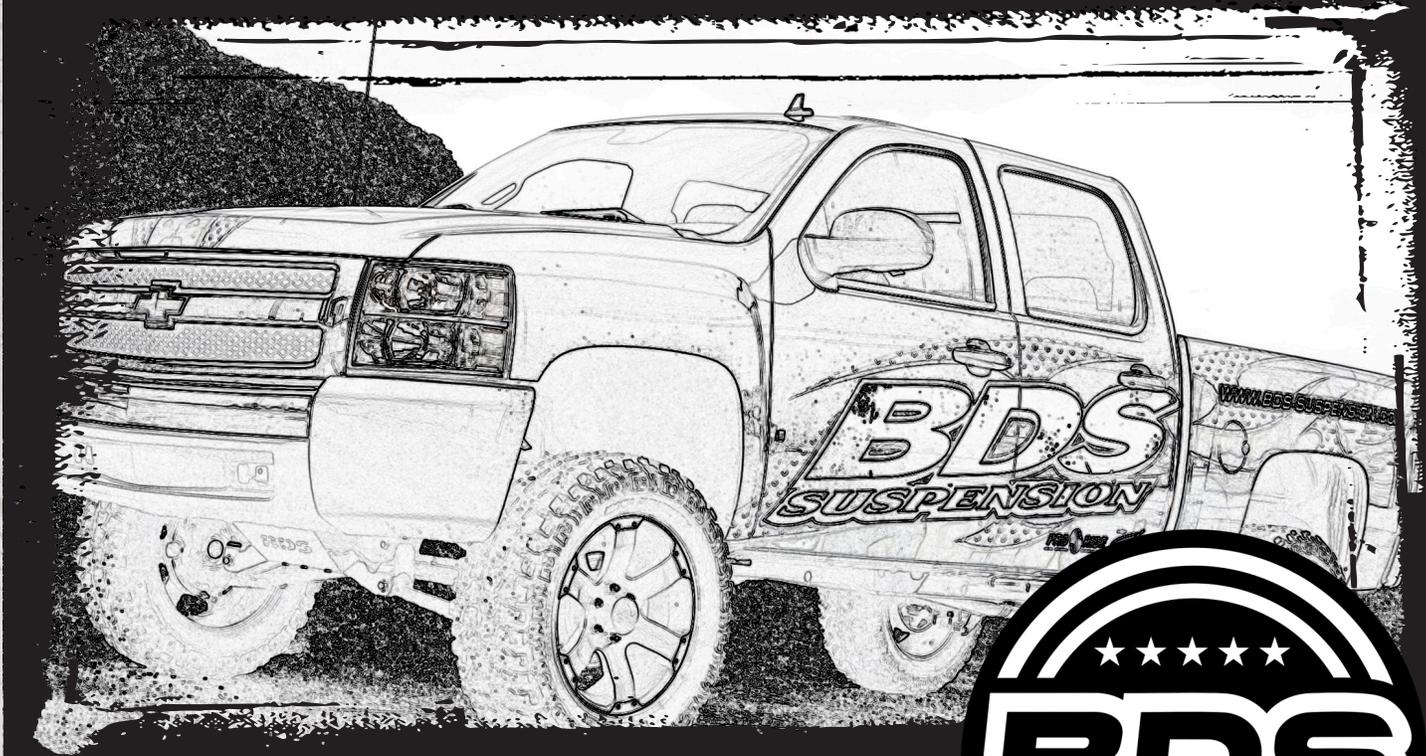


# INSTALLATION GUIDE



Part#: 121151, 121152



**HARDCORE LIMITED LIFETIME WARRANTY**

## Upper Control Arms

**Chevy / GMC 1500 4WD | 2007-2018**

Rev. 111122

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

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

Wheels (stock/leveled) – 4.5" Backspacing required to run 12.50 wide tires. 5" backspacing will work with 11.50 wide tire (285).

Wheels (BDS 4.5/6.5) – works with wheels listed on kit fitment. May require use of supplied weld-on steering stops for some combinations



### 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

## 121151 Cast Steel Upper Control Arm Box Kit

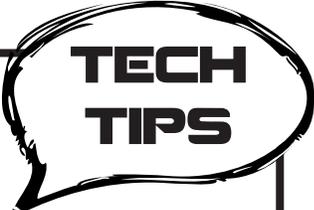
Part #	Qty	Description
A262	1	Drv Assembly
02743	1	UCA - DRV
500-1103	1	Ball Joint
SB02A241190	2	Rubber Bushing
A263	1	Pass Assembly
02744	1	UCA - PASS
500-1103	1	Ball Joint
SB02A241190	2	Rubber Bushing
02911	2	Ball Joint Cap
9452K145	2	O-ring (#139)
02895	1	Wheel Spacer (Temp. for Spare*)
02826	2	Weld-on Steering Stop
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

## 121152 Cast Aluminum / Stamped Steel Upper Control Arm Box Kit

Part #	Qty	Description
A354	1	Drv Assembly
02881	1	UCA - DRV
500-1104	1	Ball Joint
SB02A241190	2	Rubber Bushing
A355	1	Pass Assembly
02882	1	UCA - PASS
500-1104	1	Ball Joint
SB02A241190	2	Rubber Bushing
02911	2	Ball Joint Cap
9452K145	2	O-ring (#139)
02895	1	Wheel Spacer (Temp. for Spare*)
02826	2	Weld-on Steering Stop
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

- Control arms are of much larger size than stock. Tire and wheel selection is critical to allow for proper clearance. Optional weld-on steering stops are for cast steel and stamped steel arms only to eliminate any possible chance for contact between the tire and upper control arm (these steering stops cannot be installed on trucks with aluminum arms).
- A wheel spacer is included for use in the event the stock spare wheel and tire needs to be installed, this is a temporary measure.
- Medium-strength thread-lock (blue thread locker) is recommended on all bolts.
- Will NOT work on MagneRide Equipped (GMC Denali) models.
- 121151 Box Kit is for Cast Steel Upper Factory Control Arms, 121152 Box Kit is for Cast Aluminum / Stamped Steel Factory Upper Control Arms. Make sure the CORRECT upper control arm is installed with the correct truck. The ball joint taper is different between the two.
- When the 121151 or 121152 BDS UCA is combined with a stock knuckles / stock lower control arms, the maximum extended length of a coilover or strut assembly is 20-3/4"; the minimum collapsed length is 14-3/4". Arms are designed to work within these limits and may not work with all aftermarket spacer lifts / lift kits. If the arm contacts the droop limiter at full droop the factory droop a different spacer or strut assembly is recommended. Removing the droop limiter may cause range of motion problems with the ball joint.
- Control arms will work with any 0-2" or 0-3" Fox Coilovers 883-02-028, 883-02 (06)-121, 880-02 (06)-525, 982-05-018, 985-62-004, or 985-62-002
- Will NOT work with BDS 4" kits, or 6" coilover kits
- For replacement ball joints, BDS121151 will use service kit BDS081201. Ball joint is directional and must be installed with the 'dot' facing either inward or outward on the vehicle, otherwise damage may occur.
- For replacement ball joints, BDS121152 will use service kit BDS081203. Ball joint is directional and must be installed with the 'dot' facing either inward or outward on the vehicle, otherwise damage may occur.



**TECH  
TIPS**

# INSTALLATION INSTRUCTIONS

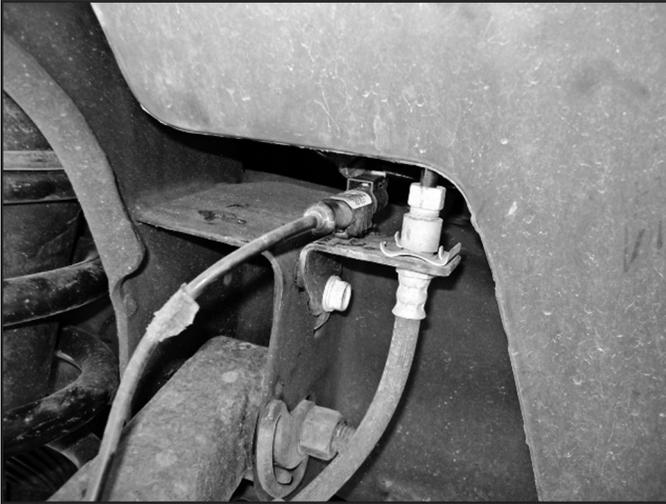
## INSTALLATION INSTRUCTIONS

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 frame above the upper control arm (Fig 1a). Remove from clip on steering knuckle by the upper ball joint. (Fig 1b)

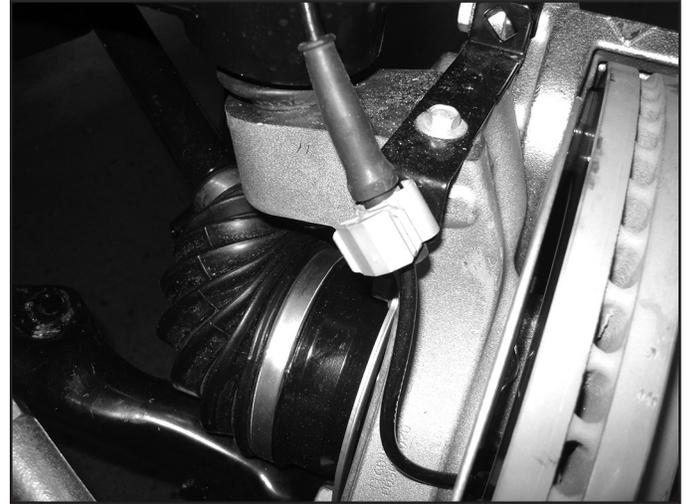
## SPECIAL TOOLS

Welder - Optional

**FIGURE 1A**



**FIGURE 1B**



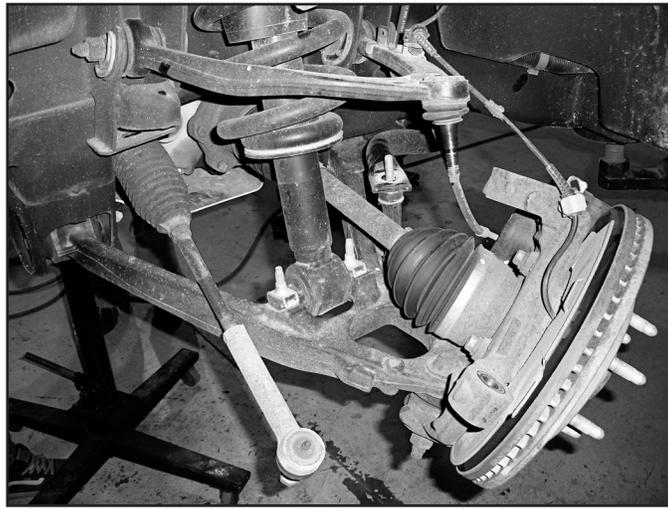
5. Remove the ABS wire from the upper control arm clip. Trim the tab from the factory brake line bracket, do this while the bracket is attached to the arm. (Fig 2)

**FIGURE 2**



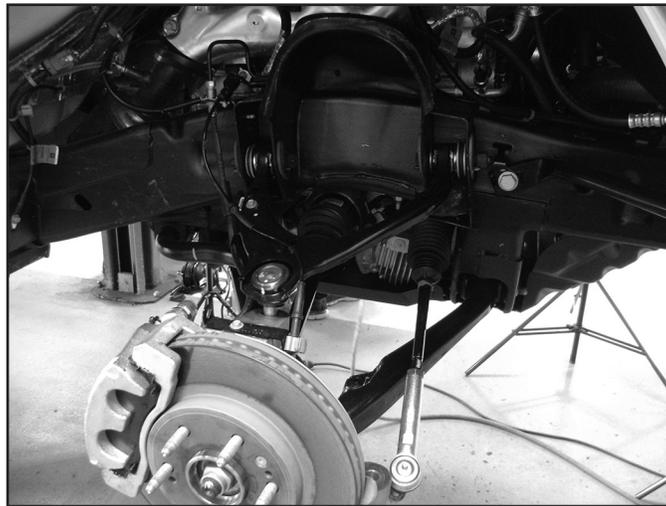
6. Disconnect the brake line bracket from the upper control arm. Hardware will not be reused.
7. Disconnect the upper ball joint. Remove the nut and separate the ball joint taper from the steering knuckle.  
*Aluminum knuckles: Do not strike the aluminum knuckle to dislodge taper. (Fig 3)*

**FIGURE 3**



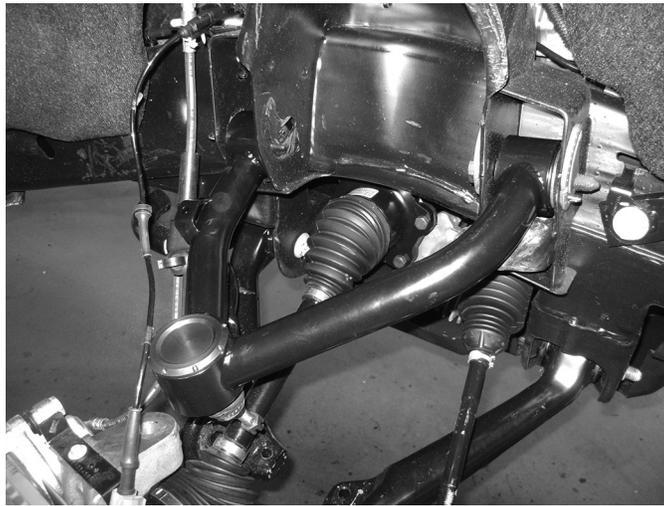
8. Support the lower control arm with a jack.
9. Remove the strut hardware and remove the factory strut from the vehicle.
10. Remove the upper control arm from vehicle. (Fig 4)

**FIGURE 4**



11. Install new control arm with factory cam bolts. Snug, but do not torque bolts. Do not install the upper ball joint cap at this time. Do not attach to the steering knuckle at this time. (Fig 5)

**FIGURE 5**



12. 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.

*Remote Reservoir Applications: Reservoir will mount to the top side of the factory upper strut bracket. Attach reservoir with included hose clamps. (Fig 6a, 6b) Ensure the hose clears the upper arm and cycle the upper arm to ensure that it will clear the hose before attaching to the steering knuckle in later steps. Adjust fittings on reservoir hose / hose location if necessary to gain adequate clearance.*

**FIGURE 6A**



**FIGURE 6B**

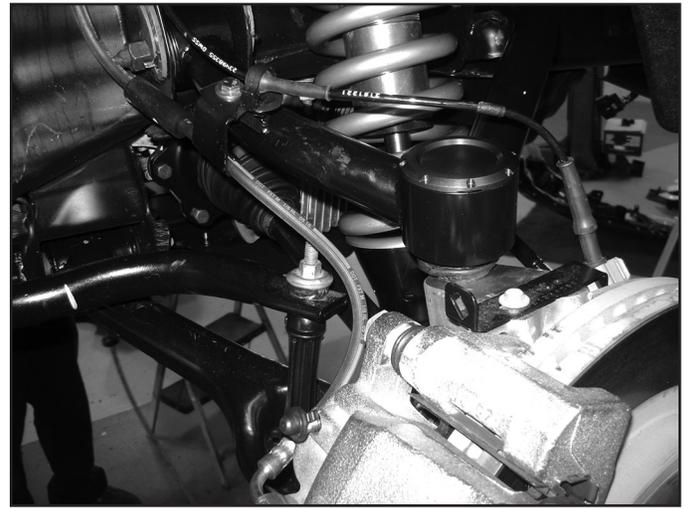


13. Attach the upper control arm to the steering knuckle with included castellated nut. Tighten to 45 ft-lbs, install cotter pin.
14. Grease the upper ball joint at this time. The ball joint cap will need to be removed to grease the joint at future maintenance intervals.
15. Lightly grease the o-ring with included grease and install the o-ring onto the cap. Push cap into the upper control arm squarely to get it to 'pop-in.' Turning the cap as you push down helps. (Fig 7a, 7b)

**FIGURE 7A**



**FIGURE 7B**

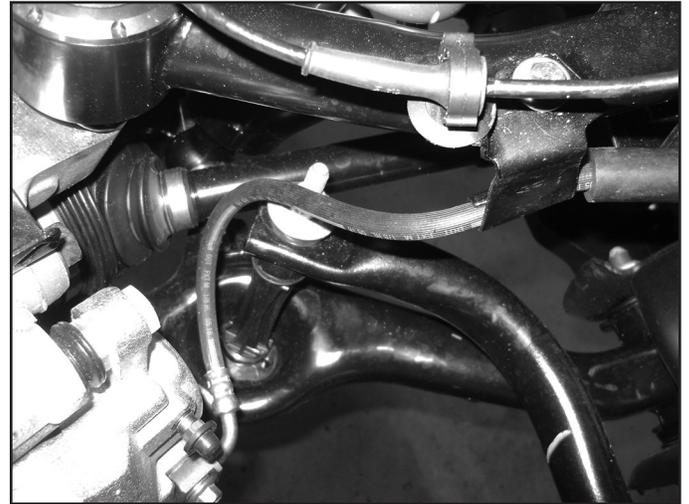


16. Attach modified factory brake line bracket to the upper control arm with ¼" hardware. Tighten to 12 ft-lbs. Cycle the steering to ensure that the brake line clears the sway bar components. Rotate bracket if necessary. (Fig 8a, 8b)

**FIGURE 8A**



**FIGURE 8B**



17. Reattach ABS wire to factory mounting clips and brackets. It may be necessary to slide the ABS wire in the rubber grommets to get adequate clearance / routing of the wire. Use silicone spray to allow the grommet to slide on the ABS wire.

## STEERING STOP INSTALLATION:

18. Disconnect battery.
19. Prep the lower control arm for welding, remove coating at the factory steering stops.
20. Place steering stops on the stock lower control arm and weld the top and bottom of the plate. (Fig 9)

**FIGURE 9**



21. Coat with paint.
22. Install new wheels and perform a steering sweep to check for adequate clearances at full droop.
23. Lower the vehicle to the ground. Perform additional steering sweep to check for clearances.
24. Center the upper control arm cams and tighten hardware to 95 ft-lbs.
25. Reconnect battery.
26. Roll the vehicle out, adjust the steering wheel to a centered position. Do not drive the vehicle with the steering wheel off center for extended periods of time or adverse traction control affects may become present.
27. Recheck all hardware after 500 miles. Grease ball joint at regular service intervals. Ball joint is a directional ball joint that must be installed correctly for maximum range of motion.



### **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.

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## **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.