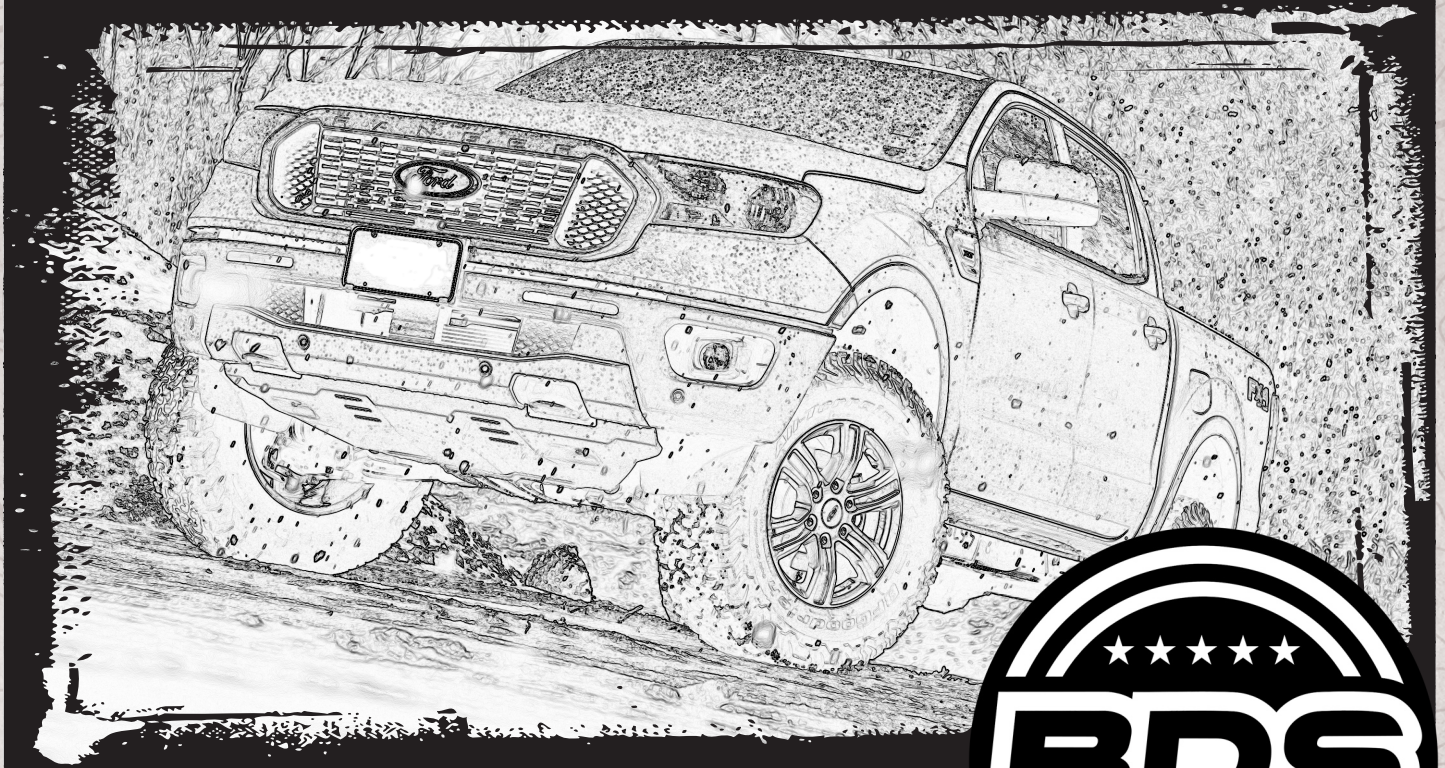


INSTALLATION GUIDE



Part#: 123252



HARDCORE LIMITED LIFETIME WARRANTY

Upper Control Arms

Ford Ranger 4WD | 2019

Rev. 052423

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

E-mail: 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 for more information.

TIRES AND WHEELS

N/A



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

123252 Box Kit		
Part #	Qty	Description
A322	1	Driver UCA Assembly
03662	1	UCA - DRV
MB05B714620	2	UCA Bushing
K80604	1	Ball Joint
A323	1	Passenger UCA Assembly
03663	1	UCA - PASS
MB05B714620	2	UCA Bushing
K80604	1	Ball Joint
03689	4	Spacer Washers
B1185	1	Bag Kit
02911	2	Ball Joint Cap
9452K145	2	O-ring (#139)
45NA53	1	Grease Packet
967	1	Bolt Pack
	2	Wire Clip
	2	1/4"-20 x 5/8" bolt grade 5 cz
	2	1/4"-20 serrated edge flanged nut
	2	1/4" SAE Clear Zinc Washer

TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. Arms are designed to work with Fox Coilovers that require upper control arms and may not work with all aftermarket spacer lifts / lift kits. The ball joint angle has been indexed to allow for max range of motion with 2" lifts. If the upper ball joint is unable to be connected without preloading the suspension, a different spacer lift is recommended that will not over-droop the suspension system.
2. Ball joint cap must be removed for maintenance of ball joint. Remove cap to access grease zerk. Grease at regular maintenance intervals.
3. Control arms will work with aluminum knuckles only.
4. Special Service Tool 204-592 recommended to dislodge the ball joint.
5. Arms are designed to work with 2" of lift. Arms will work with 0" of lift, but are not recommended due to increased caster.
6. For replacement ball joints, order BDS083202.



**TECH
TIPS**

INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.
2. Raise the front of the vehicle and support frame rails with jack stands.
3. Remove the front wheels.
4. Disconnect the ABS wire from the bottom side of the upper control arm.
5. It is recommended to disconnect the ABS wire from the clips on the inside of the fender well / strut mount to prevent over-extending of the ABS wire. Do not allow the brake line to hold the steering knuckle assembly in place.
6. Remove the hardware for the upper arm shield and remove the shield. Save for later installation.

7. Remove the upper ball joint nut and thread back on a couple of turns by hand. Separate the upper ball joint from the knuckle, recommended to use Special Service Tool 204-592. (Fig 1) Remove the nut and remove the ball joint from the knuckle. Allow the knuckle to rest back away from the front strut.



Tip A bungee strap can be used to hold the knuckle from falling forward and pulling the CV shaft out.

FIGURE 1



8. Remove the upper control arm from vehicle. Save the long bolt and nut for use with the new upper control arm. Reference factory service manual if necessary.
9. Install new control arm with factory bushing bolt / nut hardware. Install the provided spacer washers with one on each side of the coil bucket as shown in Figure 2 & 3. Snug, but do not torque bolts. Attach to the steering knuckle at this time with new hardware (Fig. 4). Tighten ball joint hardware to 46 ft-lbs. Install cotter pin, do not loosen nut to install the cotter pin.

FIGURE 2

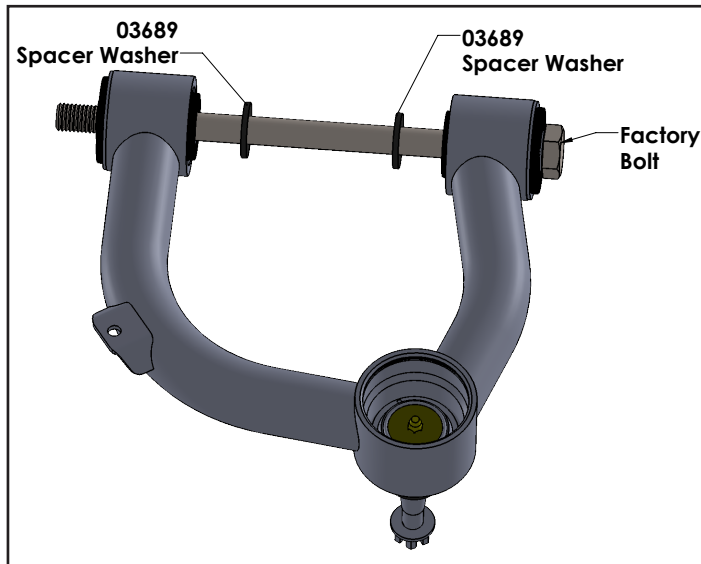


FIGURE 3

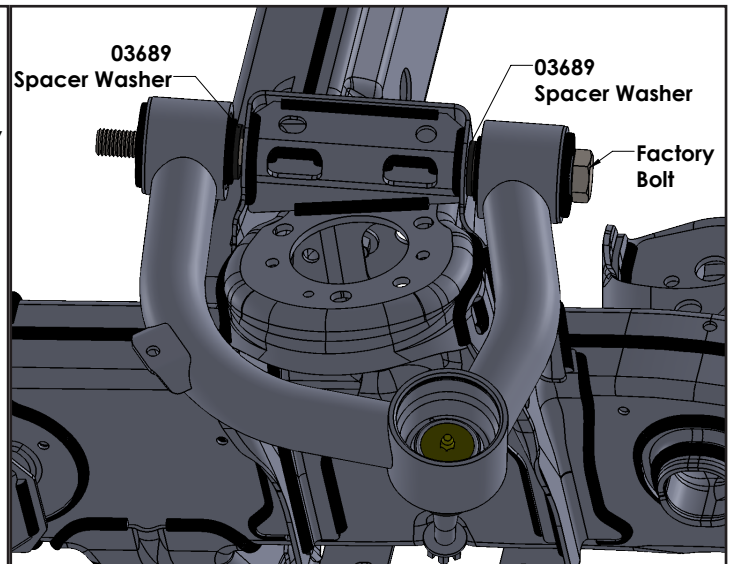
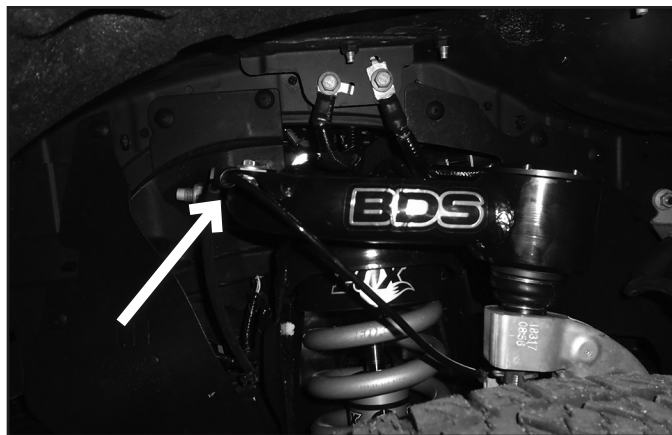


FIGURE 4



10. Reinstall the upper arm shield and tighten the shield bolt to 80 in-lbs.
11. GREASE BALL JOINT at this time! Install the o-ring on cap with grease from the included grease packet to aid installation. Install cap. Cap must be removed to access grease fitting for future maintenance.
12. Remove the factory ABS mounting clips from the ABS line. Attach the ABS wire to the control arm with new 1/4" hardware with new wire clip from Bolt Pack 967. Tighten to 15 ft-lbs. (Fig 5)

FIGURE 5



13. Reinstall wheels. Tighten lug nuts to factory specification. Lower vehicle to the ground. When vehicle is settled at ride height, torque the upper control arm bushing hardware to 122 ft-lbs.
14. Arms give increased caster, a front end alignment is now required.
15. Recheck hardware after 500 miles of driving, grease ball joint by removing cap at 3,000 mile increments.



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.

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.