



DIRECT-REPLACEMENT
INSTALLATION AND SET-UP GUIDE

FOR HARLEY-DAVIDSON TOURING 2 INCH OVER FORK CARTRIDGE KITS

STREET PERFORMANCE SERIES CARTRIDGE KITS

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INTRODUCTION

Thank you for choosing FOX direct-replacement cartridge kit for your motorcycle. FOX products are designed, tested, and manufactured by the finest professionals in the industry.

WARNING

Please read the entire manual before attempting to install the cartridge kit on your motorcycle. When working on this product, always see the vehicle manufacturer's work shop manual for vehicle-specific procedures and important specifications. Be sure to clean the components you intend to modify to avoid contamination or damage during the installation process. If you have any questions call the FOX motorcycle shock service center at 831.740.4619.

To achieve the best performance and product longevity, periodic service and maintenance is required. Please refer to the MAINTENANCE section for more information.

Always use a calibrated torque wrench when tightening components. Failure to properly torque the parts can result in separation of the fork, which could cause loss of control resulting in a crash, bodily injury, or death!

Always use the appropriate lift equipment to ensure the vehicle is securely supported so that it will not tip. Placing body parts beneath an unstable vehicle may lead to serious injury or death.

It is advisable to have a professional motorcycle mechanic install the cartridge kit. In addition to these instructions, professional knowledge of disassembly/reassembly procedures and post installation checks must be known.

FOX recommends that you become thoroughly familiar with the handling characteristics of your modified vehicle before operating it under rigorous conditions. This will help to avoid potential loss of control events that could lead to serious injury or death. FOX further recommends that you use appropriate protective equipment at all times when operating your vehicle.



WARNING

SAFETY INSTRUCTIONS

- FOX direct-replacement cartridge kits are designed to fit and allow proper clearance with the stock components. If aftermarket suspension components are installed it is the customer's responsibility to ensure that interference between the FOX cartridge kit and other motorcycle fork components does not occur at any point in the fork stroke.
- FOX direct-replacement cartridge kits should always be installed as a set for maximum performance.
- Proper installation and service procedures are essential for the safe and reliable operation of the suspension components, requiring the experience and tools specially designed for this purpose. Installation and maintenance procedures for this product must be performed by a qualified service technician, to avoid potentially unsafe motorcycle handling characteristics, which may result in **SERIOUS INJURY or DEATH**.
- Adjusting your suspension will change the handling characteristics of your motorcycle. Under certain conditions, your adjusted motorcycle may be more susceptible to loss of control, which can result in **SERIOUS INJURY or DEATH**. Thoroughly familiarize yourself with the adjusted motorcycle handling characteristics before any rigorous vehicle operation. Wear protective body gear and a helmet when appropriate.
- Any attempt to misuse, misapply, modify, or tamper with any FOX product voids any warranty and may result in **SERIOUS INJURY or DEATH**.

 **WARNING**

INSTALLATION GUIDELINES

- DO NOT install any FOX product without the necessary special tools, expertise, and equipment, or you will subject yourself to the risk of **SERIOUS INJURY** or **DEATH**.
- The springs are coated with a corrosion-resistant oil that requires eye protection and gloves for safe handling. Wear safety glasses and rubber gloves when disassembling and reassembling fork legs as they are under spring tension and contain oil. Avoid contact with eyes and skin. Do not ingest and avoid repeated inhalation of vapor.
- The top cap may come out with more force than you expect, which can cause bodily injury. Keep your body and face, along with all other objects, out of the path of the top cap as it is removed.
- Take care when clamping the fork into a fork vise or bench vise, as damage can occur.
- The cartridge assembly will be installed into the right (throttle side) fork leg.

TOOLS REQUIRED

- Gloves
- Safety glasses
- Vehicle manufacturer's workshop manual for torque specifications
- Assorted sockets, ratchets, Allen bits, and Torx® bits for fork removal and installation
- Loctite® 565™
- Torque wrench
- Fork vise
- Bench vise
- 12 mm long Allen bit
- 12 mm Allen wrench
- 13 mm socket and extensions
- 33 mm socket
- 1 quart FOX 5WT PTFE infused suspension fluid (included)
- Graduated cylinder (or container) for measuring fork oil

Required tools and supplies may change over time. Visit ridefox.com or contact a representative for the most up-to-date details.

COMPATIBILITY CHART

MAKE	PLATFORM	MODEL NAME	MODEL CODE	STARTING YEAR	ENDING YEAR	FORK DIAMETER	FORK CARTRIDGE KIT 2-INCH OVER	OUTER TUBE LENGTH
Harley-Davidson	Touring	Electra Glide Limited CVO	FLHTKSE	2014	2020.	49 mm	890-27-009	24-7/8 inch
		Electra Glide Ultra Classic	FLHTCU	2014	Cont.			
		Electra Glide Ultra Limited	FLHTK	2014	Cont.			
		Road Glide	FLTRX	2015	Cont.			
		Road Glide Special	FLTRXS	2015	Cont.			
		Road Glide Ultra	FLTRU	2016	Cont.			
		Road Glide Ultra CVO	FLTRUSE	2015	2022.			
		Road King	FLHR	2014	2016			
		Road King Custom	FLHRC	2014	2016			
		Street Glide	FLHX	2014	Cont.			
		Street Glide CVO	FLHXSE	2015	2022.			
		Street Glide Special	FLHXS	2014	Cont.			

NOTICE

The purchase of a longer fork tube is required for the correct fitment of this cartridge kit. Please refer to the above table for tube length.

NOTICE

If you can not find your motorcycle listed above please contact FOX Service Center at **1.831.740.4619** or **psservice@ridefox.com** to check your fitment.

FORK DISASSEMBLY

STREET PERFORMANCE SERIES TOURING CARTRIDGE KIT INSTALLATION

⚠ WARNING: The springs are coated with a corrosion-resistant oil that requires eye protection and gloves for safe handling. Wear safety glasses and rubber gloves when disassembling and reassembling fork legs as they are under spring tension and contain oil. Avoid contact with eyes and skin. Do not ingest and avoid repeated inhalation of vapor.

1. Remove the fork legs from your motorcycle according to your vehicle manufacturer's workshop manual and secure them in a fork clamp.

NOTE: All fork disassembly instructions are repeated for the second fork leg.

2. Clamp the fork in fork vise, then loosen the top cap with appropriately sized tool (Fig. 1).

NOTICE: Use care when clamping not to damage fork leg.

3. Keep downward force on the top cap and tool while unthreading the cap (Fig. 2).
4. Carefully remove the top cap, keeping your body and other objects out of the path of the cap (Fig. 3).

⚠ WARNING: The top cap may come out with more force than you expect, which can cause bodily injury. Keep your body and face, along with all other objects, out of the path of the top cap as it is removed.

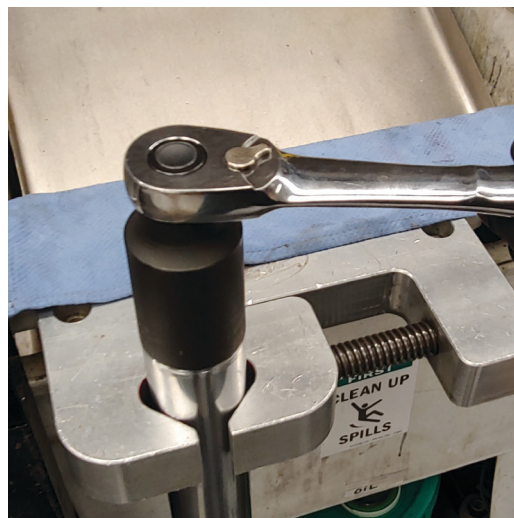


Fig. 1: Loosen the top cap.



Fig. 2: Downward force while unthreading the top cap.

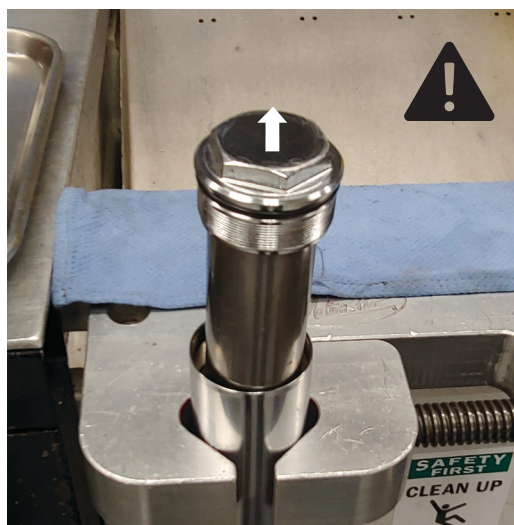


Fig. 3: Carefully remove the top cap.

5. Remove the stock preload spacer (Fig. 4).
6. Remove the stock spring washer (Fig. 5).
7. Remove the stock spring (Fig. 6).

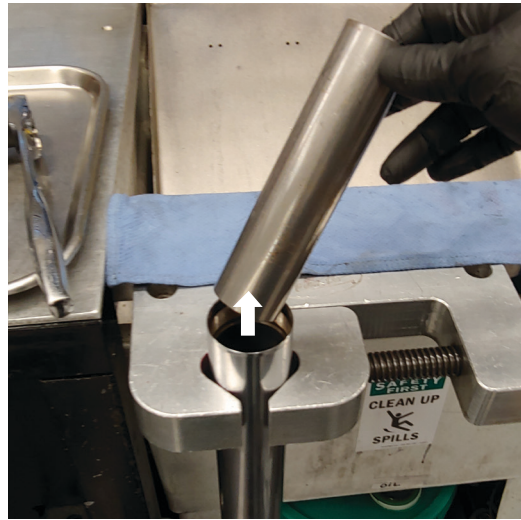


Fig. 4: Remove the preload spacer.

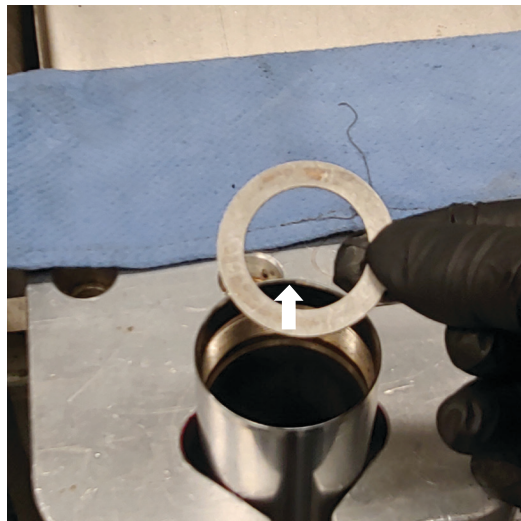


Fig. 5: Remove the spring washer.

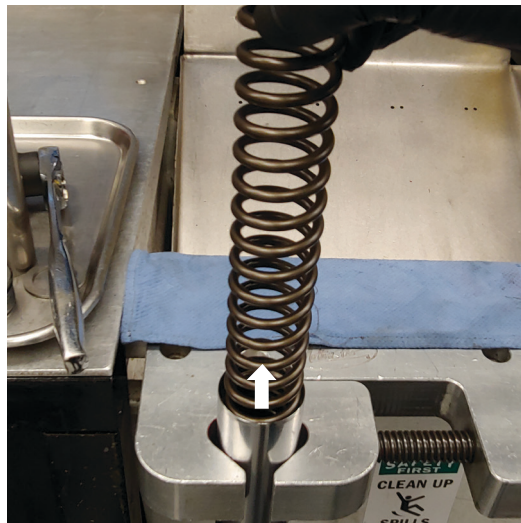


Fig. 6: Remove the spring.

8. Fully compress the fork several times, while holding it upside down, to drain the oil into a clean container. Clamp the lower portion of the fork leg in a vise with access to the retaining screw (Fig. 7).

NOTICE: Use care when clamping not to damage the fork leg.

9. Use a 12 mm Allen wrench to remove the damping post retaining screw (Fig. 8). Apply pressure to the damping post with the main spring to keep the post from rotating inside the leg as you remove the retaining screw.
10. Compress the fork to hold the bottom-out cup in place. Turn the fork upside down to remove the damping post and negative spring (Fig. 9).
11. Repeat for the other fork leg (not pictured).

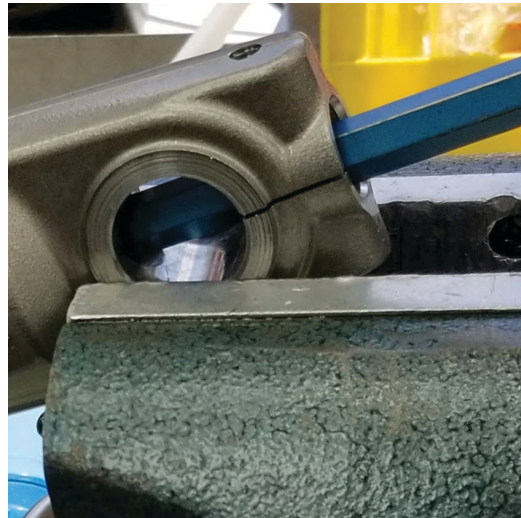


Fig. 7: Clamp the lower portion of the fork to access the retaining screw.



Fig. 8: Remove the retaining screw.



Fig. 9: Remove the damping post and negative spring.

FORK REASSEMBLY

LEFT LEG (CLUTCH SIDE)

1. Ensure that you can see a circle of light through the hole in the bottom of the left fork leg, which indicates that the bottom out cup is seated correctly (Fig. 10).
2. Install the negative spring onto the extender post and slide both into the fork leg (Fig. 11).
NOTE: Use the negative spring supplied with your FOX Cartridge Kit. **Do NOT** install the cartridge assembly, which will go in the opposite (right) fork leg.
3. Inspect the copper washer on the retaining screw (Figure 12). Replace if necessary.

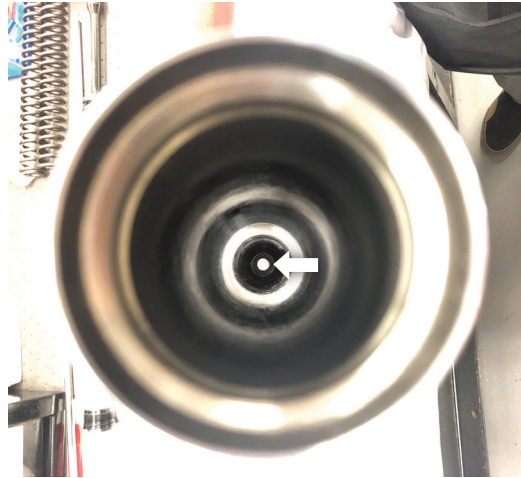


Fig. 10: Light through the hole in fork leg.



Fig. 11: Install spring and post.



Fig. 12: Inspect washer.

4. Apply Loctite® 565™ thread sealant to the threads of the retaining screw (Fig. 13).
5. You'll need a friend for this step. Have your friend use a 13 mm socket and extensions to hold the extender post in place (Fig. 14). Then, use a 12 mm Allen wrench to install the damping post retaining screw (Fig. 15). Torque to the manufacturer's specification.



Fig. 13: Apply Loctite to the screw threads.



Fig. 14: A friend holding the extender post.



Fig. 15: Install the retaining screw.

6. Carefully clamp the left fork leg into a fork vise. Install the spring into the left fork leg and place the supplied washer on top of the spring (Fig. 16).

NOTICE: Use care when clamping not to damage the fork leg.

7. Add 450ml of the FOX 5WT PTFE infused suspension fluid, included with kit (Fig. 17).
8. Install the supplied spacer on top of the washer and the spring, followed by the supplied top cap (Fig. 18).



Fig. 16: Install the spring and washer.



Fig. 17: Add suspension fluid.

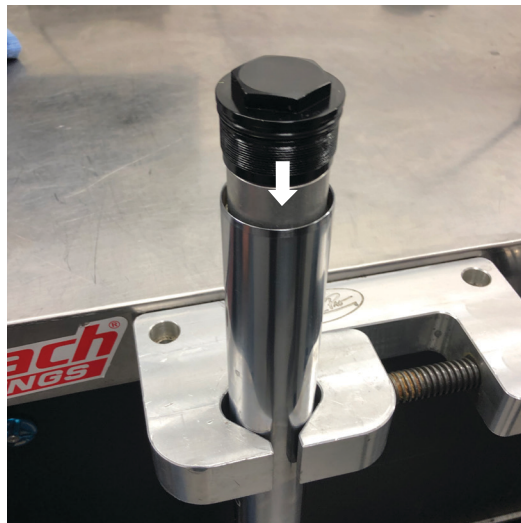


Fig. 18: Install spacer and top cap.

9. Compress the assembly into the fork leg using the supplied top cap (Fig. 19).
10. Use a 33 mm socket to torque the top cap to the manufacturer's specifications (Fig. 20).



Fig. 19: Compress the assembly.



Fig. 20: Torque the top cap.

FORK REASSEMBLY

RIGHT LEG (THROTTLE SIDE)

1. Ensure that you can see a circle of light through the hole in the bottom of the right fork leg, which indicates that the bottom out cup is seated correctly (Fig. 21).
2. Install the negative spring onto the extender post and slide both into the fork leg (Fig. 22).
NOTE: Use the negative spring supplied with your FOX Cartridge Kit.
3. Install the cartridge assembly into the right fork leg only (Fig. 23).

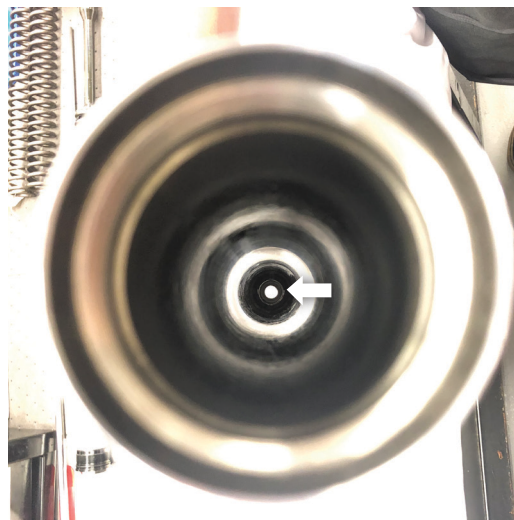


Fig. 21: Light through hole in fork leg.



Fig. 22: Install the spring and post.

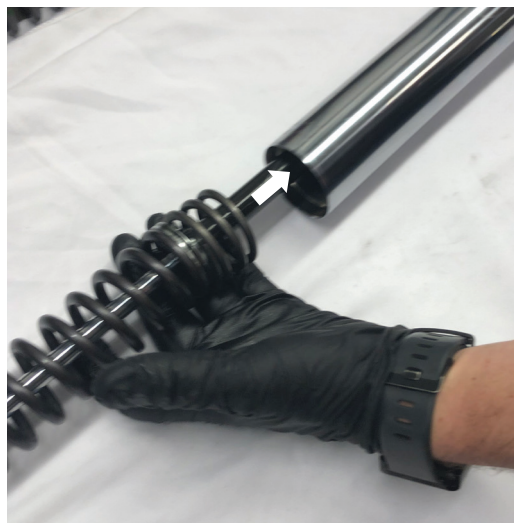


Fig. 23: Install the cartridge into right fork leg.

4. Carefully clamp the right fork leg into a fork vise (Fig. 24). Compress the cartridge assembly and temporarily thread the top cap into the fork leg using a 33 mm socket (Fig. 25).

NOTICE: Use care when clamping not to damage the fork leg.

5. Inspect the copper washer on the retaining screw (Fig. 26). Replace if necessary.



Fig. 24: Carefully clamp the fork leg and compress the assembly.



Fig. 25: Thread the top cap.

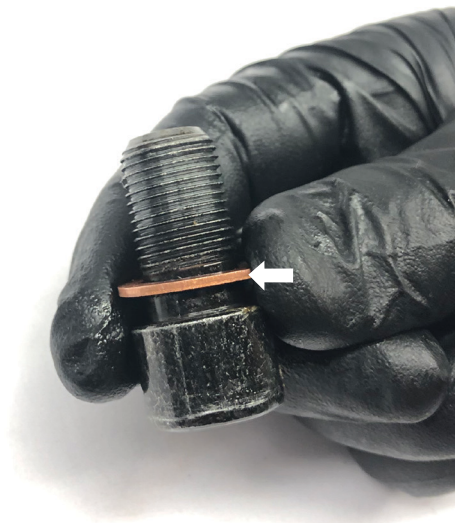


Fig. 26: Inspect washer.

6. Apply Loctite® 565™ thread sealant to the lower screw (Fig. 27).
7. Carefully clamp the lower leg in a vise and install the retaining screw and copper washer (Fig. 28). Use a 12 mm Allen wrench to torque to the manufacturer's specification.
8. Carefully clamp the upper tube in the fork vise. Use a 33 mm socket to unthread the top cap. Then slide the lower fork leg up to expose the spring and cartridge (Fig. 29).



Fig. 27: Apply Loctite to the screw threads.



Fig. 28: Install the retaining screw.



Fig. 29: Slide the lower fork leg up to expose the spring and cartridge.

9. Add 450ml of the FOX 5WT PTFE infused suspension fluid, included with the kit (Fig. 30).
10. Compress the cartridge assembly into the fork leg (Fig. 31).
11. Use a 33 mm socket to thread the top cap into the leg and torque to the manufacturer's specification (Fig. 32).
12. Install the forks back into the triple clamps. Reassemble the rest of the motorcycle completely according to your vehicle manufacturer's workshop manual before riding (not pictured).

NOTE: It is normal to hear some spring rubbing noise during the first few miles of use. Once the oil coats the inside of the fork, the noise should go away.

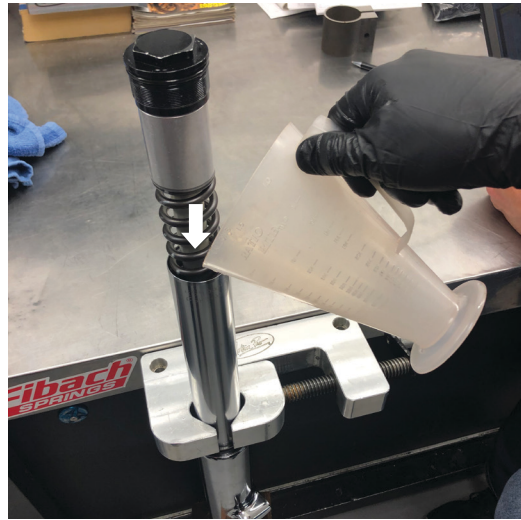


Fig. 30: Add suspension fluid.



Fig. 31: Compress the cartridge assembly.



Fig. 32: Torque the top cap.

MAINTENANCE

SEE OIL CHANGE INTERVAL LISTED IN VEHICLE SERVICE MANUAL.

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE PERFORMANCE AND RELIABILITY OF YOUR FORK KIT.

It is important to keep the forks clean and free of dirt.

The service interval depends on how frequently and aggressively the motorcycle is ridden. Under normal usage, it is recommended to have the forks completely inspected and serviced annually.

FOX SERVICE AND UPGRADES

HAVE YOUR FOX SHOCKS SERVICED OR UPGRADED BY FOX TECHNICIANS. CALL OUR MOTORCYCLE SERVICE CENTER AT 831.740.4619 TO GO OVER THE SERVICE AND UPGRADE OPTIONS AVAILABLE FOR YOUR SHOCKS. ONCE YOU'VE SETUP YOUR SERVICE AND/OR UPGRADES, YOU WILL RECEIVE A RETURN AUTHORIZATION NUMBER AND SHIPPING INSTRUCTIONS.

COMPLETE SERVICES

Normal use: once per season

Racing or extreme use: may require more frequent service

SERVICE MENUS AND PRICING

visit ridefox.com/service



**WARNING: Cancer and
Reproductive Harm —**
www.P65Warnings.ca.gov

WARRANTY INFORMATION

FOX LIMITED WARRANTY

FOX Factory, Inc., a Georgia corporation having an office at 2055 Sugarloaf Circle Suite 300. Duluth, GA 30097 ("FOX"), makes the following LIMITED WARRANTY with respect to its suspension products:
LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION PRODUCTS.

Subject to the limitations, terms and conditions hereof, FOX warrants, to the original retail owner of each new FOX suspension product, that the FOX suspension product, when new, is free from defects in materials and workmanship. Unless otherwise required by law, this warranty expires one (1) year from the date of the original FOX suspension product retail purchase from an authorized FOX dealer or from a FOX authorized Original Equipment Manufacturer where FOX suspension is included as original equipment on a purchased vehicle. If law requires a warranty duration of greater than one (1) year, then, subject to the other provisions hereof, this warranty will expire at the end of the minimum warranty period required by such law.

TERMS OF WARRANTY

This warranty is conditioned on the FOX suspension product being operated under normal conditions and properly maintained as specified by FOX. This warranty is only applicable to FOX suspensions purchased new from an authorized FOX source and is made only to the original retail owner of the new FOX suspension product and is not transferable to subsequent owners. This warranty is void if the FOX suspension product is subjected to abuse, neglect, improper or unauthorized repair, improper or unauthorized service or maintenance, alteration, modification, accident or other abnormal, excessive, or improper use.

Should it be determined by FOX in its sole and final discretion, that a FOX suspension product is covered by this warranty, it will be repaired or replaced, by a comparable model, at FOX's sole option, which will be conclusive and binding. THIS IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY. ANY AND ALL OTHER REMEDIES AND DAMAGES THAT MAY OTHERWISE BE APPLICABLE ARE EXCLUDED, INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR PUNITIVE DAMAGES.

This limited warranty does not apply to normal wear and tear, malfunctions or failures that result from abuse, improper assembly, neglect, alteration, improper maintenance, crash, misuse or collision. This limited warranty gives the consumer specific legal rights. The consumer may also have other legal rights which vary from state to state or country to country. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages or warranties, and if dictated by law the above limitations or exclusions may not apply to you. If it is determined by a court of competent jurisdiction that a certain provision of this limited warranty does not apply, such determination shall not affect any other provision of this limited warranty and all other provisions shall remain in full effect.

THIS IS THE ONLY WARRANTY MADE BY FOX ON ITS SUSPENSION PRODUCTS AND COMPONENTS, AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION HEREIN. ANY WARRANTIES THAT MAY OTHERWISE BE IMPLIED BY LAW INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED.

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