DIRECT-REPLACEMENT
INSTALLATION GUIDE

FORD F150 4WD | 2015 - ON

BILLET UPPER CONTROL ARM KIT

803-34-015 - Kit: Control Arm, 2015 - ON Ford F150 Upper Control Arm, Black
803-35-015 - Kit: Control Arm, 2015 - ON Ford F150 Upper Control Arm, Orange

803-34-015/803-35-015 - REV A

FOX products are subject to continuous development and improvement. To find the most up to date product information such as color installation manuals, videos, and FAQs please visit:

http://ridefox.com/manuals

To locate the correct installation manual, use the 8-digit part number found on the end of the packaging box (see illustration below):

CONTENTS

INTRODUCTION	1
UCA SUPPLIED PARTS	2
UCA DIAGRAM	3
SAFETY INSTRUCTIONS	4
INSTALLATION GUIDELINES	5
UCA INSTALLATION	6
MAINTENANCE	13
WARRANTY INFORMATION	14
CONTACT INFORMATION	15

INTRODUCTION

Thank you for choosing FOX direct replacement, upper control arms 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.

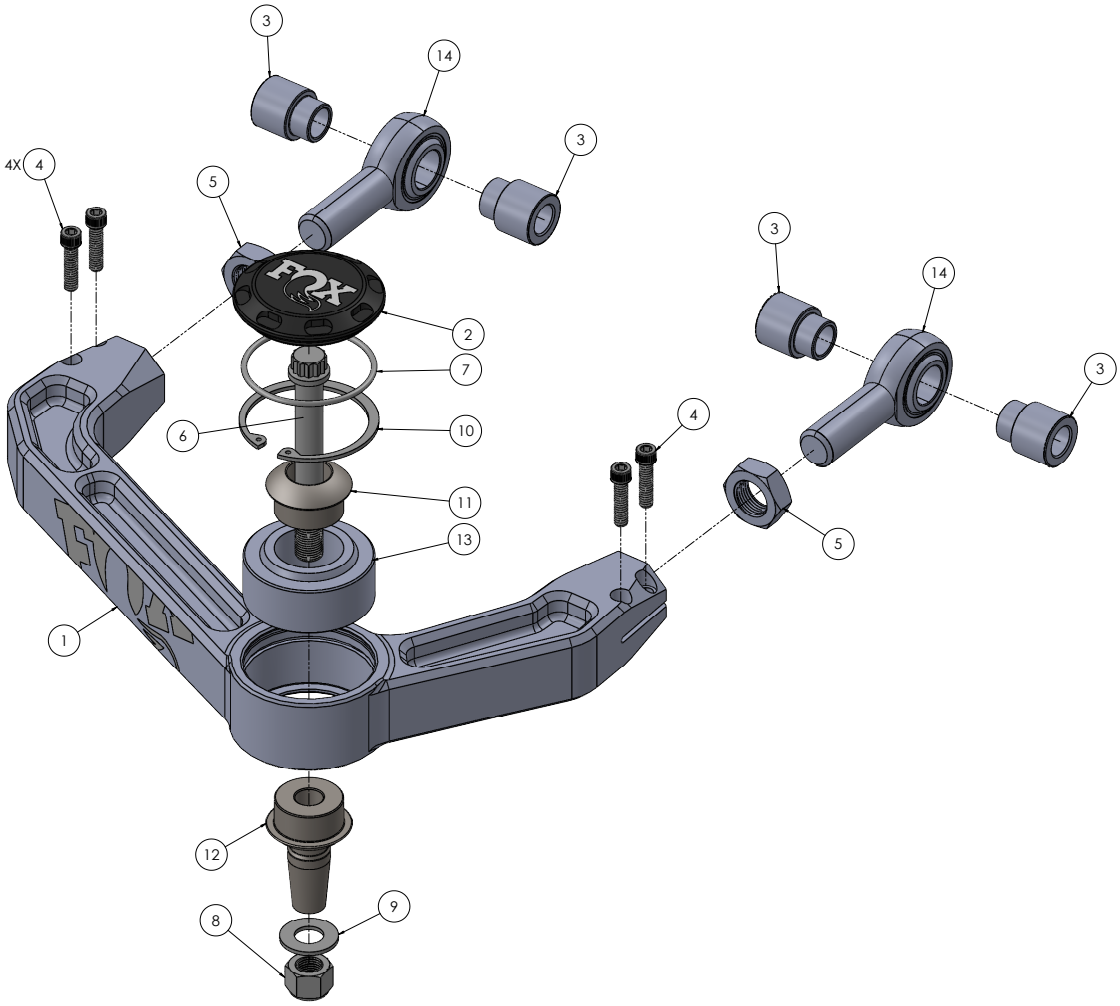
IN THE BOX

- Front Billet Upper Control Arms
- Supplied Hardware
- Installation Guide

UCA SUPPLIED PARTS

FRONT UCA ASSEMBLY			
FOX PN	**DESCRIPTION**	**QTY**	**NOTES**
B5133	Bag Kit: Taper Hardware	2	
	Hardware: O Ring Cap Seal	1	O-Ring seal for the cap to the billet control arm
	Misalignment: 1/2” Sunk Misalignment	1	Hardware to mount the billet control arm to the steering knuckle
	Misalignment: 2015+ Ford F150 Taper Misalignment	1	
	Hardware: 1/2”-20 x 4” Bolt, 12 Point	1	
	Hardware: 1/2” Washer	1	
	Hardware: 1/2”-20 Nylock Nut	1	
	UCA Cap: Spherical Bearing Cap	1	Black: 803-35-014 Orange: 803-35-015
B5132	Bag Kit: Pivot Hardware	2	
	Hardware: 3/4”-16 Jam Nut	2	Hardware to mount the billet control arm to the frame.
	Rod End: 3/4”-16 PTFE Lined Rod End	2	
	Hardware: Bolt: 1/4”-20 x 1” Socket Head Screw	4	
	Misalignment: 2015+ Ford F150 Pivot Misalignment	4	
A5125-BLK	FOX UCA: 2015+ Ford F150 - Billet Front UCA - DS - FOX Logo - Black	1	Black: 803-35-014
A5125-BLK	FOX UCA: 2015+ Ford F150 - Billet Front UCA - PS - FOX Logo - Black	1	
A5125-ORG	FOX UCA: 2015+ Ford F150 - Billet Front UCA - DS - FOX Logo - Orange	1	Orange: 803-35-015
A5125-ORG	FOX UCA: 2015+ Ford F150 - Billet Front UCA - PS - FOX Logo - Orange	1	

UCA DIAGRAM



PART NO.	NAME	PART NO.	NAME
1	Billet Upper Control Arm	8	Nut
2	Cap	9	Washer
3	Pivot Misalignment	10	Snap Ring
4	Pinch Bolts	11	Sunk Misalignment
5	Jam Nut	12	Taper Misalignment
6	Uniball Bolt	13	1.25” Spherical Bearing
7	O-Ring	14	3/4” Rod End

⚠ WARNING

SAFETY INSTRUCTIONS

- FOX direct-replacement UCA's 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 UCA's and other vehicle components does not occur at any point in the shock stroke.
- FOX direct-replacement UCA's 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.
- 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 any aftermarket parts, 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.
- Control arms with sensor are designed to keep the sensor arm in the stock position (same position as the OE control arm).
- Will work with driver and passenger side upper control sensors (including CCD trucks).
- Do NOT hit the aluminum knuckle with a hammer to separate the ball joint, use appropriate ball joint separation tool.
- Service Kit Information:

Part Type	Part Number
Single Spherical Rod End Bearing	001-01-003
Single Spherical Uniball Bearing	001-00-015
Pair Spherical Uniball Bearing Cap - Black	006-00-065
Pair Spherical Uniball Bearing Cap - Orange	006-00-066
UCA Complete Rebuild Kit (X2 Control Arms)	803-04-369

- Wheel / Tire Fitment Information:

Wheel Specification	Tire Specification	Fitment Notes
Stock Wheel	Stock Tires	Wider than stock tires on stock wheels will rub on the Billet Fox UCA when turning. . OE tires and wheels may rub the Billet Fox UCA during full suspension travel.
18” x 9” 4.5” Back Spacing	Up to 12.50” Wide Tire	Tire diameter is relative to lift height
18” x 9” 5” Back Spacing	Up to 295 Width Tire	
20” x 9” 4.5” Back Spacing	Up to 12.50” Wide Tire	
20” x 9” 5” Back Spacing	Up to 295 Width Tire	

UCA INSTALLATION

PREPARATION

1. Please read the installation guidelines on page 5 for instructions on how to properly lift and secure the vehicle.

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

TOOLS REQUIRED

- Manufacturer Torque Specs
- Basic Hand Tools / Socket & Wrench Set
- Jack Stands
- Tape Measure
- Medium-Strength Thread Locker
- Torque Wrench
- Ford Service Tool: 204-592 Separator (or Equiv)

DISASSEMBLY

1. Park vehicle on clean, flat, and level surface.
2. Block the rear wheels for safety.
3. Raise the front of the vehicle. Support the frame rails with jackstands.
4. Remove the front wheels.
5. Disconnect the upper ball joint from the steering knuckle. Do not strike the side of the steering knuckle to get the taper to pop loose. Use Ford Service Tool: 204-592 Separator (or Equiv) to avoid damaging the steering knuckle. (Fig 1)
6. Disconnect ABS (Fig. 2)
7. Disconnect Brake line bracket (Fig. 3)

Fig. 1: Disconnect OE UCA from knuckle.

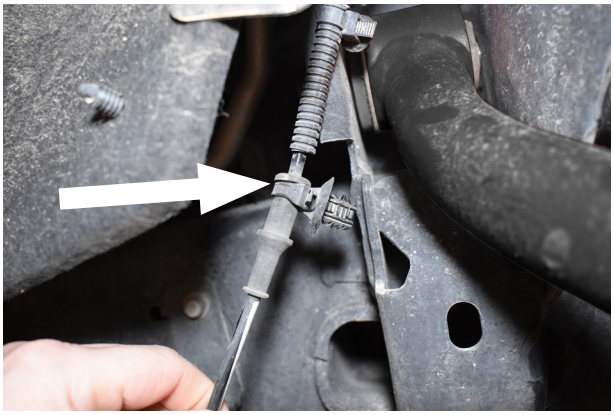


Fig. 2: Disconnect ABS Clip.

Fig. 3: Disconnect Brake line bracket.

8. If equipped, remove the nut attaching the sensor ball stud to the bracket. (Fig. 4)
9. Remove axle nut - depending on model version could be large or small nut. (Fig. 5)
10. Disconnect tie rod end (Fig. 6)
11. Disconnect Sway bar link (Fig. 7)
12. Support LCA. Remove lower strut bar pin bolts and nuts. (Fig. 8)

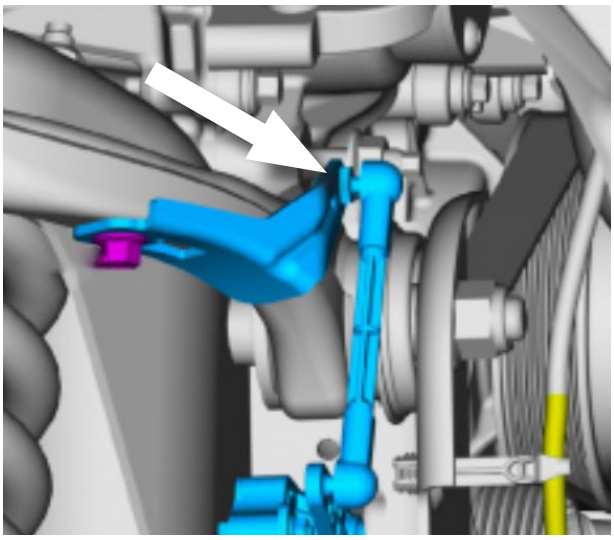


Fig.4: Disconnect sensor arm from UCA.

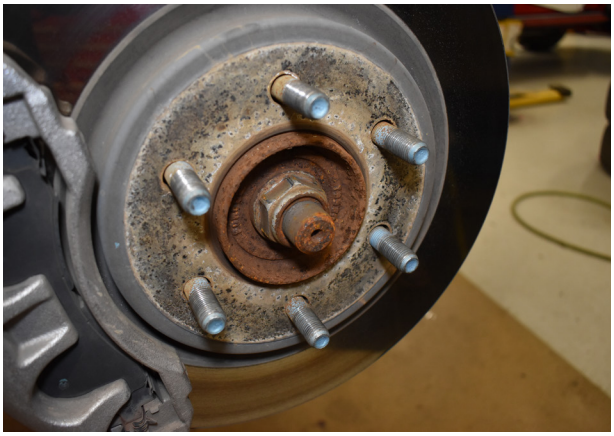


Fig.5: Remove Axle nut.

Fig.6: Disconnect the tie rod end.

Fig.7: Disconnect sway bar link.

Fig.8: Disconnect sway bar link.

13. Remove the 3 upper strut nuts. DO NOT REMOVE THE CENTER STRUT NUT. (Fig. 9)
14. Lower the lower control arm to remove the strut.
15. With the strut removed you can now remove the UCA bolts and nuts and retain for reuse. Remove the UCA from the vehicle. Use 18mm and 21mm wrench/socket. (Fig. 10)

Fig.9: Remove the 3 Strut nuts.

Fig.10: Remove UCA.

UCA ASSEMBLY

16. Assemble heims by installing jam nut. Anti-seize is recommended - (Fig. 11, 12)
17. Install heims into arms, measure from the arm to the end of threads should be 5/8" (Fig. 13)
18. Install misalignments.(Fig. 14A, 14B)

Fig. 11: Install jam nut.

Fig. 12: Anti-Seize threads.

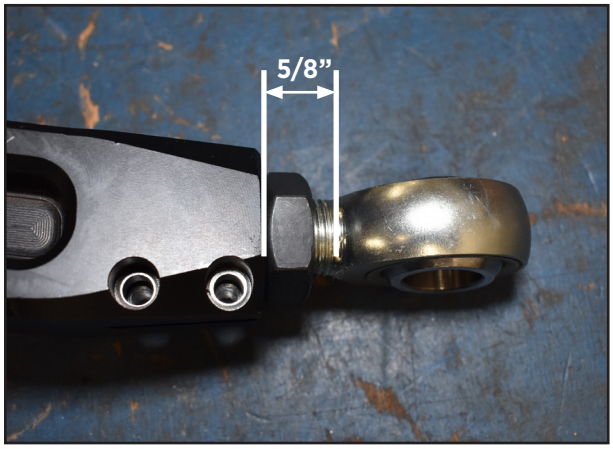


Fig. 13: Install heims.

Fig. 14B: Install misalignments.

Fig. 14B: Install misalignments.

19. Using a long rod or screwdriver, install through the arm ends to keep them from spinning when being tightening the jam nut. (Fig. 15)
20. Install the sensor bracket towards the bottom and the spacer on top in the pinch bolt slot onto the front side of the UCA. (Fig. 16)
21. Using blue thread locker (Fig. 17), install the (4) 1/4"-20 bolts into the pinch joints onto the control arm and torque to 107 in-lbs at this time. After the 1/4" pinch bolts are torqued, tighten the jam nuts to 90 ft-lbs. (Fig. 18)

Fig. 15: Tighten jam nut.

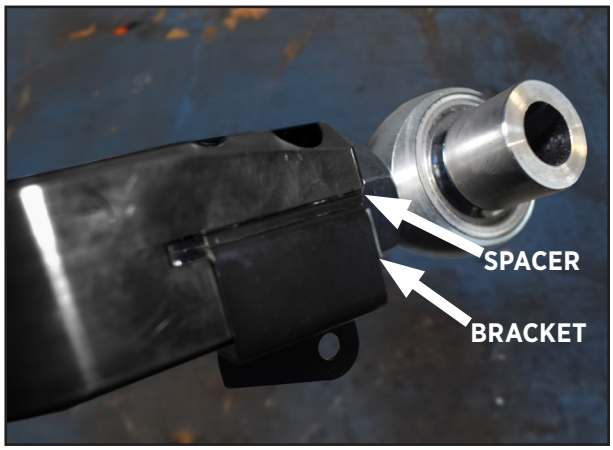


Fig. 16: Install Sensor bracket and spacer.

Fig. 17: Loctite pinch bolt threads.

Fig. 18: Install pinch bolts.

CONTROL ARM INSTALLATION

22. Install new upper control arm with factory hardware. Torque pivot hardware to OE specifications. (FIg. 19, 20)
23. If Coilovers have been purchased, install them at this point following the manufacturer instructions.
24. If no coilovers have been purchased, re-install strut assembly connecting to the LCA. Torque strut mount hardware to OE specifications.
25. Insert the sunk misalignment and uniball bolt through the top of the bearing. Install the taper misalignment to the other end of the bolt with the taper side down to fit into the steering knuckle. **See the UCA diagram on page 3 for reference.**
26. Angle the joint misalignment in order to help attach the upper control arm to the steering knuckle. Initial movement of the uniball joint will be stiff until the joint is installed on the vehicle. Inserting the bolt into the misalignment and moving it may help to break free the uniball joint from its installed position.
27. Once aligned, attach the UCA to the steering knuckle. Attach to the steering knuckle using the provided washer and nylock nut. Torque the upper uniball nut to 80 ft-lbs. (Fig. 21)

Fig. 19: Install UCA.

Fig. 20: Install UCA.

Fig. 21: Connect UCA to knuckle.

28. For trucks equipped with ride height sensors, unplug the sensor and disconnect the bracket from the frame. (Fig. 22)
29. Disconnect the sensor from the OE frame bracket by removing the 2 bolts and 2 nuts. Note the orientation of the sensor. Reinstall the sensor onto the provided relocation bracket using the OE hardware and torque to OE specifications. (Fig. 23)
30. Install the provided relocation bracket with sensor to the frame using the OE hardware. Torque to OE specifciation. (Fig. 24)
31. Attach the ball stud to the FOX UCA sensor mount using the factory nut and thread locker. Torque to OE specification . Using the factory linkage hardware, attach the sensor to the provided bracket in the same orientation it was on the OE bracket. Plug in the sensor. Torque all sensor hardware to OE specifications.
32. Reattach the tie rod to the knuckle and torque to OE specifications.
33. Reinstall the axle nut and torque to OE specifications.
34. Re-attach the ABS clip and brake line bracket to the knuckle.
35. Repeat installation on the opposite side of the vehicle. When both sides are complete, reattach the sway bar links and tighten hardware to OE specifications.
36. Install the O-ring onto the cap and lightly grease the O-ring to help seal the cap to the control arm. Line up the groove on the cap towards the inside of the vehicle, such that the FOX logo is facing outwards towards the tire.
37. Reinstall the front wheels and lower the vehicle to the ground. Torque lug nuts to OE specifications.

POST INSTALLATION INSTRUCTIONS

38. Check all hardware for proper torque.
39. Check hardware after 500 miles.
40. Adjust headlights.
41. The vehicle will need a complete front end alignment.
42. Cycle the steering to check for adequate ABS slack, adjust as necessary.
43. Remove the cap and clean the joint at regular service intervals.

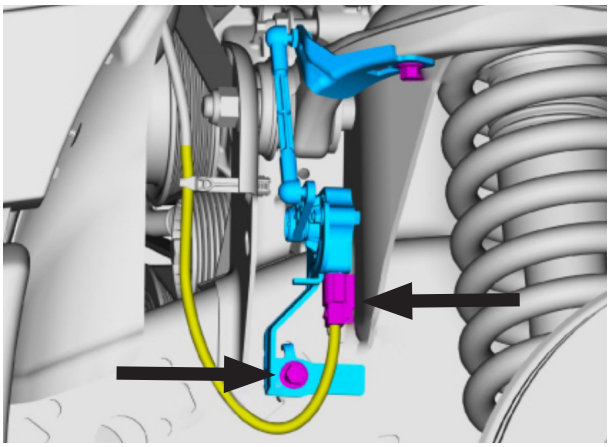


Fig. 22: Unplug sensor and disconnect OE bracket.

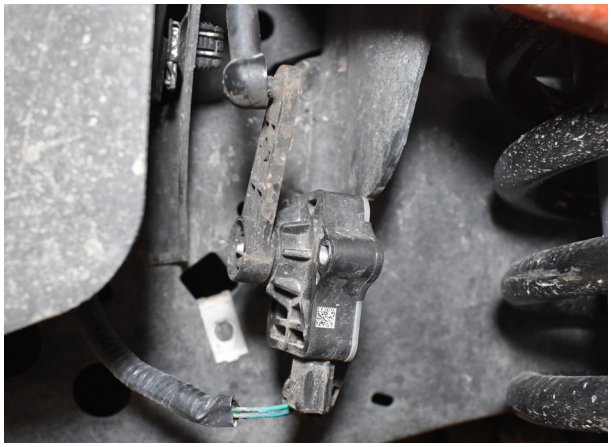


Fig. 23: Remove Sensor from bracket.

Fig. 24: Install sensor bracket to frame.

MAINTENANCE

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE PERFORMANCE AND RELIABILITY OF YOUR BILLET UPPER CONTROL ARMS.

To avoid corrosion, you should keep the billet upper control arms, free of dirt and moisture. The spherical bearing and rod ends are lined with a PTFE lubricant for long life when kept clearn. Make sure you clean these areas completely to prevent corrosion on the joints. Avoid using a high-pressure washer near the O-ring cap seals, as this could drive dirt and moisture inside the cap.

Make sure the O-ring seal is lubricated with grease to prevent moisture from entering the sealed cavity and causing corrosion on the spherical bearing.

Clean the pockets of the control arm to prevent dirt from scratching the anodized coating to ensure a long life of the coating.

FOX SERVICE AND UPGRADES

CALL OUR CUSTOMER SERVICE CENTER AT 800.269.7469 EXT. 2 OR EMAIL US AT ORSALES@RIDEFOX.COM TO GO OVER THE SERVICE OPTIONS AVAILABLE FOR YOUR BILLET UPPER CONTROL ARM.

COMPLETE SERVICES

ALL OF OUR SPHERICAL BEARINGS COME WITH A LUBRICANT INFUSED LINER, IT IS NOT RECOMMENDED TO FURTHER LUBRICATE THESE SPHERICAL BEARINGS AS THIS COULD CAUSE PREMATURE FAILURE

INSPECT FOR PLAY IN THE SPHERICAL BEARINGS AND SPHERICAL ROD END AFTER ANY OFF-ROAD USE

CLEAN OFF DIRT FREQUENTLY FOR LONGEST LIFE

INSPECT JAM NUTS AT LEAST ONCE EVERY THREE MONTHS

WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

WARRANTY INFORMATION

BILLET UPPER CONTROL ARMS

- Additionally, Fox Factory, Inc. offers a lifetime warranty except for (i) all serviceable components of the Upper Control Arms including spherical bearings, rod ends, other fabricated hardware and (ii) appearances and finishes based on issues with workmanship. Serviceable components and appearances/finishes are limited to a twelve (12) month warranty. Damage by use and abuse is not covered.

- Please note that certain sounds, including those resembling a “race car” noises such as squeaks or creaks, may be normal for specific models or configurations. These sounds are often associated with the design and operation of the vehicle and do not necessarily indicate a mechanical issue. However, if you hear noises such as clunks or thuds please bring your vehicle to a qualified mechanic for review.

- This warranty covers any repair or replacement necessary for defects in materials or workmanship, excluding sounds that result from standard operation of the vehicle’s performance features

CONTACT

FOX RACING SHOX
A DIVISION OF FOX FACTORY INC.

SALES
750 Vernon Way, Suite 101
El Cajon, CA 92020
1.800.FOX.SHOX (1.800.369.7469)
orsales@ridefox.com