



FOX
RACING SHOX

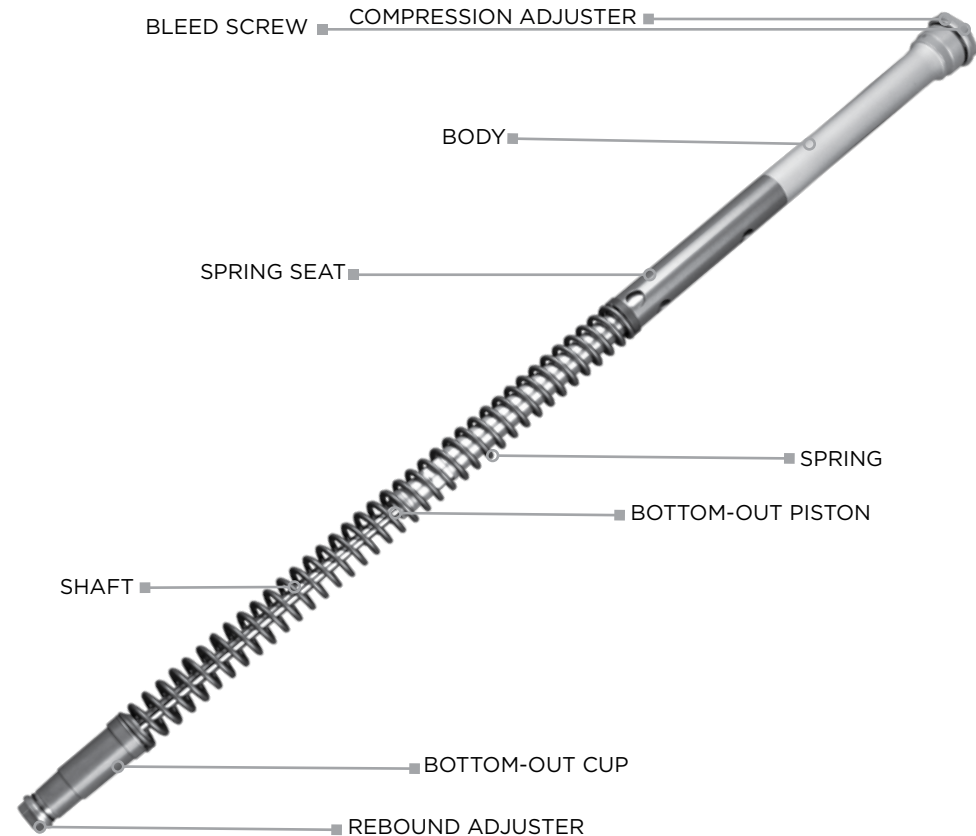
**MINI-MOTO
MX-C**
OWNER'S MANUAL

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NOTICE: THE MOTORCYCLES PICTURED IN THIS MANUAL MAY OR MAY NOT RESEMBLE YOUR ACTUAL MOTORCYCLE. IN ANY CASE, THE PROCEDURES OUTLINED WILL CORRECTLY ENABLE YOU TO SET UP, MOUNT AND TUNE THE FOX MX-C TO YOUR PARTICULAR MODEL.

MX-C	
features	<ul style="list-style-type: none"> > Lightweight > Race-proven oil pressurized damping system > External rebound damping adjuster > External compression damping adjuster > Mid-valve damping technology > Bottom-Out damping technology > 100% rebuildable and revalveable > 1-Year factory limited warranty > 90-day valving guarantee > Easy to install (no fork modifications)
kit contents	<ul style="list-style-type: none"> MX-C Fork Cartridge X2 Owner's Manual Decals



DENOTES INFORMATION THAT, IF NOT FOLLOWED, CAN CAUSE DAMAGE TO YOUR FORK OR LEAD TO SERIOUS INJURY OR DEATH.



DENOTES INFORMATION THAT MAY NOT BE OBVIOUS OR THAT CAN HELP THE RIDER OUT WITH A DIFFICULT SITUATION.

CONGRATULATIONS!

Thank you for choosing the FOX RACING SHOX MX-C (Moto-X Cartridge) for your motorcycle. In doing so, you have chosen the finest suspension fork cartridge in the world. FOX Racing Shox products are designed, tested and manufactured by the finest professionals in the industry in Santa Cruz County, California, USA. Your new MX-C replaces the older style open bath cartridge with a higher performing sealed unit. The sealed cartridge performs more efficiently than the open bath design because it separates the oil used for damping from the oil in the outer fork leg. By pressurizing the oil in the damping cartridge we are able to optimize damping forces and sustain those forces for a longer time. This also keeps any dirt from getting its way into the damping circuit and causing poor performance.

This manual does not contain step-by-step detailed service instructions for a reason: FOX recommends that detailed service be performed by FOX Racing Shox or a qualified suspension professional.

CONSUMER SAFETY



RIDING A MOTORCYCLE CAN BE DANGEROUS AND CAN RESULT IN DEATH OR SERIOUS INJURY.

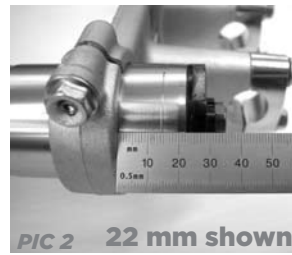
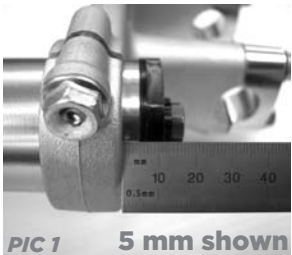
Take your responsibility to yourself and others seriously, and heed the following safety tips:

- > Keep your motorcycle and suspension system in optimal working condition.
- > Wear protective clothing, eye protection and always fasten your helmet before you ride.
- > Know and ride within your limits.

SETTING UP THE MX-C

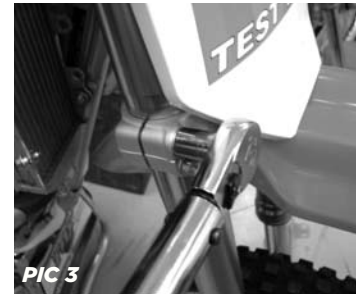
FORK INSTALLATION

1. Put bike on a stand that will enable front tire to be off the ground. Start with setting the same fork height you recorded before removing the fork legs.
2. Install forks in triple clamps, The height at which the forks are in the triple clamps is a critical tuning parameter. **Lowering** the fork in the triple clamps will raise the bike and increase the rake of the fork. This will increase the bikes stability but may make it push in the turns. **Raising** the forks in the triple clamps will lower the front of the bike and decrease the rake of the fork. This will decrease the bikes stability but it may cause oversteer in corners. Below we display a suggested measuring method to record your current height. (See pic 1-2)



MEASURE FORK FROM TOP FORK CLAMP TO THE TOP OF THE UPPER FORK LEG TUBE AS SHOWN ABOVE.

3. Tighten each bolt (in an alternating fashion) in the upper fork clamp to the specified manufacturer's torque.
4. Tighten the lower fork clamp pinch bolts to the specified manufacturer's torque. (Over tightening of the lower pinch bolts may result in a mid-stroke harshness condition). (See pic 3)
5. Install front wheel assembly, Sometimes it helps to pry the brake pads apart a little with a screw driver before bringing the wheel into position)
6. Proceed and fully tighten the axel nut to the specified manufacturer's torque. If your bike is fitted with pinch bolts, tighten to manufacturer's specified torque. (See pic 4)
7. Spin the front wheel and abruptly apply the front brake. Repeat this a few times to make sure your brakes are functional before riding.



AN IMPROPERLY MOUNTED FORK CAN FAIL PREMATURELY, CAUSING LOSS OF CONTROL OF THE MOTORCYCLE. THIS CAN RESULT IN SERIOUS OR FATAL INJURIES.



OVERTIGHTENING THE PINCH BOLTS IN THE FORK CLAMP MAY RESULT IN DAMAGED FORK TUBES OR POOR SUSPENSION PERFORMANCE.

LOCATION AND FUNCTION OF THE ADJUSTERS



THE COMPRESSION ADJUSTER WAS ON THE BOTTOM OF YOUR STOCK FORK BUT HAS NOW BEEN MOVED TO THE TOP OF THE FORK LEG.



COMPRESSION DAMPING

The blue compression adjuster knob is located on the top of the fork at the triple clamps and controls how fast the fork compresses. Turning the knob clockwise will give you **MORE** compression and a firmer ride. The compression adjuster has 20 clicks of adjustment and 1 revolution will give you 6 clicks. Adjust by turning 2 clicks at a time. For current settings, refer to your **TUNING DECAL** on your fork. (The decal is shown on page 6.) Settings are counted as clicks out from full in.



COMPRESSION DAMPING TROUBLESHOOTING

Symptom	Remedy
- Fork is bottoming	Increase compression
- Fork feels harsh	Decrease compression



ALWAYS REMEMBER TO MAKE ONE CHANGE AT A TIME WHEN TUNING YOUR FORK AND KEEP NOTES OF HOW MANY CLICKS OF ADJUSTMENT YOU ARE CURRENTLY RIDING WITH. THIS WILL GIVE YOU AN IDEA OF THE EFFECTS OF ADJUSTMENTS.



THE REBOUND ADJUSTER WAS ON TOP OF YOUR STOCK FORK BUT HAS NOW BEEN MOVED TO THE BOTTOM OF THE FORK LEG.



REBOUND DAMPING

The rebound adjuster is located in a red housing at the bottom of the fork leg, it controls how fast the fork rebounds from a compression event. Turning the adjuster clockwise will give you **MORE** rebound and a slower extending fork. The rebound adjuster has 20 clicks of adjustment and 1 revolution will give you 6 clicks. Adjust by turning 2 clicks at a time. For current settings, refer to your **TUNING DECAL** on your fork. (The decal is shown on page 6.) Settings are counted as clicks out from full in.



REBOUND DAMPING TROUBLESHOOTING

Symptom	Remedy
- Fork feels springy	Increase rebound
- Fork is packing in repetitive bumps	Decrease rebound



FORK REBOUND HELPS TO SET THE FRONT END RIDE HEIGHT DURING CORNERING. REBOUND SET TOO FAST WILL CAUSE THE FRONT END TO FEEL HIGH; THE FRONT WHEEL WILL TEND TO PUSH OR "UNDER-STEER" - SLIDING OUT ON SMOOTH SWEEPING TURNS.

TUNING THE MX-C



PRIOR TO MAKING ANY FINE TUNING ADJUSTMENTS TO YOUR FORK, BE SURE TO CHECK FRONT AND REAR TIRE PRESSURES.

Go out and ride. Tune your senses to what the bike's front wheel is doing. Sometimes you know the motorcycle isn't handling quite right but it may be hard to tell whether the problem is too little rebound damping or too much compression damping. Sometimes the difference in "feel" is subtle. It is common practice for riders to "test" fork damping by pushing down on the front of the motorcycle and observe the fork response, this test is useful, but very limited. You should be aware that this test only involves low-speed damping action. It will tell you nothing about fork damping at medium and high speeds.

OIL HEIGHT TUNING

Outer chamber oil volume must be accurately and equally adjusted on both fork legs. FOX will adjust both fork legs to a pre set amount when your MX-C is installed. We recommend that you use this for the basic setup. If fork oil is added or reduced, it should be done with a **5w** suspension fluid in **5ml** increments. Avoid mixing different types of fork oil as they may not be compatible and cause poor sliding performance of the fork tubes or deteriorate the rubber sealing components. Fork oil height adjusts the progression of the spring deep into travel.

To determine your current oil level and adjuster settings on your new MX-C, refer to the tuning decal located on your fork leg. FOX will fill out this information during the installation of your cartridge. **(Pic 5)**

FOX

DATE: _____

RIDER: _____

REB: _____ COMP: _____
(CLICKS OUT FROM FULL IN)

OIL LEVEL: _____

SPRING RATE: _____

VALVE CODE: _____

FORK HEIGHT IN
TRIPLE CLAMP: _____

PIC 5

TUNING SUGGESTIONS

The percentage change in damping when going from one click to the next click is fairly small. This is so you can really fine tune your fork. A one click change is hard to notice, therefore, FOX recommends making changes of two clicks at a time. For example, if after testing you feel compression is too soft, try a two-click change (clockwise on compression adjuster). If that feels just right, then you've got it. On the other hand, if that now feels a little too stiff, then you've got it "bracketed"; go back one click (counterclockwise) and it should now feel just right.

These recommendations apply to both rebound and compression damping.

DIAL IN REBOUND FIRST

Find a table-top jump that you can hit consistently and safely, landing as flat as possible.

As a general rule you want as little rebound damping as possible so that the suspension returns quickly, but still enough rebound damping that the front of the motorcycle does not oscillate upon landing. The fork should return quickly to ride-height and then remain still. If the fork continues to oscillate several times after landing, try increasing the rebound damping. If the fork does not oscillate after landing, try decreasing the rebound damping. This procedure should allow you to close in (or bracket) on the desired rebound damping setting.

For increased rebound damping, turn the adjuster clockwise.

For decreased rebound damping, turn the adjuster counterclockwise.

DIAL IN COMPRESSION SECOND

Compression damping is much more of a personal preference issue, and is therefore more difficult to give a generic suggestion for initial setup. Compression damping also depends on the type of riding. (SX normally needs more compression than XC) as an example. The best advice here is to experiment and keep track of the changes. Don't hesitate to adjust compression for different riding conditions and situations.

For increased compression damping, turn the adjuster clockwise.

For decreased compression damping, turn the adjuster counterclockwise.

SUSPENSION TUNING TROUBLESHOOTING

Symptom	Remedy
Feels too soft overall and bottoms	-Increase compression.
	-Replace with stiffer spring rate.
	-Add fork oil to outer chamber.
Feels too hard overall	-Decrease compression.
	-Replace with softer spring rate.
	-Remove fork oil from outer chamber.
Feels too harsh at the beginning or deflects off small bumps.	-Decrease compression.
Feels too soft near the end of the stroke.	-Add fork oil to outer chamber.
Feels wallowy and unstable or bounces on jump landings	-Increase rebound.

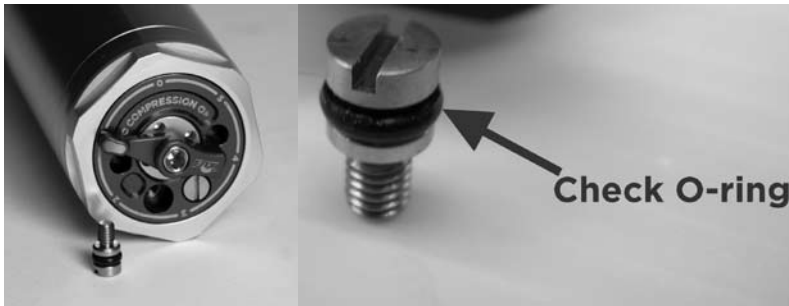
BLEEDING THE MX-C



AS A RULE OF THUMB, UNTHREAD THE BLEED SCREW BEFORE EVERY RACE. DO THIS ONLY WHEN THE FORK IS AT ROOM TEMPERATURE AND FULLY EXTENDED. THIS RELIEVES THE EXCESS PRESSURE THAT NORMALLY BUILDS UP IN THE FORK OVER TIME.

BLEEDING PROCEDURE

1. Place the bike on a stand so that the front wheel is off of the ground.
2. Make sure the top cap is clean before removing bleed screw.
3. Remove the bleed screw from the top of the fork using a flat blade screwdriver. (You might hear air escape when the o-ring seal is released).
4. Check o-ring on screw for any dirt, cracks or tears and replace or clean as needed
5. Reinstall bleed screw.



IT IS NORMAL TO HEAR AIR ESCAPE WHEN THE BLEED SCREW IS UNTHREADED. IT DOES NOT MEAN THAT YOUR FORK IS DEFECTIVE OR DAMAGED IN ANY WAY.



THE MX-C REQUIRES SPECIAL EQUIPMENT TO ACCESS AND ALTER THE INTERNAL PARTS OF YOUR CARTRIDGE. DO NOT TRY TO OPEN YOUR FORK. FOR TECHNICAL SUPPORT CONTACT A FOX RACING SHOX CERTIFIED TECHNICIAN.

TUNING NOTES:

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QUICK REFERENCE GUIDE

MX-C		
terms used	<p>SUSPENSION</p> <ul style="list-style-type: none"> > Compression: downward travel of the suspension. Actions that move the endpoints of the shock closer together. > Compression damping: oil damping resistance felt when trying to compress the shock. > Emulsion shock: shock without an IFP (Internal Floating Piston) separating the oil and nitrogen. > Frame clearance: distance between the frame and other moving parts, like the shock. > Negative travel: distance the suspension or shock extends from the static ride height. Also referred to as 'free sag'. > Preload: initial force on the spring. Preload is used to adjust rider sag. > Ride height: with the rider on the bike, the basic stance of the bike. Usually measured from the ground to some point on the bike frame. > Rebound: force required to extend the shock or suspension. Can also refer to the extending action of the suspension. > Rebound damping: oil damping resistance that controls the rate at which the shock extends after being compressed. > Rider sag: amount the shock compresses with the rider sitting on the bike in a normal riding position. Best measured with a friend holding your cycle up. > Free sag: amount that the bike "sits" into travel. Usually measured from the ground to a point on the frame, or as shock stroke, and without a rider on the bike. > Stroke: amount of shock travel. > Travel: total amount the shock compresses, as measured from eye-to-eye. > Wheel travel: distance the wheel moves when the suspension is cycled through its full travel. <p>RIDING</p> <ul style="list-style-type: none"> > Bottoming: vehicle has bottomed-out when the suspension reaches the limit of its travel and stops further downward motion. > Bucking: kicking motion on a rider after a bump or jump landing. > Chatter: small bumps similar to braking bumps prior to a corner or berm. Often refers to the harshness felt when riding over small, closely spaced bumps. > Fading: slow loss of shock damping usually due to heat. > Packing: when the shock does not return quickly enough to adequately absorb the next bump in a repetitive bump sequence. > Spiking: sharp impact cause by a square-edge bump. > Squat: when the rear of the vehicle "sits" down either due to weight transfer or driveline forces. > Stiction: initial force that needs to be overcome to start the suspension stroke. > Topping-out: when the suspension is fully extended. <p>FORK</p> <ul style="list-style-type: none"> > Fork clamp: at the front end of the motorcycle where the fork mounts to the bike. > Spring rate: force required to compress a spring one inch. Measured in lb/in. or Kg/mm. > Valving: refers to the combination of shims or damping valves on the piston face used to achieve a specific ride characteristic. 	
service intervals	<ul style="list-style-type: none"> > Before every ride: Wipe mud and debris off fork exterior > Monthly: Check your fork seals and wipers > Annually: Clean and inspect your fork. > Every ride season: Fork rebuild by a FOX Certified Technician or FOX Racing Shox 	
tools and supplies	<ul style="list-style-type: none"> > Flat-blade screwdriver > Measuring tape > Ratchet 	
contact info	<p>FOX Racing Shox 130 Hangar Way Watsonville, CA 95076 USA Phone: 1.831.274.6500 North America: 1.800.FOX.SHOX (369.7469) Fax: 1.831.768.7026 E-mail: info@foxracingshox.com Website: www.foxracingshox.com Business hours: Monday - Friday 8 a.m. - 5 p.m. PST</p>	<p>method of payment & shipping</p> <p>Visa, MasterCard, Cashier's Check</p> <p>FOX Racing Shox uses UPS Ground Service within the USA.</p>
disclaimer	<p>FOX Racing Shox is not responsible for any damages to you or others arising from riding, transporting, or other use of your PODIUM X shock. In the event that your shock breaks or malfunctions, FOX Racing Shox shall have no liability beyond the repair or replacement of your shock pursuant to the terms outlined in the warranty provisions of this manual.</p>	<p>specific exclusions from warranty</p> <ul style="list-style-type: none"> > Parts replaced due to normal wear and tear and/or routine maintenance > Parts subject to normal wear and tear and/or routine maintenance > Bushings > Seals (after the 90-day seal warranty period expires) > Suspension fluids > Crash damage
warranty policy	<p>The factory warranty period for your shock is one year (two years for countries in the EU) from the original date of purchase of the shock or motorcycle. A copy of the original purchase receipt must accompany any shock being considered for warranty service. Warranty is at the full discretion of FOX Racing Shox and will cover only defective materials and workmanship. Warranty duration and laws may vary from state to state and/or country to country.</p> <p>Parts, components and assemblies subject to normal wear and tear are not covered under this warranty.</p> <p>FOX Racing Shox reserves the right to all final warranty or non-warranty decisions.</p>	<p>general exclusions from warranty</p> <ul style="list-style-type: none"> > Installation of parts or accessories not qualitatively equivalent to genuine FOX Racing Shox parts. > Abnormal strain, neglect, abuse and/or misuse > Accident and/or collision damage > Modification of original parts > Lack of proper maintenance > Shipping damages or loss (purchase of full value shipping insurance is recommended) > Damage to interior or exterior caused by rocks, crashes or improper installation > Oil changes or service not performed by FOX Racing Shox or an Authorized Service Center
valving guarantee	<p>If it is determined that the MX-C requires a valving change within the first 90 days of ownership, FOX will perform the re-valve at no charge for the original consumer. The consumer is required to follow the Service Policy procedure below and is responsible for all shipping costs to and from FOX Racing Shox. Unless otherwise specified, FOX Racing Shox will return ship the fork via UPS Ground Service.</p>	
service policy	<ul style="list-style-type: none"> > FOX Racing Shox offers 5-business day turnaround, which may vary. > Obtain an RA (Return Authorization) number and shipping address from FOX Racing Shox at 800.FOX.SHOX. Outside the USA, contact the appropriate International Distributor. > Mark the RA number and Return Address clearly on the outside of the package and send to FOX Racing Shox (see Contact Info above) or your International Service Center with shipping charges pre-paid by the sender. > Proof-of-purchase is required for warranty consideration. > Include a description of the problem, motorcycle information (manufacturer, year and model), type of FOX product and return address with daytime phone number. 	

