PVG Owners/Service Manual
Production Standards

Cover Stock:	22-24# Matte Cover
Text Stock:	22-24# Matte Book
Cover Ink:	Black
Text Ink:	Black
Size:	8.5"x11" (Portrait)
Bindery:	Staple, upper left corner

Note: Manuals are to be printed Black & White and double sided.

Do Not Print

INSTALLATION GUIDE

2024+ TOYOTA TACOMA, LC250, GX550, 2025+ 4-RUNNER

BILLET FRONT UPPER CONTROL ARM

803-35-006 - Kit: Control Arm, 24+ Toyota Tacoma, LC250, GX550, 25+ 4-Runner Upper Control Arm, Black
803-35-007 - Kit: Control Arm, 24+ Toyota Tacoma, LC250, GX550, 25+ 4-Runner 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	2,3
UCA DIAGRAM	4
SAFETY INSTRUCTIONS	5
INSTALLATION GUIDELINES	6
UCA INSTALLATION	7
MAINTENANCE	18
WARRANTY INFORMATION	19
CONTACT INFORMATION	20

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

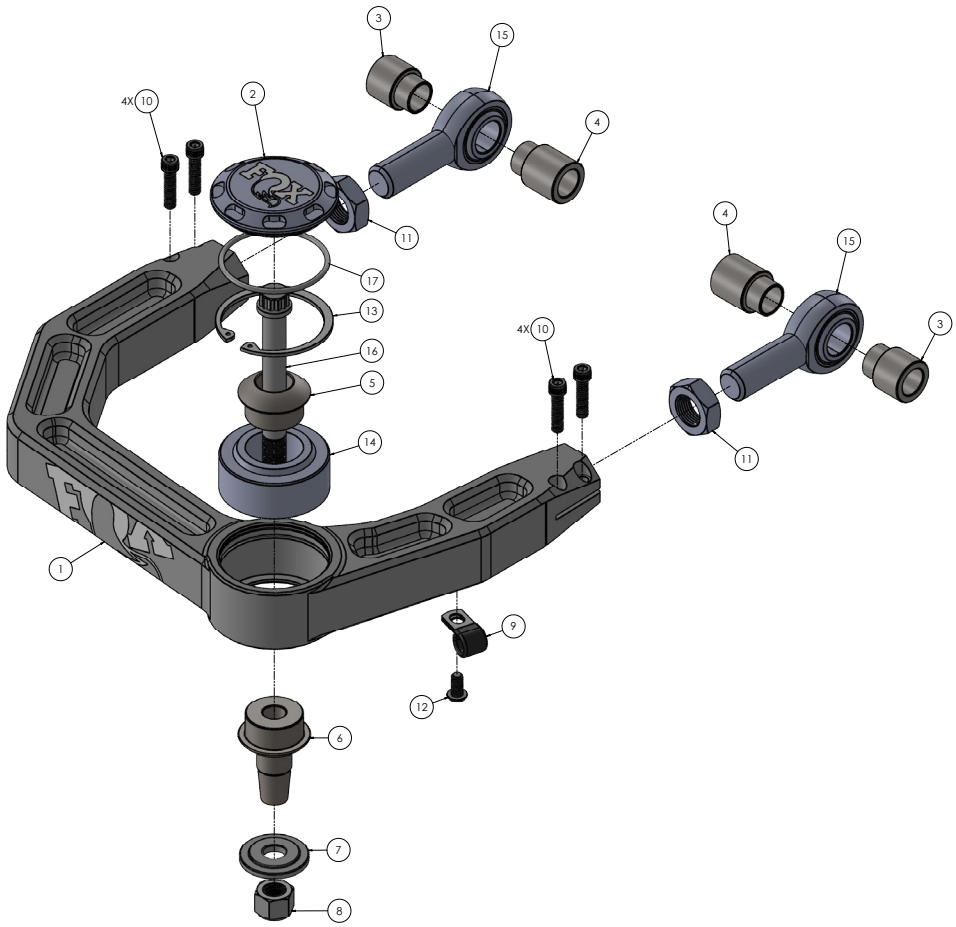
UCA-BLACK SUPPLIED PARTS

803-35-006			
FOX PN	**DESCRIPTION**	**QTY**	**NOTES**
A5119-BLK	Billet Front UCA - DS - BLK	1	Black: 803-35-006
A5120-BLK	Billet Front UCA - PS - BLK	1	
B1660	Bag Kit: Taper Hardware	2	
	Hardware: 1/2”-20 Nylock Nut Clear	2	Hardware to mount the billet control arm to the steering knuckle
	Hardware: 3/8” Loop Clamp	2	
	Misalignment: 1/2” Sunk Misalignment	2	
	Misalignment: 2022+ Toyota Tunda Taper Misalignment	2	
	Hardware: 1/4”- 20 x 1/2” Button Head Hex Drive Screw	2	
	Hardware: 1/2”-20 x 4” Bolt, 12 Point	2	
	Hardware: 1/2” Stepped Washer	2	
	UCA Cap: Spherical Bearing Cap - BLK	2	Black: 803-35-008
	Hardware: O-Ring Cap Seal	2	O-Ring seal for the cap to billet control arm
B1659	Billet UCA - Pivot Kit	2	
	Misalignment: 1” x 0.563” x 0.740” Pivot Misalignment	8	Hardware to mount the billet control arm to the frame
	Misalignment: 1” x 0.563” x 0.959” Pivot Misalignment	4	
	Hardware: 3/4”-16 Jam Nut	4	
	Rod End: 3/4”-16 PTFE Lined Rod End	4	
	Hardware: : 1/4” -20 x 1” Socket Head Cap Screw	4	Hardware to attach ABS wires to the billet upper control arm

UCA-ORANGE SUPPLIED PARTS

803-35-007			
FOX PN	**DESCRIPTION**	**QTY**	**NOTES**
A5119-ORG	Billet Front UCA - DS - ORG	1	Orange: 803-35-007
A5120-ORG	Billet Front UCA - PS - ORG	1	
B1661	Bag Kit: Taper Hardware	2	
	Hardware: 1/2”-20 Nylock Nut Clear	2	Hardware to mount the billet control arm to the steering knuckle
	Hardware: 3/8” Loop Clamp	2	
	Misalignment: 1/2” Sunk Misalignment	2	
	Misalignment: 2022+ Toyota Tunda Taper Misalignment	2	
	Hardware: 1/4”- 20 x 1/2” Button Head Hex Drive Screw	2	
	Hardware: 1/2”-20 x 4” Bolt, 12 Point	2	
	Hardware: 1/2” Stepped Washer	2	
	UCA Cap: Spherical Bearing Cap - ORG	2	Orange: 803-35-009
	Hardware: O-Ring Cap Seal	2	O-Ring seal for the cap to billet control arm
B1659	Billet UCA - Pivot Kit	2	
	Misalignment: 1” x 0.563” x 0.740” Pivot Misalignment	8	Hardware to mount the billet control arm to the frame
	Misalignment: 1” x 0.563” x 0.959” Pivot Misalignment	4	
	Hardware: 3/4”-16 Jam Nut	4	
	Rod End: 3/4”-16 PTFE Lined Rod End	4	
	Hardware: : 1/4” -20 x 1” Socket Head Cap Screw	4	Hardware to attach ABS wires to the billet upper control arm

UCA DIAGRAM



PART NO.	NAME	PART NO.	NAME
1	Billet Upper Control Arm	10	Pinch Bolt
2	Cap	11	Jam Nut
3	Outer Pivot Misalignment	12	Wire Clamp Bolt
4	Inner Pivot Misalignment	13	Snap Ring
5	Sunk Misalignment	14	1.25" Spherical Bearing
6	Taper Misalignment	15	3/4" Rod End
7	Stepped Washer	16	Uniball Bolt
8	Nut	17	O-Ring
9	Wire Clamp		

⚠ WARNING

SAFETY INSTRUCTIONS

- FOX Upper Control Arms 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 and other vehicle components does not occur at any point in the shock stroke.
- FOX direct-replacement Upper Control Arms 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 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)	803-04-367

- Wheel / Tire Fitment Information:

Wheel Specification	Tire Specification	Fitment Notes
Stock Wheel	285/70R17	Wider than listed may rub on the Billet Fox UCA when turning.
17” x 8.5” 4.5-5.75” Back Spacing	Up to 12.50” Wide Tire	Tire diameter is relative to lift height
18” x 9” 4.5-5.75” Back Spacing	Up to 12.50” Wide Tire	
20” x 9” 4.5-5.75” Back Spacing	Up to 12.50” Wide 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
- SST: 09628-62011 Ball Joint Separator (or Equiv.)

DISASSEMBLY

1. Chock the rear wheels and raise the front of the vehicle.
2. Remove the front wheels.
3. Remove the splash guards using snap ring pliers. (Fig. 1)
4. Disconnect the ABS wire bracket bolts from the UCA. (Fig. 2)



Fig. 1

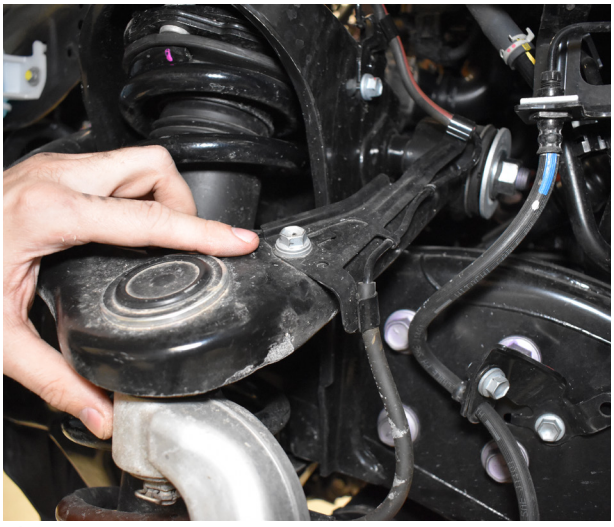


Fig. 2

5. Using a trim tool and screw driver remove all the inner fenders various attachment hardware. (Fig. 3A, 3B)
6. At the front is a hidden fastener that will need to be removed by pulling out the fender flare to gain accessing. (Fig. 4)



Fig. 3A



Fig. 3B



Fig. 4

7. Remove inner fender. (Fig. 5)
8. Disconnect the intercooler line to allow space to remove the Upper Control Arm bolt. (Fig. 6A, 6B)



Fig. 5

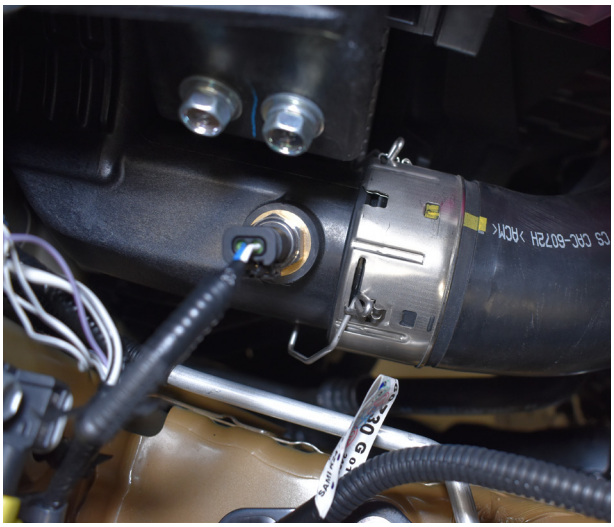


Fig. 6A



Fig. 6B

9. Remove upper control arm ball joint taper castle nut retaining pin by rotating down and pulling out. (Fig. 7)
10. Loose castle nut using a 19mm socket. Thread to the end of the threads. (Fig. 8)
11. Use the recommended tool SST: 09628-62011 to dislodge the upper control arm from the knuckle. (Fig. 9)

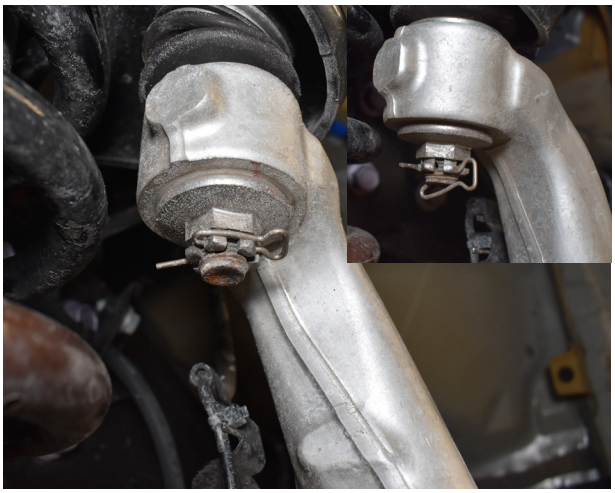


Fig. 7

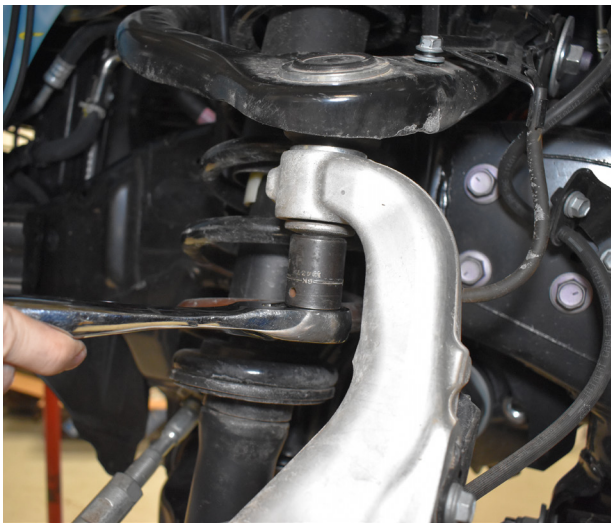


Fig. 8

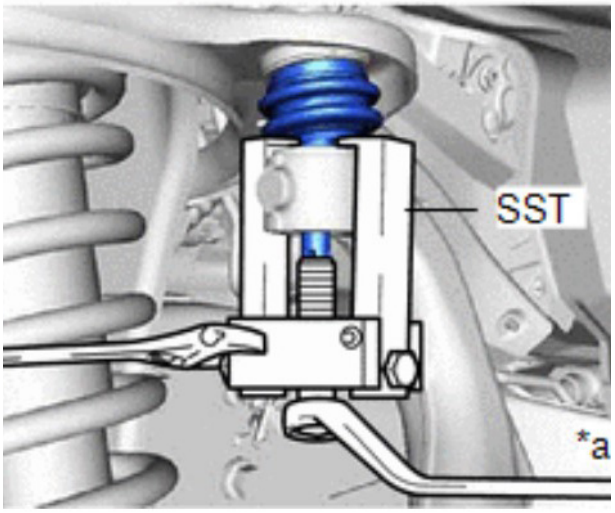


Fig. 9

12. Loosen front cab/core support mount bolt but do not remove. (Fig. 10)
13. Loosen the upper control arm pivot hardware nut using a 22mm wrench. (Fig. 11)
14. Remove upper control arm bolt and washer. (Fig. 12)

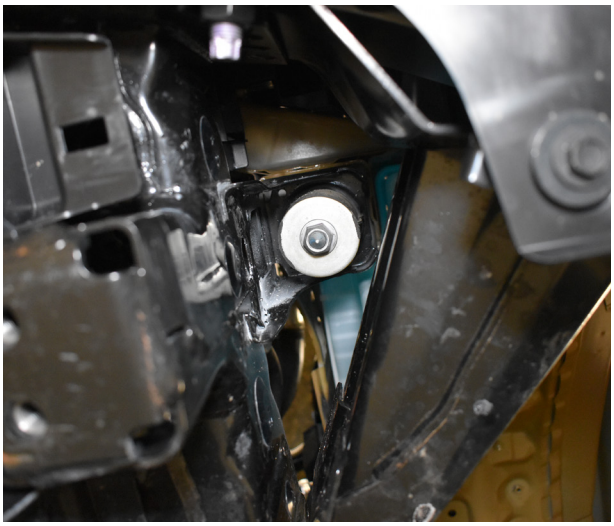


Fig. 10

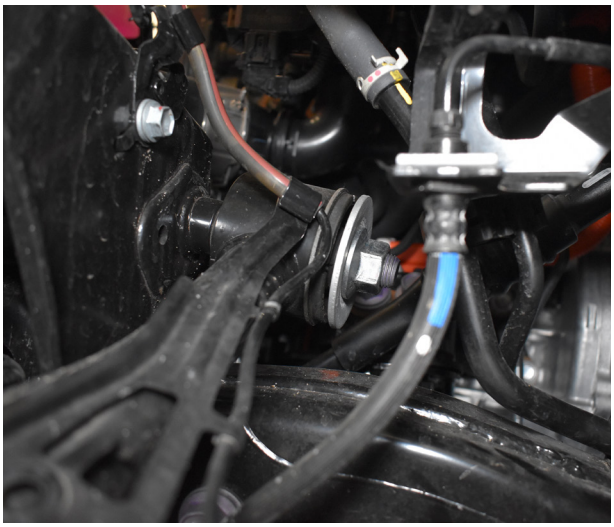


Fig. 11

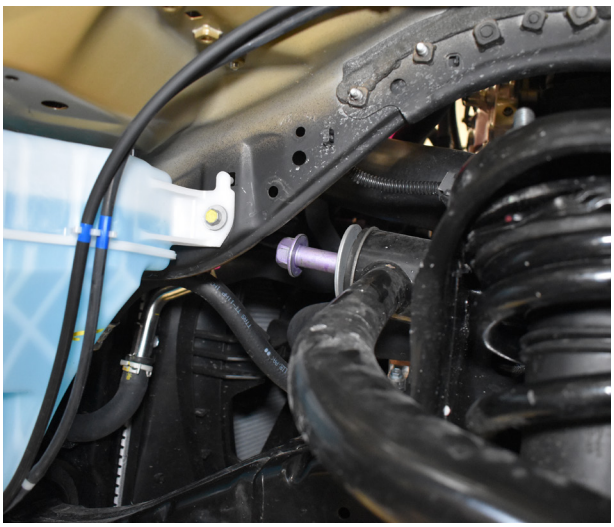


Fig. 12

15. Using a pry bar, pry on the inside body to help clear bolt head during removal. (Fig. 13)
16. Remove upper control arm bolt. (Fig. 14)
17. Remove upper control arm the vehicle. (Fig. 15A)
18. Inner fender will need to be trimmed up ½" on the front and back side for clearance of the control arm at full compression conditions. (Fig 15B)



Fig. 13



Fig. 14

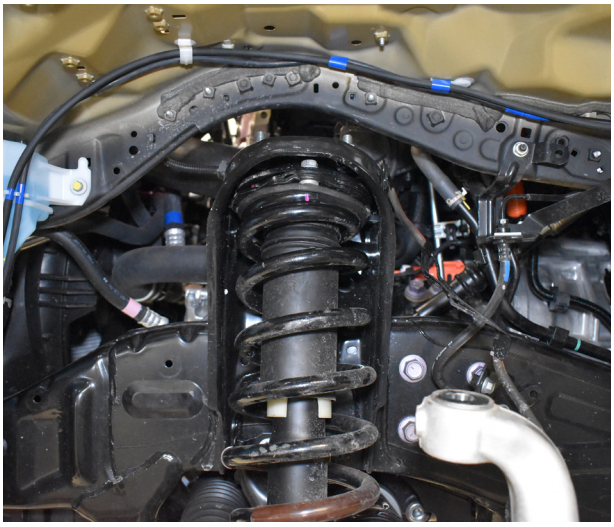


Fig. 15A

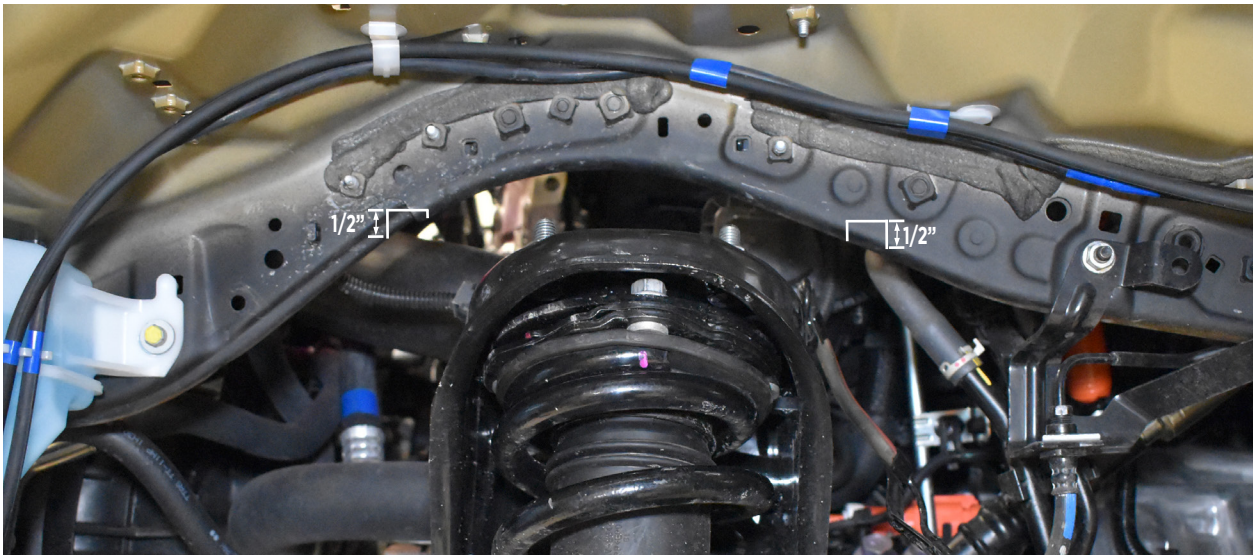


Fig. 15B

UCA ASSEMBLY

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



Fig. 16A



Fig. 16B

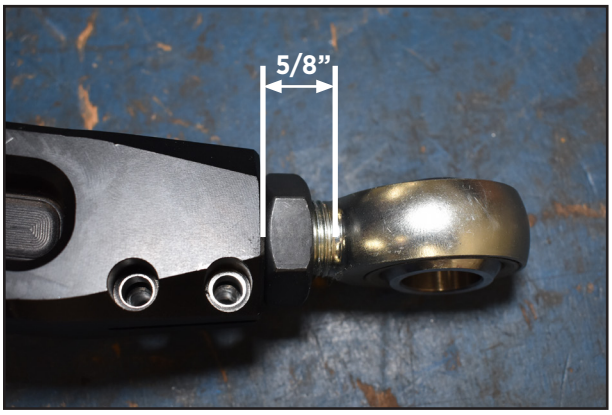


Fig. 17



Fig. 18

22. Using blue thread locker, install the (4) 1/4”-20 bolts into the pinch joints. Do not tighten at this time. (Fig. 19A, 19B)
23. Using a OE upper control arm bolt, temporarily install through the arm ends to keep the from spinning when tightening the jam nut. (Fig. 20)
24. First torque the pinch bolts to 107 in-lbs then torque the jam nuts to 90 ft-lbs. (Fig. 21)



Fig. 19A


Fig. 19B


Fig. 20


Fig. 21

UCA INSTALLATION

25. Install new upper control arm using factory bolt and nut. Install the wide misalignments to the inside of the rod ends. **NOTE: DO NOT RE-USE OE WASHERS.** (Fig. 22A, 22B)
26. Install the sunk misalignment and the 12pt - 1/2" bolt into the top of the uniball (Fig. 23)

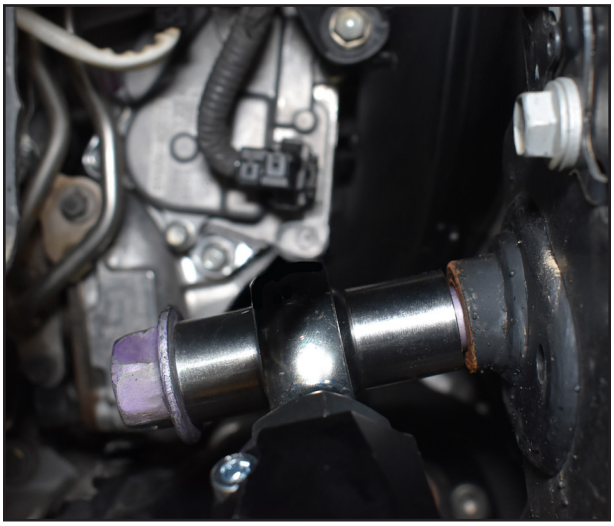


Fig. 22A

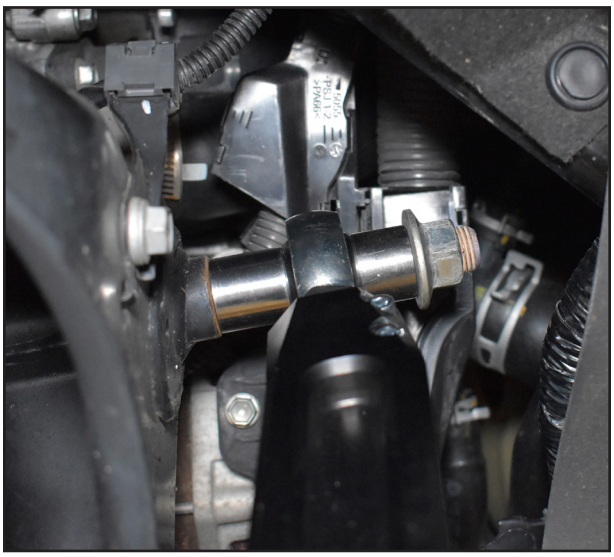


Fig. 22B



Fig. 23

27. Install the taper misalignment onto the lower end of the bolt and insert into the knuckle. (Fig. 24)
28. Using the provided step washer, install onto the 1/2” bolt with the stepped profile towards the steering knuckle. Install the provided 1/2” nylock nut. nylock nut. Tighten to 80 ft-lbs. (Fig. 25)
29. Remove the ABS wire bracket from the ABS wire by bending the 4 tabs with a screwdriver. (Fig. 26)
30. Attach the ABS wire to the upper control arm underside with the provided loop clamp and **1/4” x 3/8” bolt from Bolt Pack BP1129**. Torque to 37 in-lbs. (Fig. 27)



Fig. 24



Fig. 25

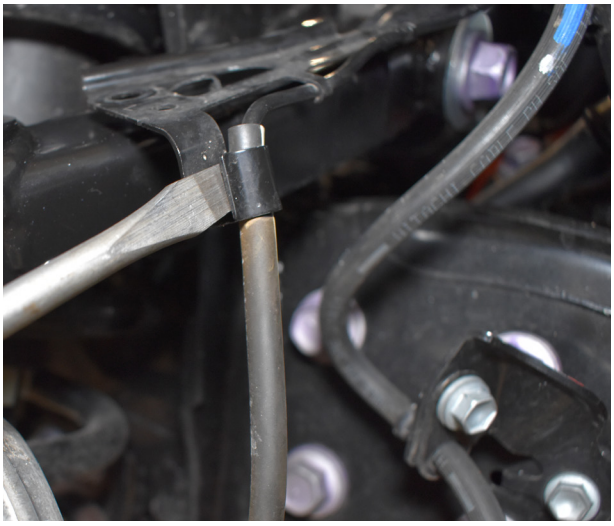


Fig. 26

31. 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.
32. Re-Attach the intercooler line. (Fig. 28)
33. Tighten the cab body mount to OE specifications. (Fig. 29)
34. Re-Install the inner fender and all corresponding hardware.
35. Re-Install the 2 inner splash shields.
36. Re-Install wheels and lower vehicle to the ground.
37. Re-check hardware after 500 miles.



Fig. 27

ALIGN TO THESE SPECIFICATIONS:

Camber:
0.59 degrees +/-0.75 degrees (Min -0.16 to max 1.34 degrees)

Caster:
4.35 degrees +/-0.75 degrees (Min 3.6 to max 5.1 degrees)

Toe-in Angle:
0.10 degrees +/-0.16 degrees

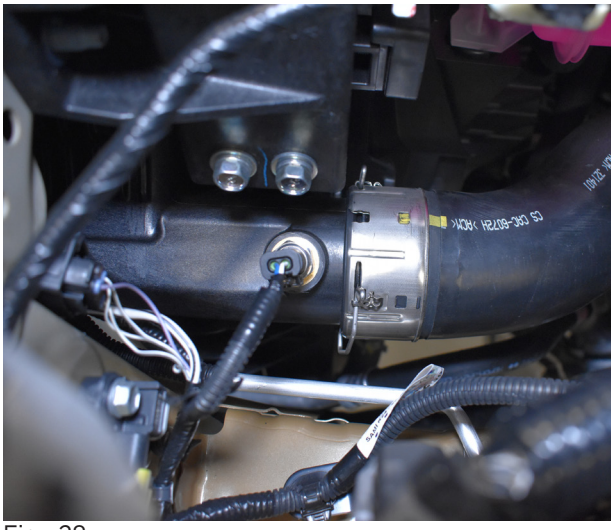


Fig. 28

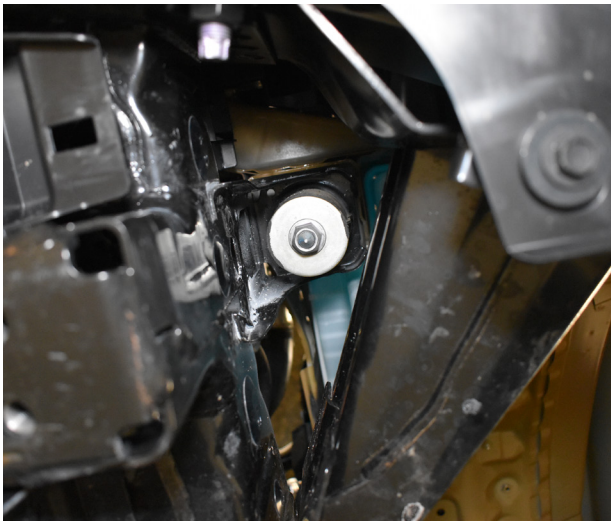


Fig. 29

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