

HARDCORE LIMITED LIFETIME WARRANTY

# **Upper Control Arm Kit**

Ford F-150 4WD | 2021-2023

Rev. 052423

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## 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 560 plus.com for more information.

## TIRES AND WHEELS

0-2" Lift: Will work with stock wheels / tires with a  $\sim 1/4$ " wheel spacer, wider tires on stock wheels may get close to the ball joint cup and control arm when turning. 5.5"- 4.5" back spacing is recommended for control arm clearance. Tire size is relative to lift amount.



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.

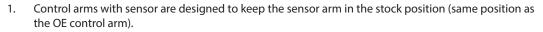
Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

## <u>CONTENTS OF YOUR KIT</u>

123261 Box Kit - Without Sensor		
Part #	Qty	Description
A376	1	2021 Ford F150 UCA Assembly - Drv
05038	1	2021 Ford F150 UCA - DRV
MB05B714620	2	UCA Bushing (F-150)
500-1105	1	Ball Joint
BDS222760	1	BDS Decal
A377	1	2021 Ford F150 UCA Assembly - Drv
05039	1	2021 Ford F150 UCA - DRV
MB05B714620	2	UCA Bushing (F-150)
500-1105	1	Ball Joint
BDS222760	1	BDS Decal
02911	2	Ball Joint Cap
9452K145	2	O-Ring (#139)
45NA53	1	Grease Packet
W12S	2	Washers
01499	2	1/4" Spacer

123262 Box Kit - With Sensor		
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#### TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE





- 3. Do NOT hit the aluminum knuckle on later model trucks with a hammer to separate the ball joint. Use appropriate ball joint separation tool.
- 4. For replacement ball joints, use BDS081203. Ball joint is directional and must be installed with the 'dot' facing either inward or outward on the vehicle, otherwise damage may occur.
- 5. Special Service Tool 204-592 recommended to dislodge the ball joint.
- 6. These upper arms are designed to work with Fox 0-2" Coilovers.
- 7. These upper control arms will work with BDS1579F / H / FS kits. These upper control arms will work with BDS1583F / H / FS kits, but will add additional caster over stock alignment specs.
- 8. These upper control arms will work with Zone leveling spacer kit ZONF1205 & ZONF1215. They may not work with all leveling spacer kits available. Check for upper ball joint to coil clearance before installation of the arms. If the factory arm in the ball joint area hits the factory coil, or has less than 1/8" of clearance, the arms will not fix the problem.



## <u>INSTALLATION INSTRUCTIONS</u>

## **INSTALLATION INSTRUCTIONS**

- 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.

#### SPECIAL TOOLS

Ball Joint Separation Tool, Special Service Tool 204-592 recommended.

Torque Wrench

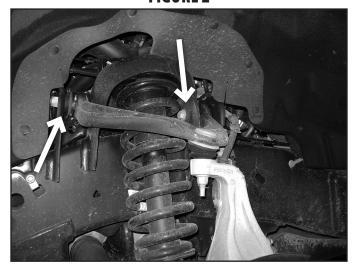
5. Disconnect the upper ball joint from the steering knuckle. Do not strike the side of the steering knuckle to get the taper to pop loose. Use appropriate ball joint separation tool to avoid damaging the steering knuckle. (Fig 1)

#### FIGURE 1



6. Remove the two bolts attaching the upper control arm to the vehicle. (Fig. 2)

#### FIGURE 2



7. Truck with sensor on the driver side upper control arm, remove the nut attaching the sensor ball stud to the bracket.

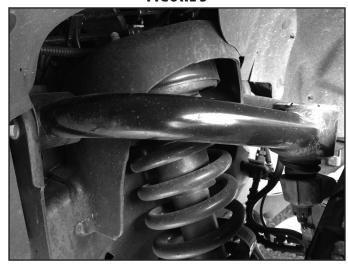
## **FOX COILOVER INSTALLATION**

8. 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.

#### CONTROL ARM INSTALLATION INSTRUCTIONS

- Install new upper control arm with factory bushing hardware. Snug up hardware, but do not tighten the bushing hardware at this time; this will be performed with the weight of the vehicle on the front suspension..
- 10. Attach upper control arm to the steering knuckle with included nylock nut and washer. Tighten to 46ft-lbs. (Fig 3)

#### FIGURE 3



- 11. Truck with sensor on the driver side upper control arm, attach the ball stud to the BDS UCA using the factory nut that was previously removed.
- 12. Grease the upper ball joint at this time.
- 13. 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.
- 14. Reinstall wheels and torque lug nuts to factory specifications.
- 15. Lower the vehicle to the ground and torque upper control arm bushing hardware to 122 ft-lbs.
- 16. The vehicle will need a complete front end alignment.

#### **BALL JOINT SERVICE**

- 17. Recheck hardware after 500 miles.
- 18. Remove the cap and grease the ball joint at regular service intervals.



#### 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 and post them on the BDS Fan Page on Facebook at 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.

## <u>TIME TO HAVE SOME FUN</u>

## 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.