

# 2007-2018 Jeep Wrangler JK Rear Suspension Stretch Installation Instructions

Thank you for purchasing our suspension stretch kit!

#### **Installation Notes:**

- This kit is designed to be used on 2007-2018 Jeep Wrangler JK and JKU models.
- Welding and general metal fabrication work is required to install this kit. All components should be installed by a trained welder and fabricator.
- This kit will move the rear axle towards the rear of the Jeep 8 inches.
- This kit will provide 2.5-3 inches of lift in the rear. Shorter springs will need to be installed in the rear or longer springs in the front to achieve a level ride height.
- An adjustable rear track bar is required.
- The muffler will need to be relocated in front of the rear axle and a custom tail pipe will be required.
- Trimming of the body, brake line modifications, new emergency brake cables, all wiring to the rear axle, axle breather, driveshaft, rear bumper, and possible relocation of the fuel filler are all responsibilities of the end user.
- If a truss has been installed on your rear axle, the rear crossmember may need to be trimmed or bumpstop extensions may need to be installed to avoid contact between the truss and crossmember.
- If you have cut the end of your frame off for a bumper installation or other reasons, you will need to subtract 9-1/8" from the dimensions given elsewhere in these instructions and measure from the center of the bolt hole shown in the image below.



#### Tools required:

- Welding machine with the capability to weld at least 1/4" thick steel
- Cutting tool for removal of OEM frame brackets
- Grinder
- Various hand tools
- Tape measure

# **Kit Contents**

#### You should receive the boxes listed below.

Qty	Kit Part Number	Kit Description
1	B4WK12750	JK Rear Stretch Control Arm Kit
1	B4WK12751	JK Rear Stretch Bracket Kit

# **Contents of each box**

Bill Of Materials For B4WK12750 JK Rear Stretch Control Arm Kit					
QTY	Part Number	<b>Etch Number</b>	Description		
4	B4W135177	177	JK Rear Stretch Kit Bumpstop Sleeve		
1	B4W188630	630	JK Rear Stretch Kit L Bumpstop Bracket		
1	B4W188631	631	JK Rear Stretch Kit R Bumpstop Bracket		
1	B4W188626	626	JK Rear Stretch L Crossmember Insert		
1	B4W188627	627	JK Rear Stretch R Crossmember Insert		
2	B4W250671	671	JK Rear Stretch Rear Coil Spring Base		
2	B4W188628	628	JK Rear Stretch Kit Rear Coil Gusset		
2	B4W188629	629	JK Rear Stretch Kit Coil Locator		
1	B4W250673P	673	JK Rear Stretch Kit L Shock Mount Press		
1	B4W250674P	674	JK Rear Stretch Kit R Shock Mount Press		
1	B4W250672	672	JK Rear Stretch Kit Rear Frame Track Bar Bracket		
1	B4W188632	632	JK Rear Stretch Kit L Sway Bar Relocation Bracket		
1	B4W188633	633	JK Rear Stretch Kit R Sway Bar Relocation Bracket		
4	37CNNE0Y/GC	NA	3/8-16 Nylock Yellow		
4	37C100HCS8Y	NA	3/8"-16X1" Hex head Grade 8		
4	8751415175RHMS	NA	Tube Insert 7/8-14RH 1.5ID 1.75 OD		
4	JN87514RH	NA	RH 7/8-14 Jam Nut		
2	125HXRHV2	NA	Heavy Wall Hex Tube Insert (1 1/4" -12) for 1 1/2 I.D.		
2	125HXLHV2	NA	Heavy Wall Hex Tube Insert (1 1/4" -12) for 1 1/2 I.D.		
2	JN125012RH	NA	RH 1-1/4"-12 Jam Nut		
2	JN125012LH	NA	LH 1-1/4"-12 Jam Nut		
4	B4WEJ371409R09	NA	Enduro 2 5/16 wide, 7/8-14 thread 9/16 bolt 9 degree offset		

Bill Of Materials For B4WK12751 JK Rear Stretch Bracket Kit					
QTY	Part Number	Etch Number	Description		
2	DOM0066	NA	JK Rear Stretch Upper Link Tube		
1	DOM201536	NA	DOM 2"X1.5"X36"		
2	B4WEJR16-9	NA	1.25 RH Enduro 9/16		
2	B4WEJL16-9	NA	1.25 LH Enduro 9/16		

## Step 1:

Remove the rear axle, control arms, springs, shocks, and trackbar from the rear of the Jeep.

## Step 2:

Cut both bumpstop mounts, rear muffler hangers, and rear track bar mount off from the frame and grind the frame smooth in those areas.

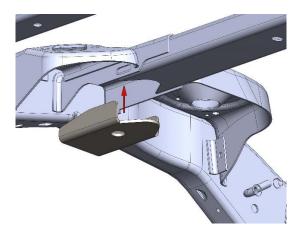
### Step 3:

Attach the coil gusset and coil locator to the coil spring base and weld the assembly. Two sets are included in the kit and will need to be welded together at this time.



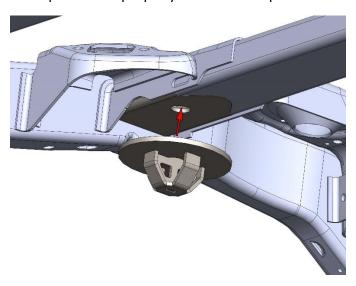
Step 4:

Install the crossmember inserts into the frame crossmember on both sides of the vehicle, the face of the insert should sit flush with the bottom face of the crossmember. Weld in place.



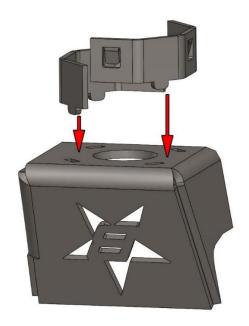
## Step 5:

Grind the edges of the crossmember flush with the top of the crossmember inserts. Place the coil spring assemblies from step 3 on the inserts and align the hole in the middle of both components. The assemblies should sit flush on the face of the crossmember inserts, when positioned properly weld them in place.



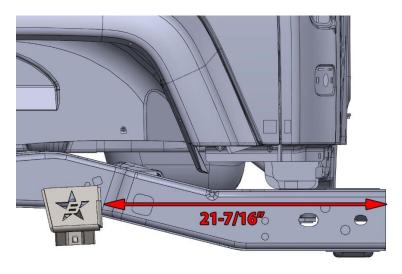
Step 6:

Install the bumpstop sleeves into the bumpstop brackets for both sides of the vehicle and weld the assemblies together.



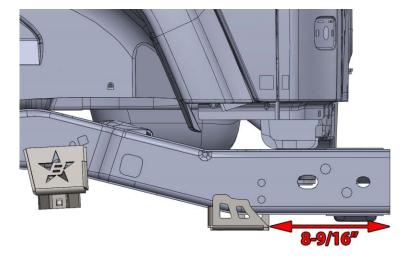
## Step 7:

Install the bumpstop assemblies from the last step onto the frame. The assemblies will need to be positioned 21-7/16" from the end of the frame. Tack weld the brackets in place on both sides.



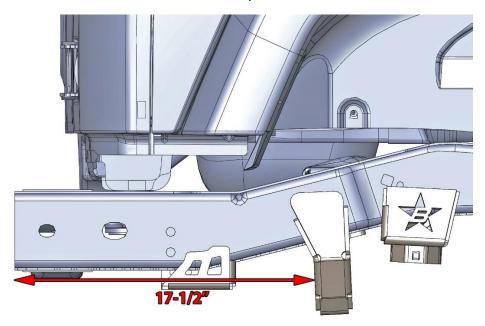
Step 8:

Install the sway bar brackets on the frame on both sides 8-9/16" from the end of the frame.



## Step 9:

Install the track bar bracket on the frame 17-1/2" from the end of the frame rail. Tack weld the bracket in place.



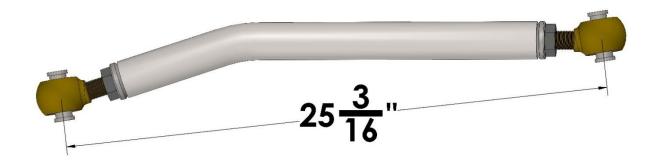
# **Step 10:**

Install the shock brackets on both sides of the frame. The shock bracket should contact the top of the frame and the top of the body mount. Tack weld the brackets in place.



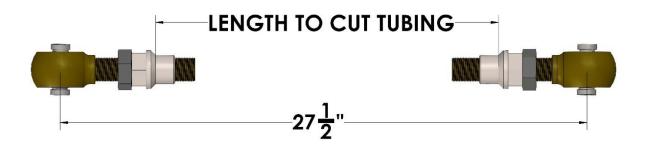
#### **Step 11:**

The upper links now need to be assembled. Install the provided tube inserts into each end of the provided tube and weld in place. After allowing time for the welds to cool, install each jam nut and small Enduro joint to complete the link assembly. The joints should be installed in the orientation shown in the image below. Adjust each end the same amount until the bolt hole to bolt hole length approximately matches the dimension in the image below.



## **Step 12:**

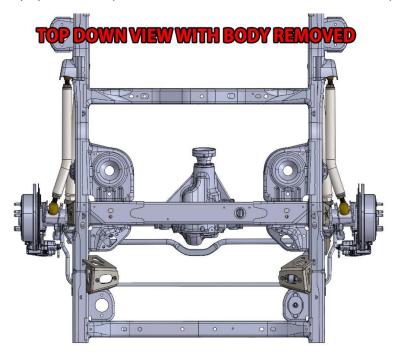
The lower links will now need to be assembled. 2"x1/4" Wall DOM Tubing has been provided but will need to be cut to length. Mock-up all joints, jam nuts and tube inserts, we recommend approximately 1" of thread showing between the jam nut and the end of the thread on the joint to allow room for adjustment. Each link will need a left-hand threaded assembly installed in one end and a right-hand threaded assembly installed in the other. Use the assembled components to determine the length to cut the tubing to obtain the correct bolt hole to bolt hole dimensions, cut the tubing to this dimension. Remove the suspension joints from the threaded inserts and weld the inserts into the tubing, after the welds have cooled assemble the links.



#### **Step 13:**

Install the axle into the vehicle with all components except for springs. The upper links will need to be installed in the same orientation as the image below. New hardware has been provided for the sway bar mounts; you will reuse your factory bumpstops in the new brackets.

Completely cycle the suspension and check for clearance to all components.



## **Step 14:**

Remove the axle from the vehicle and complete welding on all brackets installed in prior steps.

Paint all bare metal surfaces to prevent rust.

## **Step 15:**

Install the axle in the vehicle with all components. Adjust the upper and/or lower control arms to obtain the desired pinion angle recommended by your driveshaft manufacturer.

## Congratulations you have completed the installation!

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