The shock rarely or never seems to bottom-out, even off the biggest jumps.

#### Symptoms of Too Little Compression Damping

The shock bottoms-out on medium sized bumps and in the bottom deep or smooth gullies, or rising portions of deep rolling sand whoops.

At high speed the rear suspension takes medium square-edged bumps smoothly, but bottoms out easily on larger bumps.

Bottoms out easily off jumps and at high speeds over large square-edged bumps, kicking up the rear suspension violently. This is known as a deflection kick (not related to rebound).

The rear suspension may also feel like it wallows too much under acceleration (excessive up and down movement on smooth surfaces).



# TUNING

DATE	COMMENTS	FULL EXTENSION	RIDE HEIGHT	SAG	SPRING PRE- LOAD	LSC ADJ	HSC ADJ	REB ADJ



# MAINTENANCE

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE PERFORMANCE AND RELIABILITY OF YOUR SHOCK ABSORBERS.

To avoid corrosion, you should keep the shocks and springs clean and free of dirt and moisture. The wiper seal will clean deposits from the shaft, but the shock won't necessarily fully compress every time. This means you could accumulate dirt at the bottom of the shaft and underneath the jounce bumper. Make sure you clean these areas completely to prevent shaft corrosion. Avoid using a high-pressure washer near the shaft seals or adjusters, as this could drive dirt inside the shock.

Make sure the ends of the spring and shock threads are clean and free of dirt before adjusting the preload ring this will make the adjustment easier and reduce wear.

Ideally, the shocks should be clean around the adjusters when changing the rebound damping setting. A small blast of contact cleaner or brake cleaner before making adjustments will keep these parts clean and operating smoothly for years.

# **REBUILD / SERVICE INTERVALS**

Just like the oil in your car engine, the oil in your shock absorber breaks down over time and must be replaced. The service interval depends on how frequently and severely the bike is ridden. For optimum performance racing applications the shocks may require rebuilding every 10-20 hours of use. In non-racing environments to keep your shocks performing at optimum performance we recommend at least every 10,000 miles or 700-1000 hrs of use.

WARNING: Shock rebuilds take special knowledge and tools. It is essential that this is performed by an authorized FOX technician or service center.

### WARRANTY

All FOX products have a one-year warranty on defects in materials or workmanship. Please view the full warranty terms and conditions at www.ridefox.com/ps-warranty. Contact a FOX Warranty representative at 1.800.FOX.SHOX (1.800.369.7469).

### SERVICE

Suspension Service Information on-line RA Request Form. http://www.ridefox.com/service Contact a FOX Service Center at 1.831.740.4619 or psservicemw@ridefox.com To receive a return authorization number before shipping the shocks to one of the following service centers:

> FOX Powersports Service 130 Hanger Way Watsonville, CA 95076

FOX Midwest Service Center 13461 Dogwood Drive Baxter, MN 56425