



DIRECT-REPLACEMENT
INSTALLATION GUIDE

FORD F-150 (2015-ON)

ADVENTURE SERIES 2.0

FRONT COIL-OVER

983-51-017 - 2015-ON Ford F150, Front C/O, Snap Ring, PS, 2.0, IFP, 1"- 3.5" Lowering

CONTENTS

INTRODUCTION	1
SUPPLIED PARTS	2
SHOCK DIAGRAM	3
SAFETY INSTRUCTIONS	4
INSTALLATION GUIDELINES	5
FRONT SHOCK INSTALLATION	6
WARRANTY INFORMATION	15

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.

IN THE BOX

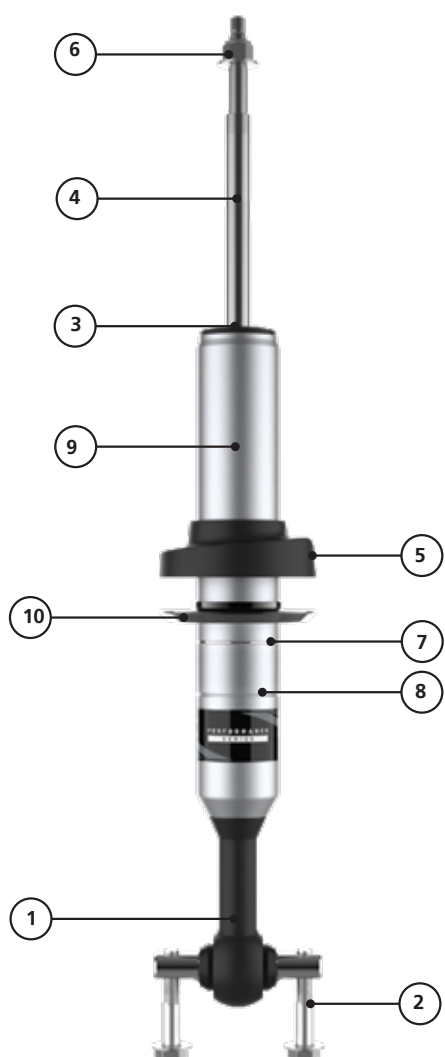
- Front Shock
- Supplied Hardware
- Installation Guide

SUPPLIED PARTS

SHOCK ASSEMBLY				
FOX PN	DESCRIPTION		QTY	NOTES
983-51-017	FRONT, LEFT/RIGHT SHOCK		1	
SERVICE PARTS				
FOX PN	DESCRIPTION	*HARDWARE REF.	QTY	NOTES
234-00-619	MOLDED SPRING SEAT	A1	1	Spring Seat Retainer Kit
706-0000	ALUMINUM SPRING SEAT	A2	1	
038-01-085	SNAP RING	-	1	
018-00-066	M12-1.75 FLANGED LOCK NUT	-	1	
99501004	1/2"-13 X 3" HEX BOLT	-	2	
99502009	1/2"-13 NYLOK NUT	-	2	
99503014	1/2" SAE FLAT WASHER	-	4	

SHOCK DIAGRAM

SNAP RING COIL-OVER REPRESENTATION



ITEM NO.	NAME
1	Eyelet
2	Bar-pin bolt
3	Wiper seal
4	Shaft
5	Molded spring seat
6	Center nut
7	Snap ring
8	Snap ring groove
9	Shock body
10	Aluminum spring seat

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.
- If a spring seat adjustment is necessary for your application DO NOT adjust preload with the coil-over on the vehicle. Remove the coil-over from the vehicle and use a spring compressor to remove the lower spring hardware and spring. Once the spring is removed, you can adjust the spring seat.

FRONT SHOCK INSTALLATION

TOOLS REQUIRED

- Manufacturer Torque Specs
- Torque Wrench
- Medium-Strength Thread-Lock
- Professional Spring Compressor
- **NOTICE:** Medium-strength thread-lock is recommended on all bolts.

1. Please read the installation guidelines on page 5 for instructions on how to properly lift and secure the vehicle.
2. Record the front vehicle ride height to ensure the proper lift is attained after kit is installed. READ INSTALLATION GUIDELINES ON HOW TO PROPERLY ADJUST PRELOAD.

STOCK SHOCK AND LCA REMOVAL

3. Remove both front wheels from the vehicle.
4. Disconnect brake line brackets from the knuckle. 10mm and 8mm socket. **(Fig. 1)** Disconnect ABS lines from the brake line inline clips.
5. Disconnect tie rod. - 21mm Socket. **(Fig. 2)**



Fig. 1: Brake line bracket



Fig. 2: Tie rod end

6. Loosen the 2 bolts attaching the lower strut to the LCA. **(Fig. 3)**
7. Loosen, but do not remove the three top hat nuts that secure the stock shock assembly to the vehicle **(Fig. 4)**. **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!**
8. Remove the LCA pivot bolts. **(Fig. 5-6)**



Fig. 3: Lower strut bolts



Fig. 4: Upper strut nuts



Fig. 5: Lower control arm front bolt removal.



Fig. 6: Lower control arm rear bolt removal.

9. Remove the LCA from its mounting pockets and allow it to hang down. **(Fig. 7)**
10. Remove the 3 coil-over top nuts at the strut tower.
11. Disengage the bottom of the strut from the lower control arm. **(Fig. 8)**
12. Remove the strut from the vehicle. **(Fig. 9)**

NOTE: Mark the struts to distinguish between driver's and passenger's.



Fig. 7: LCA Removal.



Fig. 8: Remove lower strut from lower control arm.



Fig. 9: Remove strut from vehicle.

LOWER CONTROL ARM ALIGNMENT SLOT

***If you are running Ridetech 12293699 Upper Control Arms, widening the LCA alignment slots is not required and you may skip to step 14. If you have stock UCAs, proceed with step 13 below.**

13. The alignment slot will need to be slotted $\frac{1}{2}$ " inward to achieve alignment in the lower positions. (Fig. 10, 11, 12)

NOTE: Slotting more than $\frac{1}{2}$ " can allow the lower control arm to hit the frame.



Fig. 10: Measure $\frac{1}{2}$ " inward



Fig. 11: Slot with a die grinder

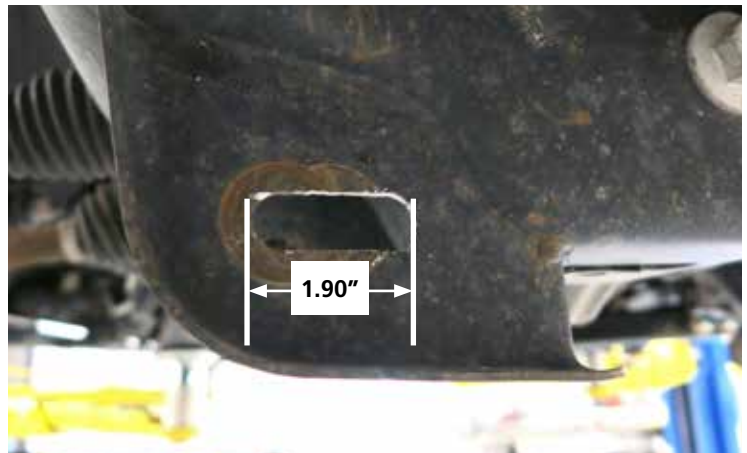


Fig. 12: Completed Slot should measure 1.9"

OEM SHOCK DISASSEMBLY

A strut compressor is required for this part of the installation.

14. Make a note of the top mount and its orientation with the lower arm connection.
(Fig. 13) TIP: Take a picture of the OEM shock's interface with the coil bucket and lower control arm for reference.
15. Use a professional spring compressor to compress the shock assembly according to the spring compressor's included instructions.
16. Follow all safety guidelines provided by the spring compressor manufacturer. Misuse of a spring compressor could result in **SERIOUS INJURY** or **DEATH**!
17. Once the spring is compressed, remove the center nut from the top mount and remove the shock assembly **(Fig. 14)**.

NOTICE: *The shock may drop from the spring compressor once the center nut is removed.*

18. Do not discard the OEM spring and associated hardware **(Fig. 15)**. Note their order and

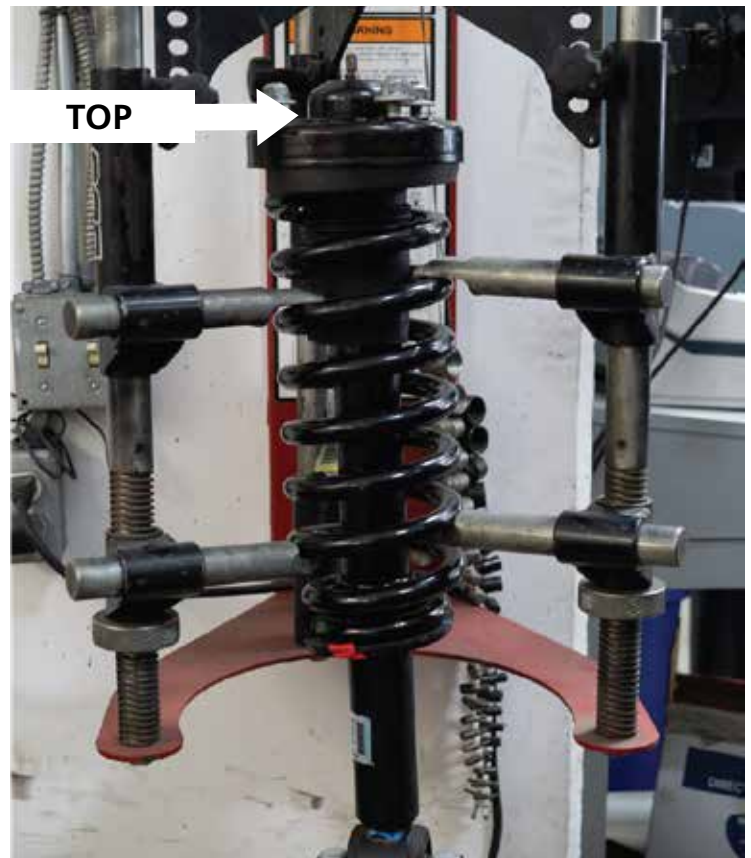


Fig. 13: Strut top mount



Fig. 14: Spring and top mount, shock removed

orientation of how the hardware is removed from the OEM assembly.

19. FOX SNAP RING COIL-OVER ASSEMBLY

20. Inspect the OEM components for excessive wear or damage.
21. Select the spring seat based on your desired lowering height and install the snap ring. Take care when moving the snap ring. It may scratch the shock body (Fig. 16).
22. Install the aluminum spring seat (**A2**) then the molded spring seat (**A1**) on the snap ring. Next, install the OEM rubber bumper on the shaft (Fig. 17).



Fig. 15: OEM spring and associated hardware.



Fig. 16: Lowering heights are approximate due to differences in exact truck configuration.



Fig. 17: Install the OEM rubber bumper on the shaft.

NOTICE: Removal of the OEM shaft guard from the OEM top hat assembly is optional but recommended to prevent interference with the shock at extreme travel conditions.

23. Marry the FOX shock with the OEM spring and top mount using the spring compressor. Install the FOX shock assembly and rotate the FOX spring seat so the OEM spring orientation is replicated (**Fig. 18**). Review your notes from step 11 on how the OEM shock was previously interfaced.

NOTICE: The Adventure Series logo on the decal faces outboard once the coil-over is installed on the vehicle. (Fig. 19)

24. Install the supplied center nut and torque to 20 ft-lbs.



Fig. 18: Shaft guard



Fig. 19: Decal faces out

FOX COIL-OVER INSTALL

25. Install the new coil-over assembly into the strut tower. Loosely fasten the top nuts (**Fig.20**).
26. Reposition the lower control arm into its mounting pockets, then position the bottom of the strut in its mounting location on the lower control arm and install the 1/2" mounting bolts, washers & nuts (**Fig. 21**).
27. Reinstall the LCA mounting bolts (**Fig. 22**). Snug the bolts, but do not torque until the vehicle is back on the ground.
28. Once the shock is oriented, torque the top hat nuts to OEM specification and bar-pin bolts to 50 ft-lbs. Ensure the Adventure Series logo faces outward.



Fig. 20: Install coilover



Fig. 21: Lower strut mount



Fig. 22: LCA mounting bolts

29. Reinstall the tie rod end link. **(Fig. 23)**
30. Re-attach the sway bar end link **(Fig. 24)**.
31. Re-attach brake brackets. **(Fig. 25)**
32. Check that the suspension has proper clearance by steering completely in both directions.
33. Complete process on the other side of the vehicle.
34. Replace wheels
35. Set the vehicle back on the ground torque lug nuts to OE specifications.
36. 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.**
37. Torque remaining hardware to OE specifications.

CHECK AND FINAL DETAILS

38. Re-check all hardware
39. It is highly recommended that you have your wheel alignment checked.
40. Check all hardware after 500 miles and at regular maintenance intervals.



Fig. 23: Attach tie rod to knuckle



Fig. 24: Sway bar link



Fig. 25: Brake line bracket

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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**WARNING: Cancer and
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