

\*\*\* images shown are a Gen 3 Raptor, but instructions apply to all half tie rods \*\*

# Step 1:

Park vehicle on level ground and set the parking brake.



Place wheel chocks on the rear tires. Remove both front tires



#### Step 2:

To get your alignment close, with the steering wheel pointing straight forward, using a tape measure, measure across the brake rotors, then after the half tie rod is installed, this is the number you will want to set it back to.



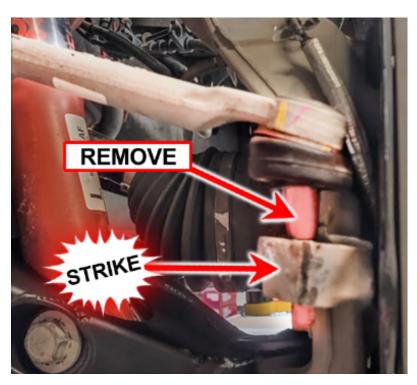
## Step 3:

Before removing the tie rod nut, loosen the jam nut, don't need to unthread it, just need it to be loose, its easier to do that now.



## Step 4:

Now loosen and remove the tie rod nut. Once the nut is removed, strike the spindle with a hammer where shown in the picture, this will dislodge the tie rod from the spindle and allow it to be removed.





### Step 5:

Unthread and remove the outer tie rod from the inner tie rod. Place the outer tie rod on the bench next to your new half tie rod, adjust the heim on the new outer tie rod to match the length on the factory outer tie rod, then install your new outer tie rod. Make sure to apply anti seize to the threads of the inner tie rod before assembly.

# Step 6:

With your new tie rod installed onto the inner tie rod, install the taper spacer into the spindle and then the bolt through the spacers and tighten.

In wet climates we recommend adding anti seize to the spacers both going into the heim and into the spindle and on the bolt, will help prevent corrosion





#### Step 7:

Now adjust the half tie rod so the FMI logo is visible as you'd like, and then tighten the heim jam nut.

Then you can adjust the inner tie rod to match your measurements you took in step 2 to get your toe alignment close, then tighten jam nuts to factory spec.

Step 8:

Reinstall tires and torque to factory spec



REMINDER: It is required that you get an alignment after install

