

DIRECT-REPLACEMENT INSTALLATION GUIDE

FORD BRONCO (2021-ON)

# PERFORMANCE SERIES 2.5 UNLOADED COIL-OVER

987-62-000 - 21-ON Ford Bronco, Front Coilover, OE Spring, 2.5 Truck PS, HTO, Base 0-3" Lift, Sasquatch 0-2" Lift 987-62-001 - 21-ON Ford Bronco, Rear Coilover, OE Spring, 2.5 Truck PS, HTO, Base 0-2" Lift, Sasquatch 0-1" Lift

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# INTRODUCTION

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

FOX recommends that you become completely familiar with the handling characteristics of your modified vehicle before operating it under rigorous conditions, helping to avoid potential rollover situations and other loss of control events. FOX further recommends that you use appropriate protective equipment at all times when operating your vehicle.

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

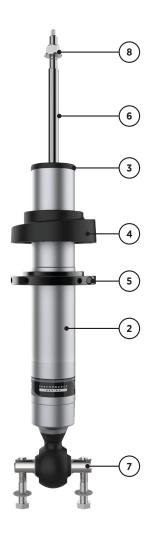
DISCLAIMER: The advertised ride heights were achieved on a 4 door, Wildtrak, Sasquach equipped vehicle with a hard top and 37" spare tire mounted on the OEM spare tire gate. Ride height verification was performed using both HOSS 1.0 and HOSS 2.0 springs.

#### IN THE BOX

- Front or Rear Shocks
- Supplied Hardware
- Installation Guide

# **SHOCK DIAGRAM**

#### **FRONT COIL-OVER**



#### **REAR COIL-OVER**



PART NO.	NAME	PART NO.	NAME	
1	Eyelet	5	Preload ring	
2	Shock body	6	Shaft	
3	Bearing cap	7	Bar-pin bolt	
4	Molded spring seat	8	Center nut	

#### **A** WARNING

# SAFETY INSTRUCTIONS

- FOX direct-replacement shocks are designed to fit and allow proper clearance with the stock suspension. If aftermarket suspension components are installed it is the customer's responsibility to ensure that interference between the FOX shocks and other vehicle components does not occur at any point in the shock stroke.
- FOX direct-replacement shocks 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 vehicle handling characteristics, which may result in SERIOUS INJURY or DEATH.
- Modifying your vehicle's suspension will change the handling characteristics of your vehicle. Under
  certain conditions, your modified vehicle may be more susceptible to loss of control or rollover, which
  can result in SERIOUS INJURY or DEATH. Thoroughly familiarize yourself with the modified vehicle
  handling characteristics before any rigorous vehicle operation. Wear protective body gear and a helmet
  when appropriate. Installation of vehicle roll bars or cage is highly recommended.
- FOX direct-replacement shocks are gas-charged and are highly pressurized. Placing shocks in a vise or clamp, applying heat, or attempting to open or service the shock without the proper tools and training can result in SERIOUS INJURY or DEATH. Do not attempt to modify, puncture or incinerate a FOX direct-replacement shock absorber.
- 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**

- Always use a chassis lift for the installation of shocks, and make certain that the raised vehicle
  is securely attached to the lift to prevent the vehicle from slipping, falling, or moving during the
  installation process.
- DO NOT install any FOX product without the necessary special tools, expertise and chassis lift or you will subject yourself to the risk of SERIOUS INJURY or DEATH. If you elect to not use a chassis lift (which may result in SERIOUS INJURY or DEATH), ensure that the vehicle is: (1) on level ground, (2) that all tires on the ground during installation are blocked to prevent vehicle movement, (3) that at least two tires are on the ground at all times, and (4) that adequately secured jack stands are used to support the vehicle. NEVER get under the vehicle until you have checked to ensure that the vehicle will be stable during installation.
- FOX direct-replacement shocks are designed to fit your vehicle's shock mounts without modification except the reservoir placement on specific models and applications.

### FRONT SHOCK INSTALLATION

**NOTICE:** Medium-strength thread-lock is recommended on all bolts.

- 1. Please read the installation guidelines on page 4 for instructions on how to properly lift and secure the vehicle.
- 2. Record the front vehicle ride height to ensure proper lift is attained after kit is installed. READ INSTALLATION GUIDELINES ON HOW TO PROPERLY ADJUST PRELOAD.
- 3. Remove both front wheels from the vehicle.

#### STOCK SHOCK REMOVAL

- 4. Disconnect the brake line bracket from the upright (Fig. 1).
- 5. Detach the tie rod end link at the spindle steering arm for removal and installation clearance (Fig. 2).
- 6. Disconnect the sway bar end link from both lower control arms (Fig. 3).
- 7. Remove the axle nut from the upright (Fig. 4). Push the axle shank flush with the face of the rotor.



Fig. 1: Disconnect brake line bracket.



Fig. 2: Tie rod end link.

8. Remove the nut connecting the upper control arm (UCA) to the upright (Fig. 5) Separate the UCA from the upright.



Fig. 3: Sway bar end link.



Fig. 5: Separate the UCA from the upright.



Fig. 4: Push the axle shank flush.

9. Before removing the stock coil-over from the vehicle, mark the coil bucket and shock assembly with a paint pen (Fig. 6).

This is necessary to properly align the FOX shock with the stock components. Take a photo for further documentation.

10. Remove the three top hat nuts that secure the stock coil-over assembly (Fig. 7). DO NOT remove the center nut. Removal of the center nut will release the spring from the shock assembly and may result in SERIOUS INJURY or DEATH!

WARNING: HIGH SPRING TENSION! Springs under tension can store a significant amount of energy, and if released unexpectedly, they can cause damage, SERIOUS INJURY or DEATH.

11. Use a pry bar to free the top of the coil-over from the coil bucket (Fig. 8).

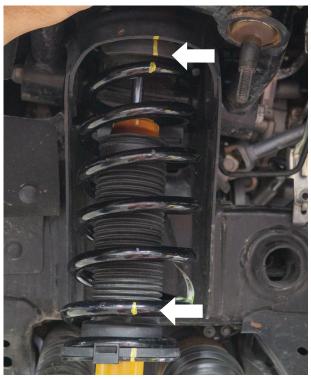


Fig. 6: Mark the coil bucket and shock assembly.



Fig. 7: DO NOT remove the center nut.



Fig. 8: Free the coil-over from the coil bucket.

12. Take off the bar-pin bolts connecting the coil-over to the lower control arm (Fig. 9). Remove the stock coil-over assembly (Fig. 10).





Fig. 9: Take off the bar-pin bolts.

Fig. 10: Free the coil-over from the coil bucket.

**NOTICE:** Do not discard the OEM hardware. They will be used with your new FOX coil-over assembly.

13. If you're installing an aftermarket UCA, install now and follow the company's required specifications. After installation, continue to step 14.

#### **FOX COIL-OVER ASSEMBLY**

**WARNING:** Follow all safety guidelines provided by the spring compressor manufacturer. Using a spring compressor in an unsafe manner can lead to SERIOUS INJURY or DEATH.

14. Use a professional spring compressor to compress shock assembly according to its included instructions (Figure 11).

15. Center nut in the top mount is removed allowing shock to be removed from spring and associated hardware. Refer to OEM service manual if not familiar.

**WARNING:** When the center nut is removed, the shock may drop from the spring compressor. OEM center nut is not retained for reuse.



Fig. 11: Use a professional spring compressor.

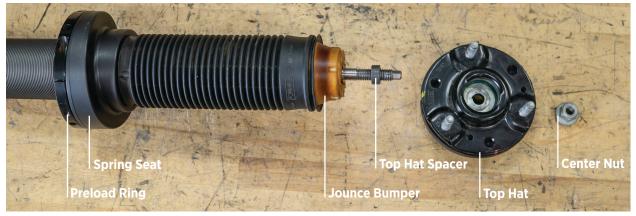


Fig. 12: Assemble shock in the following order, left to right.

16. Retain the OEM spring, foam jounce bumper, top hat, and top hat spacer.

17. Inspect all OEM components for excessive wear or damage, especially rubber components. Keep vehicle mileage in mind.

18. Preload ring adjustment might be necessary to achieve the desired lift.

**NOTICE:** The shock's preload ring is set to accommodate 2" of lift on a Wildtrak equipped with a Sasquatch package and HOSS 1.0 OEM springs.

19. Reference the table below for preload ring settings (Fig. 13). Measure from the top of the preload ring to the bottom of the bearing cap (Fig. 14). Torque the preload ring's screw to 80 in. lbs.

FRONT 2" LIFT SASQUATCH, 3" LIFT BASE			REAR 1" LIFT SASQUATCH, 2" LIFT BASE		
	2-door	4-door		2-door	4-door
HOSS 1.0	6 7/8"	6.5"	HOSS 1.0	9.5"	9"
<b>HOSS 2.0</b>	6 3/8"	6"	HOSS 2.0	9.5"	9"

Fig. 13: Review preload ring settings.



Fig. 14: Measure from the preload ring to the bottom of the bearing cap.

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20. Identify the correct FOX spring seat adapter and slide it over the shock body onto the preload ring before installing the OEM spring hardware. The other provided spring seat can be discarded. Use FOX part number 234-00-830 for HOSS 2.0 springs and 234-00-847 for HOSS 1.0 springs. Look on the top or bottom towards the center of the adapter for the FOX part number.

21. Use a professional spring tool to install FOX assembly with the OEM spring, top hat, top hat spacer, and jounce bumper. The FOX decal seam points towards center of vehicle. The FOX spring seat rotates freely so OEM spring orientation can be used. Review your notes taken from Step 9.

**NOTICE:** Install the top hat spacer before the top hat and center nut (Fig. 12).

22. Align the marks on the top hat and spring. Align the shock's bar pin perpendicular to the marks. Torque the supplied center nut to 20ft-lbs (Fig. 15).



Fig. 15: Align the marks on the top hat and spring

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#### **FOX COIL-OVER INSTALL**

- 23. Install the new coil-over assembly with the shock decal seam facing inboard and the reference marks on the top hat and spring pointed outboard (Fig. 16).
- 24. Mount the three OEM top hat nuts and torque to OEM specification (Fig. 17).
- 25. Fasten the two supplied bar-pin bolts to the lower shock mount and torque to 50 ft-lbs (Fig. 18).



Fig. 16: Align marks on the coil bucket and top hat.



Fig. 17: Mount the top hat nuts.



Fig. 18: Fasten the bar-pin bolts.

26. Reattach the UCA to the upright with the ball joint bolt. Support the axle during the reinstallation. Fasten the nut to both the axle nut and UCA. Torque the nuts to OEM specification (Fig. 19 & 20).



Fig. 19: Reattach the UCA.



Fig. 20: Fasten the axle nut.



27. Reinstall the tie rod end (Fig. 21), sway bar end link (Fig. 22), and brake bracket bolt (Fig. 23). Torque all hardware to OEM specification.







Fig. 22: Sway bar end link.



Fig. 23: Brake bracket bolt.

#### **FINAL CHECK AND DETAILS**

- 28. Check that the suspension has proper clearance.
- 29. Reinstall the wheels and torque to OEM specifications.
- 30. Set the vehicle back on the ground and drive back and forth several feet to allow the suspension to settle. Now measure ride height and adjust if necessary. READ INSTALLATION GUIDELINES ON HOW TO PROPERLY ADJUST PRELOAD.
- 31. It is highly recommended that you have your wheel alignment checked.

## REAR SHOCK INSTALLATION

**NOTICE:** Medium-strength thread-lock is recommended on all bolts.

- 1. Please read the installation guidelines on page 4 for instructions on how to properly lift and secure the vehicle.
- 2. Remove both rear wheels.
- 4. Support the center of the differential with a jack stand (Fig. 24).

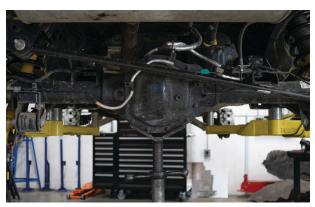


Fig. 24: Support the differential.

#### STOCK SHOCK REMOVAL

5. Loosen the coil-over's lower mounting bolt and three top hat nuts (Fig. 25 & 26). DO NOT remove the center nut. Removal of the center nut will release the spring from the stock assembly and may result in SERIOUS INJURY or DEATH!

**WARNING:** HIGH SPRING TENSION! Springs under tension can store a significant amount of energy, and if released unexpectedly, they can cause damage, SERIOUS INJURY or DEATH.



Fig. 25: Loosen the lower mounting bolt.



Fig. 26: Do not remove the center nut.

6. Remove the top hat nuts first, then the lower shock mount bolt. Slide the stock coil-over out.

#### **FOX COIL-OVER ASSEMBLY**

**NOTICE:** The shock's preload ring is set to accommodate 1" of lift on a Wildtrak equipped with a Sasquatch package and HOSS 1.0 OEM springs. Preload adjustment might be necessary to achieve the desired lift. Review the table and steps on page 8 for preload ring settings. Torque the preload ring's screw to 80 in. lbs.

- 7. Mark the stock assembly's top mount and spring to ensure correct alignment.
- 8. Refer to pages 7-9 on how to disassemble the stock coil-over and reassemble with the FOX shock.
- 9. Identify the correct FOX spring seat adapter and slide it over the shock body onto the preload ring before installing the OEM spring hardware. The other provided spring seat can be discarded. Use FOX part number 234-00-830 for HOSS 2.0 springs and 234-00-847 for HOSS 1.0 springs. Look on the top or bottom towards the center of the adapter for the FOX part number.
- 10. Align the FOX shock's eyelet perpendicular to the marked top hat and spring (Fig. 25).

#### **FOX SHOCK INSTALLATION**

- 11. Orient the FOX coil-over.
- 12. Attach the top hat nuts first and torque to OEM specification. (Fig. 26).
- 13. Use the OEM lower nut and bolt. Install the lower eyelet of the shock with the longer spacer on the inside of the vehicle. Torque to OEM specifications (Fig. 27).

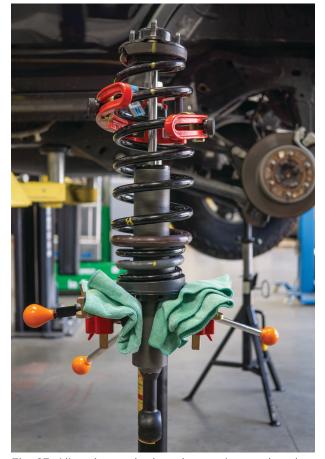


Fig. 27: Align the marked top hat, spring, and eyelet.



Fig. 28: Attach the top hat nuts.



Fig. 29: The larger spacer mounts on the inboard side of the eyelet.

#### **FINAL CHECK AND DETAILS**

- 14. Check that the suspension has proper clearance.
- 15. Reinstall the wheels and torque to OEM specifications.
- 16. Set the vehicle back on the ground and drive back and forth several feet to allow the suspension to settle. Now measure ride height and adjust if necessary. READ INSTALLATION GUIDELINES ON HOW TO PROPERLY ADJUST PRELOAD.
- 16. It is highly recommended that you have your wheel alignment checked.

### **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, 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. Use a small amount of contact cleaner before making adjustments will keep these parts clean and operating smoothly for years

**NOTICE:** Keep the shock and spring clean and free of dirt or water to avoid corrosion. Keep the shock shaft clean and free of mud. Avoid using a high-pressure washer near the shaft seals and adjusters. Before adjusting preload or the crossover ring, clean the threads of the shock body for easier adjustment and mitigating wear.

#### FOX SERVICE AND UPGRADES

HAVE YOUR FOX SHOCKS SERVICED BY FOX TECHNICIANS. CALL OUR SERVICE CENTER AT 619.768.1800 TO GO OVER THE SERVICE AND UPGRADE OPTIONS AVAILABLE FOR YOUR PRODUCT. ONCE YOU'VE SETUP YOUR SERVICE AND/OR UPGRADES YOU WILL RECEIVE A RETURN AUTHORIZATION NUMBER AND SHIPPING INSTRUCTIONS.

#### **COMPLETE SERVICES**

100% street use: every 50,000 miles 50% street/50% off-road use: every 10,000 miles

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### WARRANTY INFORMATION

#### **FOX LIMITED WARRANTY**

FOX Factory, Inc., a Georgia corporation having an office at 6634 Highway 53 Braselton, GA 30517 ("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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