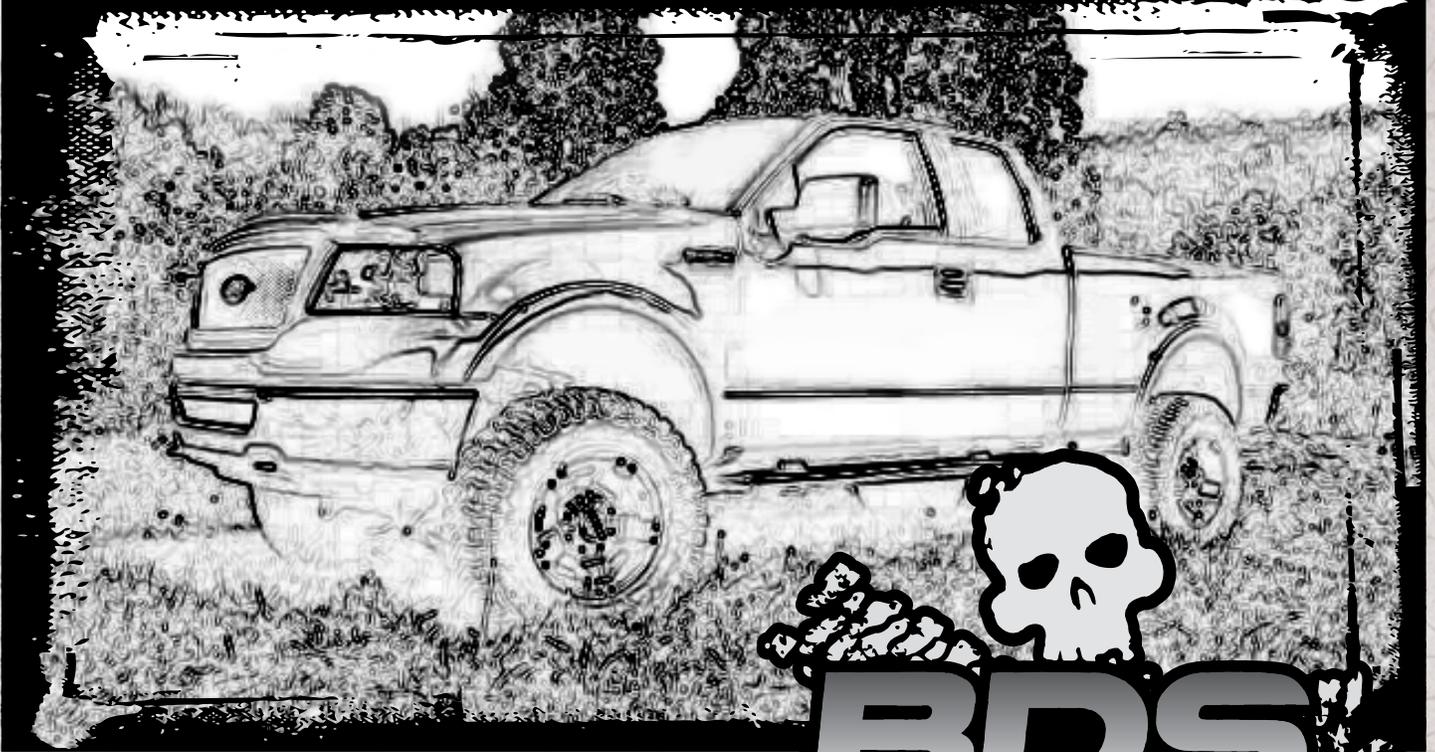


# INSTALLATION GUIDE



Part#: 123253



**HARDCORE LIMITED LIFETIME WARRANTY**

## Upper Control Arm Kit

Ford F-150 4WD | 2004-2020

Rev. 050120

491 W. Garfield Ave., Coldwater, MI 49036 • Phone: 517-279-2135

Web: [www.bds-suspension.com](http://www.bds-suspension.com) • E-mail: [tech-bds@ridefox.com](mailto:tech-bds@ridefox.com)

# Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.



## THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come.

Thank you for choosing BDS Suspension!

### BEFORE YOU START

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

### FOR YOUR SAFETY

Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

### BEFORE INSTALLATION

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
- If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
- Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.



Visit [560plus.com](http://560plus.com) for more information.

### TIRES AND WHEELS

0" Lift: Stock  
2" Lift: 35x12.50 w/ 5.5" BS \*Trimming Req'd\*  
W/ 6" Lift: See Lift Manufacturers  
Recommendations



### BEFORE YOU DRIVE

Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.

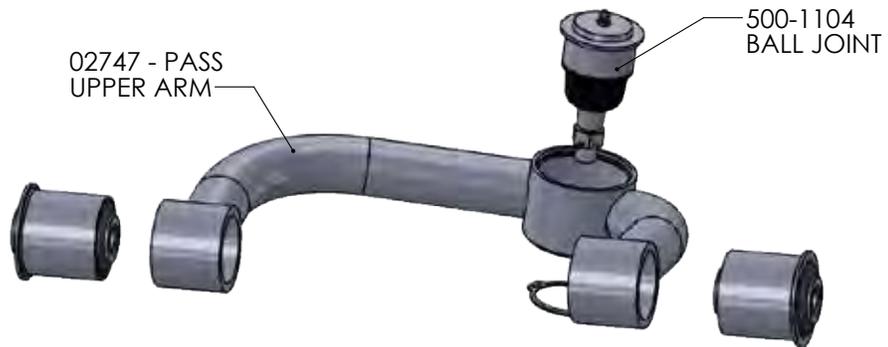
Perform head light check and adjustment.

Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

# CONTENTS OF YOUR KIT

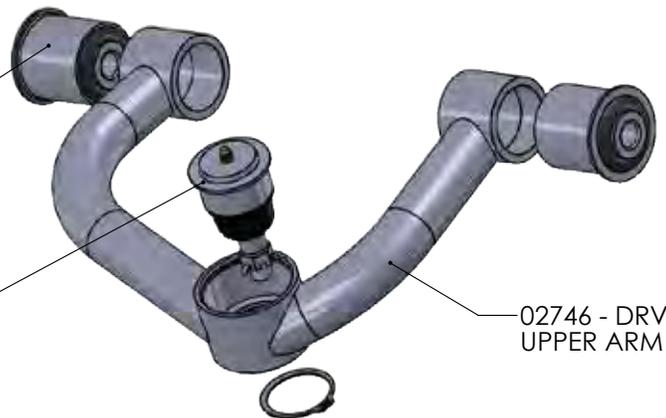
123253 Box Kit		
Part #	Qty	Description
A297	1	F150 UCA Assembly - Drv
02746	1	UCA - DRV
MB05B714620	2	UCA Bushing (F-150)
500-1104	1	Ball Joint
BDS222760	1	BDS Decal
A298	1	F150 UCA Assembly - Pass
02747	1	UCA - PASS
MB05B714620	2	UCA Bushing (F-150)
500-1104	1	Ball Joint
02911	2	Ball Joint Cap
9452K145	2	O-ring (#139)
45NA53	1	Grease Packet

## A298 PASS ARM ASSEMBLY



MB05B714620  
BUSHING

500-1104  
BALL JOINT



02746 - DRV  
UPPER ARM

## A297 DRV ARM ASSEMBLY

## TECH TIPS

### TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. Do NOT hit the aluminum knuckle on later model trucks with a hammer to separate the ball joint. Use appropriate ball joint separation tool.
2. Ball joint used is 500-1104, use this for replacement purposes if a new ball joint is ever needed. Ball joint is directional and must be installed with the 'dot' facing either inward or outward on the vehicle, otherwise damage may occur.

## INSTALLATION INSTRUCTIONS

### INSTALLATION INSTRUCTIONS

#### PRE INSTALLATION NOTES:

These upper arms are designed to work with Fox Coilovers. They may not work with all spacer kits available. Check for upper ball joint to coil clearance before installation of the arms. If the factory arm in the balljoint area hits the factory coil, or has less than 1/8" of clearance, the arms will not fix the problem. A different aftermarket strut spacer or replacement Fox coilover are recommended. (Fig 1)

### SPECIAL TOOLS

Ball Joint Separation Tool, equivalent to Chrysler #8677 to separate the upper ball joint from the steering knuckle

FIGURE 1



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. Remove the front wheels.
4. 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 appropriate ball joint separation tool to avoid damaging the steering knuckle (especially 2015+ models with aluminum knuckles). (Fig 2)

**FIGURE 2**



5. Remove the upper control arm from the vehicle and retain the upper control arm hardware.
6. If installing with Fox Coilovers, install the coilovers at this time. Follow instructions included with the coilovers or reference the coilover install instructions on Fox's website.
7. Install new upper control arm with factory hardware. Do not tighten the bushing hardware at this time.
8. Attach upper control arm to the steering knuckle with included nut and cotter pin. Tighten to 50ft-lbs. (Fig 3) Do NOT loosen the nut to get the cotter pin to align. BDS ball joints do not require the factory torque specification.

**FIGURE 3**



9. Grease the ball joint at this time.
10. Use the included grease packet to lube the o-ring. Install o-ring onto the cap and install cap into the arm. Note: The cap must be removed to grease the ball joint.
11. Reinstall wheels and torque lug nuts to factory specifications.
12. Lower the vehicle to the ground and torque upper control arm hardware to 111 ft-lbs.
13. Recheck hardware after 500 miles.
14. Remove the cap and grease the ball joint at regular service intervals. Replacement ball joint # is 500-1104



## **WE WANT TO SEE YOUR RIDE!**

Grab photos of your BDS-equipped truck in action and send them in for a chance to be featured. Send it in to our Bad Ass Rides customer gallery at [bds-suspension.com/bar](http://bds-suspension.com/bar) and post them on the BDS Fan Page on Facebook at [facebook.com/BDSSuspensions](https://facebook.com/BDSSuspensions). Don't forget about your BDS swag! BDS offers t-shirts, hoodies, decals and more available on the BDS website or through your local BDS distributor.

---

## **TIME TO HAVE SOME FUN**

### **Thank you for choosing BDS Suspension.**

For questions, technical support and warranty issues relating to this BDS Suspension product, please contact your distributor/installer before contacting BDS Suspension directly.