



## Ford F-150 2009-2020

**Step 1.** The leaf spring clamp located towards the front of the leaf spring must be removed in order to install the VAS traction bars. Cut across as shown and remove the upper part of the clamp. This will allow easy removal of the clamp in step 2.



**Step 2.** Grind the rivet located at the bottom of the clamp. Once it is completely flush hit the clamp with a hammer and the clamp will fall right off. If you do not cut the top part of the bracket in step 1 you will need to pry open the clamp in order to remove it.



**Step 3.** Once the clamp has been removed it will expose a pin that is left over from the original rivet. This pin will be used to locate the forward bracket on the leaf spring.



Step 4. Locate the forward bracket of your VAS Traction bar kit and install them on the leaf springs. Choose between the center hole and off set hole on the leaf spring mount and make sure that the bump stop located on the front of the forward bracket sits underneath the leaf spring bushing. See pic below for reference.

Torque the (4) ½ bolts to 40ftlbs

New kits now use (4) ½ U-bolts to connect the leaf mount to the leaf springs. We no longer use the top plate and bolt design.

**IMPORTANT!!!**

**Torque the large 5/8 bolt that connects the forward bracket to the leaf mount to 30ftlbs. Do not over tighten this bolt or the suspension will ride stiffer than normal. The spacer provided in the kit must also be installed or the bracket will be crushed during installation.**



Step 5. Install the rear bracket as shown. Remove the 4 ubolt nuts and place the bracket underneath the stock axle bracket. Reinstall the nuts and tighten to specs. Ensure the flat part of the bracket is facing the front of the truck.

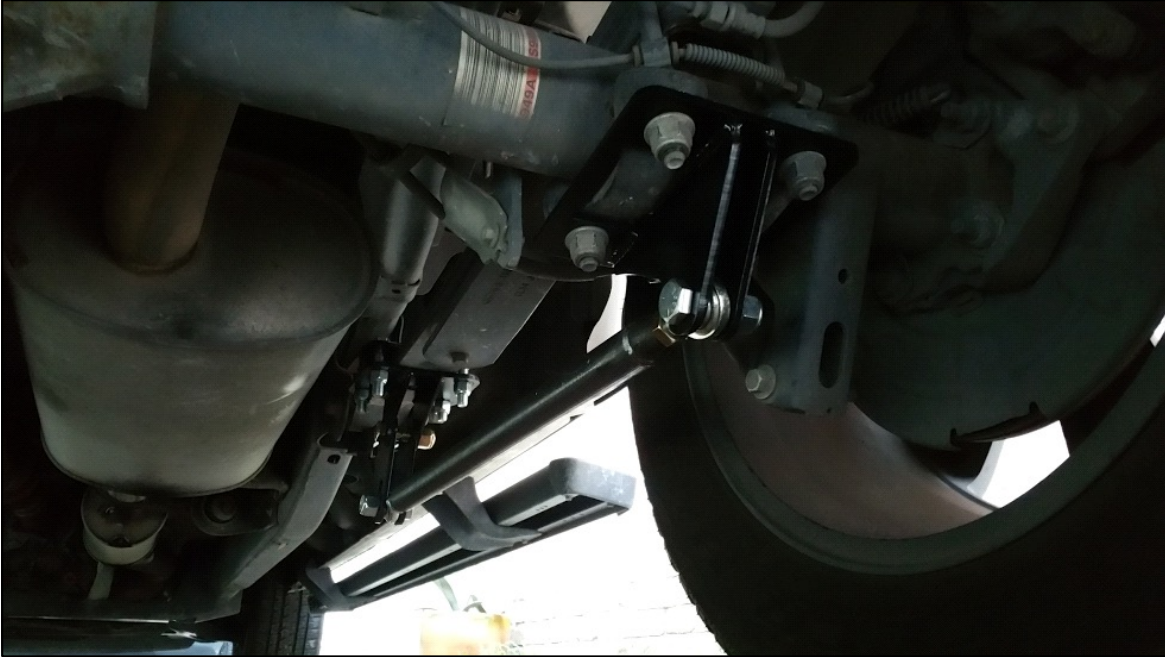
If using a flip kit the kit will come with new flip kit rear mounts. Remove the ubolt plate that came with your flip kit and replace with our rear flip kit ubolt brackets.





Step 6. Install the heim joints on the bars. Each bar will take a left and right hand heim joint. **Apply anti seize grease on the threads to prevent them from seizing up.** Install the bar between both brackets. Make sure both heim joints are completely screwed into the bar. Once you have the bars between the brackets twist the bar until the 3/4 nut on the forward bracket is 1/4 from hitting the leaf spring bushing.

Torque 5/8 bolts to 70ftlbs



### **Street Adjustment**

Once you have your traction bars installed you will need to adjust them. 1<sup>st</sup> you want to choose the holes on the brackets that will keep the bars as close to parallel with the ground as possible. Next make sure there is a gap between the bump stop on the forward bracket and the bottom of the leaf spring bushing. Put the truck on the ground and turn the bars until the bump stop is  $\frac{1}{4}$  from touching the leaf spring bushing. Tighten the jam nuts and your bars are ready for use.

### **Track Adjustment**

With the truck on the ground turn the bars until the bump stop is slightly touching the leaf spring. Once it touches rotate the bar  $\frac{1}{2}$  turn and tighten down the lock nuts on both ends. Drive the truck around the block. The bars will become loose with the movement of the suspension and will need to be adjusted again. Loosen the jam nuts on the heim joints and adjust the bars once again. Your bars are now installed and ready for track use.