

DIRECT-REPLACEMENT INSTALLATION GUIDE

DODGE/ RAM 1500 4WD | 2006 - ON

BILLET UPPER CONTROL ARM KIT

803-35-016 - Kit: Control Arm, 2006 - On Ram 1500 Upper Control Arm, Black 803-35-017 - Kit: Control Arm, 2006 - On Ram 1500 Upper Control Arm, Orange



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	11
WARRANTY INFORMATION	12
CONTACT INFORMATION	17

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

803-35-016 / 803-35-017

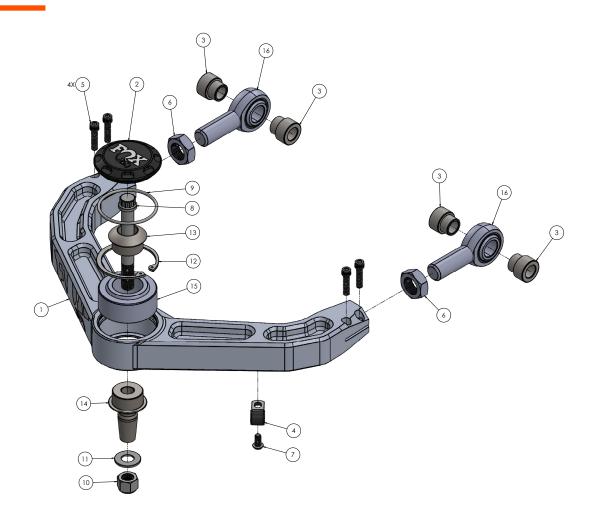
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UCA SUPPLIED PARTS

FRONT UCA ASSEMBLY				
FOX PN	DESCRIPTION	QTY	NOTES	
B5130	Bag Kit: Pivot Hardware	2		
	Misalignment: 2006+ Ram 1500 Pivot Misalignment	4		
	Hardware: 3/4"-16 Jam Nut	2	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		
	Hardware: 3/8" Wire Loop Clamp	1	Hardware to attach	
	Hardware: Bolt: 1/4"-20 x 1/2" 18-8 SS Button Head Hex Drive Screw	1	ABS wires to the bil- let upper control arm	
B5129	Bag Kit: Taper Hardware	2		
	Hardware: 1/2"-20 Nylock Nut	1	Hardware to mount	
	Misalignment: 1/2" Sunk Misalignment	1		
	Misalignment: 2006+ Ram 1500 Taper Misalignments	1	the billet control arm to the steering knuckle	
	Hardware: 1/2"-20 x 4" Bolt, 12 Point	1		
	Hardware: 1/2" Washer	1		
	UCA Cap: Spherical Bearing Cap	1	Black: 803-35-008 Orange: 803-35-009	
	Hardware: O Ring Cap Seal	1	O-Ring seal for the cap to billet control arm	
A5113-BLK	UCA: 2006+ Ram 1500 - Billet Driver Side - Arm Assembly	1	Black: 803-35-008	
A5114-BLK	UCA: 2006+ Ram 1500 - Billet Passenger Side - Arm Assembly	1		
A5113-ORG	UCA: 2006+ Ram 1500 - Billet Driver Side - Arm Assembly	1	Orange: 803-35-009	
A5114-ORG	UCA: 2006+ Ram 1500 - Billet Passenger Side - Arm Assembly	1		

FOX 803-35-016 / 803-35-017

UCA DIAGRAM



PART NO.	NAME	PART NO.	NAME
1	Billet Upper Control Arm	10	Nut
2	Cap	11	Washer
3	Pivot Misalignment	12	Snap Ring
4	Wire Clamp	13	Sunk Misalignment
5	Pinch Bolts	14	Taper Misalignment
6	Jam Nut	15	1.25" Spherical Bearing
7	Wire Clamp Bolt	16	3/4" Rod End
8	Uniball Bolt		
9	O-Ring		

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.
- Do NOT hit the aluminum knuckle on later model trucks 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)	803-04-370

• 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

- Basic Hand Tools / Socket & Wrench Set
- Jack Stands
- Tape Measure
- Cut Off Wheel / Reciprocating Saw
- Ball Joint Separator Tool
- · Medium-Strength Thread Locker
- Torque Wrench
- 8677 Chrysler Ball Joint Separation Tool (or Equiv)

PREPARATION

- 1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.
- 2. Raise the front of the vehicle and support the frame rails with jackstands.
- 3. Remove the front wheels.
- 4. Disconnect the ABS wire from the upper control arm. (If equipped)
- 5. Disconnect upper control arm from the knuckle. Do not hit the aluminum steering knuckle with a hammer to dislodge the upper ball joint taper. Chrysler manual recommends #8677 ball joint tool. (Fig 1) Failure to properly disassemble the ball joint may weaken the factory aluminum knuckle and cause premature failure.

DISASSEMBLY

6. Disconnect the sway bar links from the lower control arm (2019+ model shown). 2006-2018 model disconnect the sway bar from the front side of the control arm. Leave the links attached to the sway bar. Save hardware. (Fig 2)



Fig. 1: Disconnect upper control arm from knuckle.



Fig.2: Disconnect sway bar link.

- 7. Disconnect both outer tie rod ends from spindle steering arm. Save hardware. (Fig. 3)
- 8. Disconnect both upper control arms from spindle steering arm. Be careful not to damage any electric wires or brake lines.
- 9. Support the lower control arm with a hydraulic jack. Remove the three strut-to-frame mounting nuts. (Fig 4)

CAUTION: DO NOT LOOSEN THE MIDDLE STRUT NUT.

- 10. Remove the (1) bolt and nut connecting the shock to the lower control arm. (Do not discard bolt and nut as it will be used with your new FOX coil-over kit) (Fig. 5)
- 11. Remove the stock shock assembly. You may need to use a pry bar to lower the suspension enough to remove the stock shock. Be careful not to damage any brake lines or electrical wires.

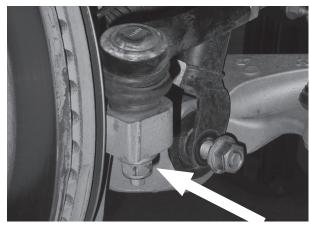


Fig. 3: Remove tie rod end nut.



Fig. 4: Loosen the 3 upper mount nuts.

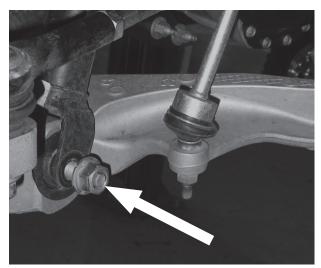


Fig. 5: Lower strut nut and bolt.

UPPER CONTROL ARM ASSEMBLY

- 12. Install the 3/4" jam nuts onto the pivot heims all the way till the jam nut bottoms out (Fig. 7).
- 13. Lightly anti-sieze the 3/4" female threads of the control arm. Install the heim joints with the jam nuts into the female threads of the control arm (Fig. 11).
- 14. Thread the heim joint into the control arm until there is approximately 5/8" between the control arm surface and base of the heim joint. Line up the heim joints such that they are "vertical" relative to the control arm. Snug up the jam nut at this time (Fig. 12).



Fig. 10: Install the 3/4" jam nuts.



Fig. 11: Install heims into UCA.



Fig. 12: Set to 5/8".

CONTROL ARM INSTALLATION

- 15. Using blue thread locker, 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. 13)
- 16. Install the pivot misalignments into the heims on the upper control arm (Fig. 14).
- If installing with FOX Coil-overs, install the coil-overs at this time. Follow instructions included with the coilovers or reference the coil-over install instructions on FOX's website.
- 18. Install the new upper control arm to the vehicle using the OE hardware. Run the bolts from the inside out of the strut bucket outwards with the nut on the outer misalignment surface. Do this for the front and rear control arm mounts (Fig. 15). Torque the control arm hardware pivot to OE torque specifications. Passenger side shown in the figure.
- 19. Insert the sunk misalignment and 12 pt. bolt through the top of the uniball joint. Install the longer bottom taper misalignment to the other end of the bolt with the taper side down to fit into the steering knuckle (Fig. 16).
- 20. Angle the joint misalignments 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.
- 21. Attach the taper misalignment joint to the upper control arm taper on the steering knuckle. Use the provided 1/2" 12 point bolt through the misalignments and attach to the steering knuckle using the washer and nylock nut. Torque the upper uniball nut to 80 ft-lbs. (Fig. 17)
- 22. Reattach the tie rod to the knuckle and torque to OE specifications.
- 23. 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.
- 24. Attach the brake line and ABS wires to the factory position on the knuckle if equipped. Use the provided wire clamps and 1/4" bolt with blue thread locker to attach the brake wire / ABS wire to the bottom side of the upper control arm. Torque the 1/4" hardware to 76 in-lbs. Check for enough slack in the wires and adjust as necessary.
- 25. 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.
- 26. Reinstall the front wheels and lower the vehicle to the ground. Torque lug nuts to OE specifications.



Fig. 13: Loctite and install pinch bolts.



Fig. 14: Install misalignments.



Fig. 15: Install UCA.



Fig. 16: Assemble uniball joint.

POST INSTALLATION INSTRUCTIONS

- 27. Check all hardware for proper torque.
- 28. Check hardware after 500 miles.
- 29. Adjust headlights.
- 30. The vehicle will need a complete front end alignment.
- 31. Cycle the steering to check for adequate ABS slack, adjust as necessary.



Fig. 17: Install upper control arm.

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



FOX 803-35-016 / 803-35-017

WARRANTY INFORMATION

BILLET UPPER CONTROL ARMS

- Additionally, Fox Factory, Inc. offers a twelve (12) month warranty on (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. Damage by use and abuse is not covered.
- Please note that certain sounds, including those resembling a "race car" or high-performance engine 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 in 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.



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