About Product

Thank you for purchasing XFUSION suspension. XFUSION takes pride in producing premium mountain bike suspension. Our entire range of products is manufactured with the highest quality components based on refined design, tested in extensive riding tests. These products stem from our passion for design and are inspired from our rides of premium mountain bikes. Before installing XFUSION product, please read this User Manual carefully as it contains very important information regarding installation, use, maintenance, as well as product warranty policies.

Fork and Rear Shock Adjustments

The following are adjustments available on fork and rear shock:

-Red Adjuster: rebound adjustments

-Blue Adjuster: low speed compression damping adjustments

-Blue Adjuster for RL/RL2 Products: lockout on & off

-Gold Adjuster: high speed damping compression/PLATFORM adjustments

Dirt Jumping

Dirt jumping involves riding a bicycle in an extreme sport manner, which includes jumping from one obstacle to another. Due to the inherently dangerous nature of dirt jumping, no fork has been proven to withstand the impacts without damage. Hence, when riding on such terrain with our suspension equipped, users are advised to take additional precautions and regularly inspect for potential damage caused by this extreme use; furthermore, frequent inspections by skilled bicycle technicians or an authorized XFUSION service center are recommended. Failure to maintain and inspect according to this protocol may result in product failure, serious injury, or death.

WARNING!!

Do not install XFUSION suspension on any motorized bicycles, electric scooters, or motor vehicles, or on vehicles carrying more than one person such as tandem bicycles. Such improper use of the product may cause the suspension to fail due to overload. Incorrect use of the suspension resulting in damage may lead to product failure, which may cause serious injury or death. Damage caused by improper use of XFUSION products will not be covered under warranty.

WARNING!!

XFUSION suspensions contain high-pressure nitrogen, air, or both. Do not puncture, burn, or pressurize the product. Do not attempt to disassemble the product unless explicitly instructed to do so in XFUSION User Manuals, and always strictly follow the instructions and warnings provided. Failure to comply may result in serious injury or death.

WARNING!!

Modifying XFUSION products yourself or using other repair products on them may cause product failure, resulting in serious injury or death. Do not modify any XFUSION product parts yourself. Any unauthorized modifications void the warranty and may cause product failure, leading to serious injury or death.

WARNING!!

Before riding, ensure that your wheel and quick release axle are properly secured as instructed in the User Manual. Incorrectly securing the bicycle's wheels may cause product failure, which may result in serious injury or death.

WARNING!!

Before riding, ensure that parts, components and accessories installed on the bicycle are installed and adjusted according to their manufacturer's instructions. Incorrect installation and adjustment may lead to system failure, resulting in product damage, and could potentially cause serious injury or death.

WARNING!!

To prevent potential disc brake set failures that could result in serious injury or death, the disc brake set mounting bolts must: 1) Have threads in 10-12 millimeters that matches the fork; and 2) Maintain the manufacturer's specified torque setting. Under all circumstances, the torque applied to the disc brake set mounting bolts must never be below the manufacturer's torque specification or exceed 90 in-lb.

WARNING!!

If using a fork hanger to mount the bicycle securely on a bicycle rack, avoid tilting the bicycle to prevent structural damage. Ensure the fork is securely fastened using a quick release (9mm quick release, X15, and X20, or thru-axle) and check that the rear wheel is also properly secured. If the bicycle tilts or falls out of the bicycle rack, do not ride it until it has been inspected and approved as safe by a qualified bicycle technician, authorized service center, or by XFUSION personnel. Structural damage to the lowers or hanger could lead to loss of control of the bicycle, resulting in serious injury or death.

WARNING!!

When secure the front wheel into a fork equipped with a disc brake system and an open hanger using a quick release mechanism, ensure that your quick release is properly installed before tightening. Improperly installed quick release mechanism may cause the front wheel to detach unexpectedly during riding. Wheel detachment may lead to serious injury or death. Follow the manufacturer's instructions for properly securing the wheel.

WARNING!!

Do not attempt to pull apart, open, or dismantle a rear suspension that is travel-crumbled and non-functional. This “stuck” state may occur owing to the failed dynamic air seal (located in both positive and negative air chambers), which causes the negative air chamber to retain higher air pressure than the positive air chamber. First test to confirm if the suspension is actually in a “stuck” state.

Remove the air valve cap and press the air valve pin to completely release the air pressure via the positive air chamber. If the shock contracts and air is fully released from the positive air chamber, use an XFUSION Shox high-pressure pump to inflate and pressurize up to 250 psi (17 bar). The suspension is in a “stuck” state if it may not fully extend after the above-mentioned steps.

WARNING!!

Improper maintenance procedures on any stuck XFUSION air suspension could lead to serious injury or death.

Contact XFUSION technical support team or an authorized service center for repairs.

Table of Services Available

Fork

Service Items	Interval(Hours)
Cleaning soil and dirt on the fork tubes	After every ride
Checking air pressure (for air forks)	After every ride
Checking top tube for scratch or dent	After every ride
Lubricating dust cover and fork tubes	After every ride
Checking torque of quick-release axle	After every ride
Cleaning or replacing (recommended) remote lockout cable and mechanism thereof	After every 25 rides
Removing lowers, cleaning/checking axle sleeve and changing hydraulic oil(if necessary)	After every 25 rides
Cleaning and lubricating gas spring kit	After every 50 rides
Replacing dust cover and oil seal	After every 100 rides / every year
DLA bracket reassembly	After every 100 rides / every year
Changing hydraulic oil for the damping unit*	After every 100 rides / every year
Cleaning and lubricating spring kit (springer fork)	After every 100 rides

Suspension

Service Items	Interval(Hours)
Cleaning soil and dirt on the front oil hose	After every ride
Checking air pressure and Sag settings	After every ride
Confirming bolt torque on suspension	After every ride
Lubricating oil hose	After every 5 rides
Removing outer air chamber axle, cleaning and lubricating	After every 25 rides
Repairing outer air chamber axle (replacing oil seal)	After every 50 rides
Complete restructuring of damping system and changing hydraulic oil *	After every 100 rides / every year

* Repair services need to be performed by an authorized service center.

* It is normal to find hydraulic oil in dark color and wear on inside of oil hose after disassembly during a rear shock maintenance.

XFUSION Warranty Manual

Warranty

XFUSION offers a 24-month warranty on all suspensions produced against defects in materials and/or workmanship. This warranty applies only to the original owner of the product and cannot be transferred. To make a warranty claim, proof indicating that the product remains in the 24-month warranty period shall be provided. The warranty period expires 24 months from the date of purchase.

The 24-month warranty period is subject to XFUSION's technical discretion or the judgment of its authorized service centers worldwide. XFUSION or its agents will determine whether the fault is due to manufacturing, material, or product defects. If the buyer fails to notify the seller within 60 days of the occurrence of the warranty issue, the claim will be considered invalid.

XFUSION and its agents reserve all rights regarding the final decision on warranty and non-warranty claims.

To maintain the validity of the full warranty conditions for all XFUSION suspensions, the buyer must perform regular service, cleaning, and maintenance according to the service instructions in the service manual. This is absolutely necessary.

Warranty Limitations

The general exclusions within this warranty specification shall include any faults arising from the following:

- Installation of parts or accessories that are not equivalent to the quality parts used by XFUSION;

-Abnormal strain, negligence, abuse, and/or misuse;

-Damages from accidental or collision;

-Modifications with non-original parts;

-Absence of proper services (see service schedule);

-Any attempt to disassemble the damping assembly unit;

-Transportation damage or loss (full-value protection is recommended);

-Internal or external damage to the product caused by improper cable installations, seat tube, rocks, collisions, or improper installation;

-Oil changes or servicing not performed by an XFUSION authorized service center;

-Over-tightening the spring beyond the prestressing (maximum three turns).

Warranty matters subject to special exclusions include:

-Parts replacement due to normal wear and tear and/or routine maintenance;

-Normal wear and tear and/or routine maintenance parts: bushings and axle bushings, seals, shock hydraulic oil, etc.

XFUSION makes no other warranties, express or implied. XFUSION disclaims any obligations beyond the stated warranty terms and time limits. All implied warranties, including those of merchantability, fitness for a particular purpose, and applicability, are excluded from this warranty.

Installing a XFUSION Fork

Max. Gas Spring Pressure for Air Fork:

【140PSI】

Velvet, Migo 9mm 27.5, Migo 27.5 Boost, Migo 9mm 29 RC32 9mm, RC32 27.5 Boost, RC32 29 Boost, Bruno 30, Slant ,Sweep Boost, Slide Boost, E-Slide Boost, Mcqueen Boost, Migo 34 27.5 Boost, Migo 34 29 Boost, Vengeance 38, Rezza 29 Boost

【120PSI】

Trace36, Metric, RV1 38

Min. Gas Spring Pressure for Air Fork:

【50PSI】

Velvet, Slant, Migo 9mm 27.5, Migo 27.5 Boost, Migo 34 27.5 Boost, Migo 9mm 29, Migo 34 29 Boost, RC32 9mm, RC32 27.5 Boost, RC32 29 Boost, E-Sweep Boost, Sweep Boost, Slide Boost, E-Slide Boost, Mcqueen Boost, Bruno 30, Rezza 29 Boost, Vengeance 38, Trace36, Metric, RV1 38

CAUTION

For DLA forks, a specific suspension pump must be used to adjust the air pressure from the bottom of the fork. All other air forks may have their air pressure adjusted via the valve located under the cap marked "AIR" on the crown.

WARNING!!

This is a special reminder: a qualified bicycle technician needs to be engaged to install your new XFUSION fork on your bicycle. If you have any doubts about your capacity to install the fork correctly, do not attempt the installation. Incorrect installation of the fork may result in installation failure, leading to loss of rider control, and causing serious injury or death.

WARNING!!

Never use handle bar spacers exceeding 30mm in height. Doing so may cause premature handle bar failure, resulting in loss of control and potentially leading to serious injury or death.

Remove the original fork from the bicycle. Measure the XFUSION fork steerer against the original to determine if the XFUSION fork steerer needs to be cut.

CAUTION

Before cutting, consult manufacturers of your headset joint bowl assembly and stem to ensure you have adequate steerer clamping length. Do not dent, cut, mark, or damage any part below the cutting area of the steerer, as this could cause steerer failure, leading to serious injury or death.

Cutting Steerer

Before cutting the steerer, follow your stem manufacturer's recommendations to ensure adequate clamping length.

Mark and cut the steerer to the correct length.

WARNING!!

If the steerer has any nicks or gouges, the crown/steerer assembly must be replaced. Any nicks or gouges may cause premature steerer failure, leading to loss of bicycle control and serious injury or death.

Always use a new threadless headset joint bowl assembly and follow the manufacturer's installation instructions.

WARNING!!

Never attempt to thread an threadless steerer on the XFUSION fork. Threading a threadless steerer may cause premature failure, leading to loss of bicycle control, or serious injury or death of the user.

Use a 39.8mm fork headset joint bowl assembly for a 1 1/2" steerer and a 29.9mm one for a 1 1/8" steerer.

Follow the expander manufacturer’s installation instructions when installing the expander into the steerer.

WARNING!!

Never attempt to remove or replace the steerer or fork tube from the crown assembly. Modifying the assembled crown, steerer, or fork tube may cause crown assembly failure, leading to loss of bicycle control, or serious injury or death of the user.

Installation and Use of XFUSION Single-Crown Fork

Install the headset bearing components according to the instructions of the headset joint bowl assembly. Adjust the headset joint bowl assembly prestress until you feel no excessive play or bearing resistance.

Tighten the stem bolts to the torque specified by the stem manufacturer.

Install the brakes according to the brake manufacturer's instructions.

When installing front disc brake, route the cables on the inside of the fork lowers and through the fork lowers’ cable guide.

WARNING!!

Do not let the disc brake cable contact the front wheel or any moving parts. To ensure safe routing, have a qualified bicycle technician inspect your bike. Improper brake cable installation may cause serious injury or death.

Tighten the cable guide screw using a hex wrench to a torque of 8 in-lb (0.90Nm).

CAUTION

If the brake cable contacts the fork crown, it may wear the crown's surface over time. If contact is unavoidable, apply tape or similar protection at the contact point. XFUSION’s warranty does not cover fork crown wear.

If your fork leaks oil, bottoms out harshly, or makes abnormal noises, contact XFUSION Shox or an authorized service center for inspection or repair immediately.

Do not operate pneumatic or electric high-pressure tools to clean your XFUSION fork.

Installing 15mm/20mm Quick Release Axle

Before assembling the front wheel quick release axle, carefully place the front wheel into the fork lower hanger and ensure the brake disc is between the caliper brake pads. Secure the quick release axle in place through the expanded hanger side of the lowers, aligning with the hub.

WARNING!!

Inspect and clean any accumulated dirt from the quick release before assembly, and make sure the hub and quick release axle sizes are compatible. Incorrect fitment may cause rider injury or even death.

Insert the quick release axle through the hub until it contacts the threads on the opposite side of the fork lowers. Tighten the quick release axle by hand until it may no longer be turned, then use the quick release lever to securely lock it in place. Do not use any tools to increase leverage during this process.

Min. quick release axle locking torque: 80 kgf-cm (70 lbf-inch)

Max. quick release axle locking torque: 115 kgf-cm (100 lbf-inch)

Use a hex wrench to loosen the screw between the quick release axle and lever to adjust the lever's position. The correct position should be in front of the fork lowers, with a gap of 1mm to 20mm from the lowers.

CAUTION

Do not position the quick release axle lever lock under the fork lower hanger during riding, as it may be struck by objects, causing the quick release to suddenly loosen and pose a danger. Install your quick release axle according to the above instructions.

Installing Remote Lockout Lever

WARNING!!

Always use the original end caps. Unstable end caps may cause the cable housing to break, potentially leading to rider injury or death.

CAUTION

If your our handle bar is made of carbon fiber, loosen the fixing screws slowly when removing the remote lever. Refer to the handle bar manufacturer's technical specifications for the correct torque values during installation.

WARNING!!

Ensure that the front wheel or any moving parts do not come into contact with the control cable routing, and have a qualified bicycle technician confirm that the routing of the levers is safe. Incorrect assembly may cause injury or even death to the rider.

Follow the procedure below to install XFUSION fork and rear shock cable control products:

Use a 3mm hex key to disassemble and assemble the lockout lever assembly.

Disassemble the grip on the right or left side according to your personal preference.

First, insert the lever assembly into the handle bar grip, then adjust the control release button towards the rider's direction, and finally align the fixed adjustment screw as close to the center of the frame as possible. After completion, confirm that the lever assembly is higher than the brake lever. This process is not directional.

Reassemble the grip.

Position the control lever assembly at the inner end of the grip, ensuring that the grip does not interfere with the operation of the control lever.

Use your thumb to press the lever to the Lockout position, rotate the lever assembly to your preferred position, and ensure that the shifters do not interfere with the operation of your thumb.

Use a 3mm hex key to tighten the fixing screws with a recommended torque value of 0.8 Nm (7 lbf-inch). Press the release button to confirm that the lever returns to the non-lockout state.

Installing XFUSION Rear Suspension

Max. Gas Spring Pressure: 300 psi (20.68 bar)

Min. Gas Spring Pressure: 60 psi (4.14 bar)

WARNING!!

The installation procedure for rear suspension may vary depending on the frame. Refer to the owner's manual to install the suspension properly. Have a qualified bicycle technician install your new XFUSION rear suspension. Improper installation may cause suspension malfunction, leading to loss of control of the bicycle, and may result in injury or even death to the rider.

CAUTION

Before riding, make sure to install XFUSION rear suspension according to the torque values set by the original frame manufacturer.

CAUTION

For XFUSION Vector and Vector Air series, ensure that the pressure of the external nitrogen cylinder does not drop below 180 psi and does not exceed 300 psi. Failure to comply may result in suspension damage for which the manufacturer will not be liable for warranty.

CAUTION

If any oil leakage or unusual noise is found during use of XFUSION rear suspension, contact an XFUSION service center immediately for inspection and maintenance.

CAUTION

Do not operate pneumatic or electric high-pressure tools to clean XFUSION rear suspension.