

## Installation Instructions

# **Dodge 2500 and 3500 Long Arm Kit Installation Instructions**

### **Control Arm Hardware**

- (2) 9/16" x 4.5" bolts
- (2) 9/16" x 7" bolts
- (8) 9/16" washers
- (4) 9/16" top-lock nuts
- (4) 5/8" x 4.5" bolts
- (8) 5/8" washers
- (4) 5/8" top-lock nuts
- (4) 5/8" cam bolt delete spacers
- (2) 18mm top-lock nuts
- (4) 18mm cam bolt delete spacers
- (2) 18mm x 100mm bolts

### **Bracket Hardware**

- (2) 5/8" x 5" bolts
- (4) 5/8" washers
- (2) 5/8" top-lock nuts
- (2) 9/16" x 4.5" bolts
- (4) 9/16" washers
- (2) 9/16" top-lock nuts

### **Torque Specs:**

- 5/8": 150 ft-lbs
- 9/16": 120 ft-lbs
- 18mm: 180 ft-lbs
- 1/2": 80 ft-lbs
- Jam nuts: 250 ft-lbs

### **Required Tools**

- Basic hand tools
- Torque Wrench
- Tools to torque down jam nuts can be an adjustable wrench or appropriate-sized crow foot adapters.
- Sawsall or a grinder with a cut-off wheel
- Safety Glasses
- 5/8" drill bit
- 9/16" drill bit
- Paint of your choice

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### **Installation Notes:**

- This kit is designed for trucks with a 2" lift or higher. Any lift size under 2" will cause interference issues between the upper and lower control arms and the upper control arm and the frame.
- For lift sizes 5" and above, it might not be necessary to clearance and/or remove the lower control arm factory mount.
- When removing the factory frame-side lower control arm mount, it is possible to only cut the welds and pop the bracket off of the frame. Doing this can save the factory bracket and can prevent damage to the frame from cutting too deep into the frame when removing the bracket.
- It is recommended to use cutting tools that will prevent damage to the frame of the truck. If possible, avoid making gouges in the frame or cutting through the wall of the frame. Doing this helps keep the frame strong and prevents water from getting into the frame, causing any rust damage inside the frame rails.
- It is recommended to paint the frame after removing the factory brackets to prevent any rust damage over time. We recommend using paints that have a rust sealer or rust inhibitor after cleaning and prepping the area you want to paint.
- You may need to remove one end of the control arm to adjust the length of the arms while installed on the vehicle due to the clearance bends. If you do this, try to ballance the adjustments between both joints on the arm to keep proper thread engagement on both ends for strength and reliability.
- Greasing Johnny Joints is similar to polyurethane bushings. Watch for grease to come out around the ball center where it meets the polyurethane bushing. If your joint does not want to accept grease, this can be caused by the joint already being full and it not needing any more grease. If your Johnny Joint will not accept grease and you can tell that it is starting to run dry, reach out to our customer service and we will be happy to help troubleshoot the issue.

### Control Arm Identification

**1. Adjustable Front  
Upper Long Arms.**

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**2. Adjustable Front  
Lower Long Arms.**

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**3. Bolt On Long  
Arm Brackets.**



**Installation Videos:**

- Tear down and prep:



- Bracket and control arm installation:



### **Frame Brackets Installation Guide**

- 1) Raise and support the vehicle from the frame away from where you are going to be working. You will be removing the factory crossmember and installing new frame brackets and crossmember.
- 2) Support the front axle and remove the front four control arms.
- 3) With the front control arms removed, identify the lower control arm frame brackets on each side of the vehicle.
- 4) With a cutting tool, start cutting the lower control arm brackets off of the frame. The brackets are welded onto the frame rails, the welds can be cut to remove the bracket or you can cut the bracket off in sections. The goal for removing the brackets is to create clearance between the new lower control arm and the factory bracket. Be careful to avoid cutting or damaging any fuel lines or wiring harnesses that are on the inside of the drivers side frame rail.
- 5) Once both lower control arm brackets are cut and trimmed, we recommend using some spray paint or rust sealer to prevent any rust starting from the freshly cut metal.
- 6) Support the transercase on the transmission and remove the bolts that attach the cross member to the frame. It is not necessary to completely remove the crossmember, and you can use the crossmember to help align the new frame brackets for drilling the required holes.
- 7) Slide the new frame bracket over the frame of the truck and line it up with the holes on your crossmember where it bolts to the frame.
  - a) It might be necessary to do some grinding on the frame around the crossmember mount to get the bracket to slide over the frame. The crossmember mount is welded to the frame and there can be slag or tall welds that prevent the bracket from sliding onto the frame.
- 8) Once the bracket is on the frame and the new crossmember bolts are loosely installed through the frame bracket and crossmember, ensure that it is sitting flush and level with the crossmember bracket on the frame. The section of the new frame bracket directly above the name plate should be even with that weld. If it is not, adjust the bracket until it is level. This will help get better alignment of both brackets and help with the installation of the bolts after drilling.
- 9) Mark and drill the two 9/16" bolts and one 5/8" bolts. You can use the bracket as a drilling guide, but that can cause damage to the powder coat. You are drilling through both sides of the frame and your holes need to be precise for proper bracket alignment on the frame. You can drill all the way through one side of the frame, like outside to inside, or you can drill the holes from each side of the frame.
  - a) The 5/8" holes will be a little harder to drill than the 9/16" because the 5/8" holes are going through a section of the frame where the two havles are connected together, making an almost "double-frame" section.

- 10) Test fit the bolts through the holes that you have drilled to ensure that they can go through both sides of the frame. Then spray some paint on the freshly drilled holes to prevent further rusting from happening.
- 11) Install the frame bracket over the frame rail and install the two  $\frac{1}{2}$ " x 7" cross member bolts, one  $\frac{5}{8}$ " x 5" bolt, and one  $\frac{9}{16}$ " x 5", and one  $\frac{9}{16}$ " x 7" bolt through the frame. Torque all bolts down to the recommended torque specifications listed above except for the  $\frac{9}{16}$ " x 7" bolt. That will be used later to hold the upper control arm in the bracket and will need to be removed for that arm to be installed. Having the  $\frac{9}{16}$ " x 7" bolt in the bracket when bolting and torquing the other bolts will help ensure that the upper control arm bolt will not have any issues with being installed from the holes on either side of the bracket being offset or not aligned with that hole.

## **Control arm Installation**

1. Before installing the arms, you may need to adjust the length to fit your application. You want the front wheel centered in the wheel well when looking at the tire from the side of the truck. The control arm is double threaded so it can be adjusted while installed on the truck, but it will be easier to get a base length set before installing it so there is less adjusting to do while on the truck.
2. Install the lower control arm in the frame bracket with the bend in the control arm pointed towards the center of the vehicle.
3. Swing the control arm up and insert it into the axle control arm mount. Our long arm kit comes with a cambolt delete spacer to replace the factory style cambolt, but it is not required to use it.
  - a. If you are installing this kit on a 2010-2014 Ram, the lower control arm uses a  $\frac{5}{8}$ " bolt on the frame bracket and an 18mm bolt on the axle mount. 2003-2009 Dodge Rams use  $\frac{5}{8}$ " bolts on both the frame and axle mounts on the lower control arm.
4. The upper control arm has two bends in it to clear the body mount and for tire clearance. The upper control arms are mirror opposites of each other and have to be installed on the correct side of the truck. Insert the upper control arm in the frame bracket mount with the control arm pointed down and away from the frame. Insert the  $\frac{9}{16}$ " x 7" bolt to help hold the arm in place.
  - a. Removing the  $\frac{9}{16}$ " x 4.5" bolt right below the upper control arm mount on the frame bracket can help give you more clearance to slide the joint into the mount. This is not required, but it can help if you need a little more clearance around the mount.
5. Insert the upper control arm into the axle side mount. The second bend in the arm should be pointed towards the center of the vehicle to help with tire clearance.
  - a. Starting from the frame bracket, the first bend should be down and away from the frame for the body mount clearance, then the second bend should be towards the center of the vehicle for tire clearance.
6. With all four control arms installed and properly adjusted, torque all bolts and jam nuts to the recommended torque specs listed above.
7. Take the vehicle for a shake down drive, or drive it for about 50 miles. Re-torque all bracket and control arm bolts and jam nuts to make sure that none of them have come loose. Retorquing bolts and jam nuts is part of the regular maintenance of the long arm kit and any suspension component. Stripped threads due to jam nuts not being torqued to the proper specification are not directly covered under our lifetime warranty due to it being preventable.

8. The Johnny Joints should be inspected and regreased every 3,000-10,000 miles. Johnny Joints come pre-greased and do not need to be greased upon installation. We recommend using a moly-type grease and to avoid any red grease or pure lithium grease. These types of grease can cause polyurethane bushings to deteriorate and fail prematurely. While this does not directly affect our warranty, it is something we watch for to help prevent premature failure of Johnny Joints in the future.