



# Installation Instructions:

OBS 05+ Axle Swap Kit

**THANK YOU** for choosing **Blowing Diesel, LLC**



Please read all instructions before beginning installation. Check parts and hardware against the bill of materials list and grade 8 hardware list. Please ensure you have all tools required for installation.

We recommend using a certified technician to install this suspension kit. In addition to these instructions, professional knowledge of disassembly/reassembly procedures and post installation checks must be known.

## **Notice:**

- Front end realignment will be necessary after installation.
- Do not fabricate, add, or alter any factory or aftermarket parts to gain additional lift over the intended product height of 4".
- Prior to drilling or cutting, check behind the surface being worked on for any wires, lines, or hoses that could be damaged.
- Paint all exposed metal surfaces.
- Prior to attaching components, be sure all mating surfaces are free of grit, grease, undercoating, etc.
- Have factory service manuals on hand for reference.
- Always wear safety glasses when using power tools or working under the vehicle.
- Use caution when cutting is required under the vehicle. Have a fire extinguisher close at hand.
- Foot pound torque readings are listed on the Torque Specifications list.
- Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

**Disclaimer Notice:**

By installing this suspension system to any vehicle you are agreeing to the following terms and conditions.

Blowing Diesel, LLC is to be held harmless by any and all parties directly or indirectly related to the installation of this suspension kit. Blowing Diesel, LLC is to be held harmless from any and all circumstances or incidents resulting from the installation of the suspension kit.

Blowing Diesel, LLC is not liable and can not be held liable for any of the following occurrences including but not limited to; any damaged/broken parts, premature failure, or poor handling of vehicle caused by oversized tires and wheel, improper installation, failure to follow instructions properly, or any general negligence caused by installer, driver, or owner of vehicle. Any incidents occurring from failure of material.

Do not drill, cut, weld, or alter the purchased product. Blowing Diesel, LLC will not be responsible for any incidents resulting from alterations done to the purchased product or alterations done to factory or aftermarket parts.

Owner of the vehicle accepts sole responsibility for verifying that the installation of the suspension kit will not be in violation of any local, state, or federal laws or vehicle code. It is advised to check local vehicle laws and regulations before making modifications to the vehicle.

For any question or concerns please email [BlowingDiesel@gmail.com](mailto:BlowingDiesel@gmail.com)

## Bill of Materials

Qty	Description
2	Coil Buckets
2	Radius Arm Brackets
1	Track Bar Bracket
2	Sway Bar Brackets
4	Grade 8 Hardware
1	Pitman Arm

## Grade 8 Hardware

Qty	Radius Arm Brackets
14	1/2 x 1.5" Hex Bolts
14	1/2" Locknuts
28	1/2" Washers

Qty	Coil Buckets
16	1/2 x 1.5" Hex Bolts
16	1/2" Locknuts
32	1/2" Washers

Qty	Sway Bar Brackets
8	7/16 x 1.5" Hex Bolts
16	7/16 Locknuts
32	7/16 Washers

Qty	Track Bar Bracket
3	1/2 x 1.5" Hex Bolts
1	5/8 x 2" Hex Bolts with long tab
1	5/8 x 2" Hex Bolts with short tab
2	5/8 Locknuts
2	5/8 Washers
6	Adjustment Shims

## Torque Specifications

Size (in.)	Torque Spec
7/16"	58 ft/lbs
1/2"	90 ft/lbs
5/8"	180 ft/lbs

## Tools Required

1 1/8" Wrench and Socket
1 13/16" Wrench and Socket
5/8" Wrench and Socket
3/4" Wrench and Socket
5/16" Wrench and Socket
8 MM Wrench and Socket
10 MM Wrench and Socket
12 MM Wrench and Socket
15 MM Wrench and Socket
17 MM Wrench and Socket
18 MM Wrench and Socket
19 MM Wrench and Socket
21 MM Wrench and Socket
24 MM Wrench and Socket
30 MM Wrench and Socket
1/2 impact gun or breaker bar
Drill
11/16" Step or Drill Bit, Center Punch
Torque Wrench up to 369 ft/lbs
Straight or 90 Die Grinder
Jack Stands
Large Hammer
Pitman Arm Puller
Tie Rod Separating Tool

## Tools Recommended

Air Hammer
Torch

## Front Installation

1. With the vehicle on flat level ground, set the emergency brake and block the rear tires/wheels.
2. First remove the bumper and then raise the front of the truck. Support the front of the truck using jack stands.
3. With the front axle on jack stands, remove the front wheels.
4. Start removal of front suspension components; including sway bar, pitman arm, radius arms (2WD), disconnect brake lines, shocks and coil springs (2WD), and/or leaf springs (4WD). Finish by taking out the TTB axle on 2WD or the solid axle on F-350 trucks(4WD).
5. Remove the bump stops, shock towers (4WD) or the coil buckets on 2WD trucks. Remove the front leaf spring hangers (4WD) and rear leaf spring hangers or radius arm brackets.

TIP: The best way we found to remove rivets is by using an air hammer and a cut off wheel. Cut an X on the head of the rivet and hammer it out using the air hammer.

6. Clean and/or remove all dirt/rust/oil/ grease from all areas where the BDD brackets will go.

TIP: This is a great time to paint your frame!

7. Start the installation of the radius arm brackets. On 4WD trucks all the existing holes will line up, but you will have to enlarge existing holes to accept the  $\frac{1}{2}$ " hardware included on the kit. On 2WD, you will need to mark and drill all new bolt holes.



(4WD) For reference the top bolt hole will be  $4 \frac{1}{2}$ " from the body mount to the center of the bolt hole. Once you have confirmed that everything lines up, align the BDD brackets to the obs frame using clamps to hold in place while you install or enlarge the existing holes. Once you have the bolts installed, snug up the bottom holes to the bracket until the bracket is snug onto the frame. Then tighten the bolts located on the side of the frame.

(2WD) At the  $4 \frac{1}{2}$ " measurement from the body mount to the top bolt as shown in picture, clamp the BDD brackets in place making sure the bottom and side on the bracket are snug on the frame. Once it is clamp in place, make sure to mark and then drill all new 6 holes.

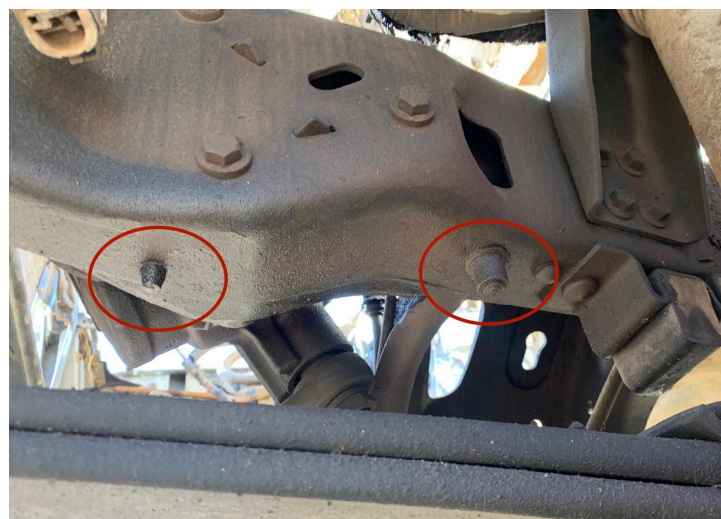
8. Start the installation of the coil buckets. On 4WD trucks all the existing holes will line up, but you will have to drill two new holes. On 2WD, you will need to mark and drill all new bolt holes.

a. (4WD) Start the installation of the coil buckets by aligning the brackets to the frame. Assistance is highly recommended, brackets are heavy and awkward to hold. Position on the frame and install the bolts on the side of the frame intended for the shock tower. Install and snug up to frame enough to be able to lift the bottom of the bucket to frame. Install the two bolts at the bottom, intended for the bump stop. Once the six bolts are snug and the coil buckets are touching the frame, you will mark the two new holes that will need to be drilled. We recommend drilling the holes as far forward as possible on the slot and then install the two last bolts.

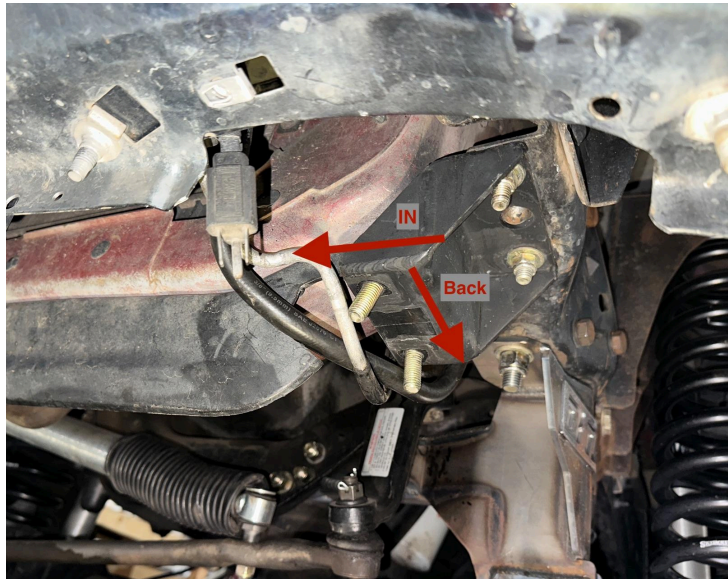
b. (2WD) At the 17 ½" measurement from the core support to the bottom first bolt, as shown in picture, clamp the BDD coil buckets in place making sure the bottom and side on the coil buckets are snug on the frame. Once it is clamp in place, make sure to mark and then drill all new 8 holes.



9. Install the new pitman arm included in the kit.
10. Install track bar bracket by removing the two rivets located at the bottom of the frame rail. You can install the  $\frac{5}{8}$ " bolt with the smaller tab through the window in the frame. Use it to hold the track bar bracket in place. We recommend using the mock up nuts included in the kit for this step. Mark the forward bolt hole in the frame rail to enlarge it for the  $\frac{5}{8}$ " bolt. Once it is enlarged, you can install the  $\frac{5}{8}$ " bolt with the larger tab through the front of the frame rail. Using the mock up nuts hand tighten both nuts on the bracket, allowing movement in the arm of the track bar bracket. Position the track bar bracket on the crossmember. Once it is in place, clamp it, mark it, and drill the holes. Be sure not to hit the power steering lines on the other side of the crossmember. Install the 3  $\frac{1}{2}$ " bolts and nuts. Tighten then remove the two mock up nuts one by one. Install the lock nuts and tighten.



11. The sway bar brackets are tilted in towards the frame and back towards the axle.



12. Torque all brackets to specs using the above chart as reference.

13. Install the radius arms on the axle and roll the axle under the truck.

14. Install radius arms into radius arms brackets on the bottom bolt hole.



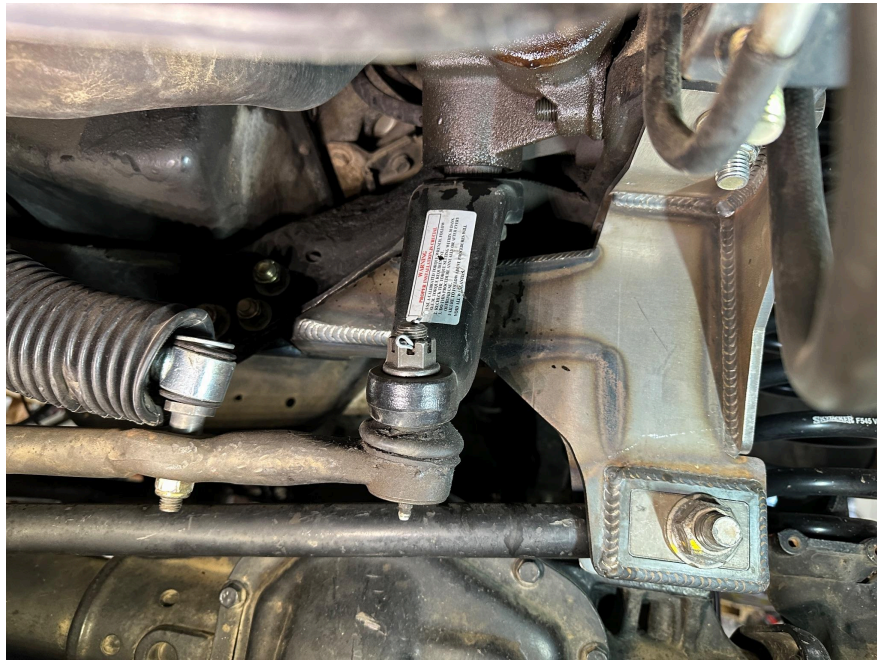


15. Install brake lines.

16. Install coils and shocks. You may need to lower the axle as low as possible or lift the truck to fit the coil into the coil bucket. OEM coil isolator goes between coil and coil bucket

17. Install the track bar into the track bar bracket using OEM hardware.

18. Install drag link into pitman arm.



19. Install sway bar onto brackets and install sway bar links to axle.

20. With all hardware installed you will need to install the wheels onto the truck and lower the truck onto its wheels.

21. We recommend settling the suspension on the truck down by rolling the truck back and forward a few times.

22. Check how centered the axle is under the truck by measuring from the coil buckets to the outside of the tire on both sides. Compare the measurements. Divide the difference in half and use the adjustment shims that are closest to that measurement and install it to the side that has the shortest measurement. Recheck the measurement to confirm that the axle is centered, repeat as necessary.

23. At this point, torque the all the hardware including the OEM hardware.

24. Check and torque all the hardware after 500 miles.

25. Check all hardware at 1,000 miles.

26. Enjoy your BDD axle sway kit! Do not forget to send in your pictures and leave us a review.

If you ever have any questions or concerns, please do not hesitate to reach out to us. We are always happy to help.

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