

Thank you for making the investment with MFC Offroad as well as yourself. The MFC lift kit is comprised of top quality parts machined out of billet 6061-T6 aircraft grade aluminum for the finest fit and finish to raise your Jeep to its full potential. With careful consideration in mind relative to body geometry, CV angles and driveline components, this lift is designed to complement all trim levels of the KL platform.

Geared towards both novice and true gear-head, the MFC lift not only is the first ever developed lift for the KL platform, but is the ONLY one you need to purchase. MFC Offroad guarantees all aspects of the MFC lift as to never fail, break, or crush under the weight of the vehicle, under normal use both on and off road. MFC Offroad is the only manufacturer that retains all aspects from the factory present in the lift design. This includes true clocking position of rear coil springs, reinforced knuckle and strut surface clamping as designed from factory, brake line, ABS line and speed sensor line relocation brackets due to the elongation of those lines with the front lifted and zero drilling of any kind.

Tools needed to complete the lift: Jack stands, floor jack, shop towels, degreaser, an 18 MM socket, 11 MM open ended wrench (12 MM preferred) rubber mallet, torque wrench with extension, and pliers.

#### Front Lift Step 1.

Lift the front end with a floor jack and support the front on both sides with jack stands. Locate the jack stands on the frame rails as pictured. Positioning the vehicle up on both of the jack stands will ensure an easier process of lifting the front. If doing one jack stand per side at a time, the sway bar will fight you to complete the lift.



#### Step 2:

After removing both front wheels, locate the knuckle pinch bolt. Using an impact gun with an 18mm socket and an 11mm wrench (12 preferred), remove this bolt and set aside. If you do not have an impact gun, a breaker bar is your next best solution.



#### Step 3:

Bend towards the engine the factory metal guide that is tack welded onto the bottom of the strut with the pliers. This is commonly referred to as the shark fin tab located on the bottom of the strut that is sandwiched between the knuckle pinch points.



#### Step 4:

Locate the brake line and ABS / speed sensor line located in the factory bracket. Slide them out of their corresponding tabs. Place each of the MFC relocation brackets onto their respective locations on the flat side of the OEM brackets. The MFC relocation brackets are held tight to the factory brackets with the supplied hardware. By relocating the positioning of the lines lower, as you will see in the next step, as you lift the strut out of the knuckle, the lines will now be located back into factory positioning.

### Step 5:

Wiggle the knuckle back and forth while pushing down on it. If needed, a rubber mallet can be used to give you the extra movement downwards. Take the front knuckle spacers (two per side) and lubricate the interior of them with lithium grease. This will assist in sliding them from seizing on the strut. Position to the mechanical stop of the brake line holder. Torque to 30 foot pounds and repeat for opposite side. Knuckle bolt is 88 foot pounds as well.

The design around these consists of providing the required structural passing of forces outwards and downwards, sufficient clamping area for the strut to be positioned and safely held, along with the factory clamping force of 52 ft lbs. around the strut. Without these, the strut will be exposed to premature wear due to the location of non-clamped area. Downward, lateral and outward forces of the strut need to be compensated, thus transferring these forces through each other and down into the knuckle. There is no more exposed strut than there was prior to the lift because the front spacers act as a continued reinforcement as intended from the factory. This is a good time to go over all of your work and make sure everything was done accordingly to the instructions. When complete you may put the wheels back on and torque the wheel studs/bolts to 91 foot pounds.



### Rear Lift Step 1:

Jack rear of vehicle up and place jack stands in the location as pictured. Once the rear of the Jeep is on the jack stands, reposition the floor jack directly under the lower control arm at the farthest outward point before the knuckle. Apply slight pressure to the bottom of the lower control arm. This is a technique to remove the rear springs without having to use spring compressors. We HIGHLY recommend not using them. They are dangerous and can easily break.



### Step 2

Untorque the bolt that attaches the control arm to the bottom of the knuckle. To do this, the M12 hex flange head bolt and M12 hex flange nut holding the lower control arm to the rear knuckle would need to be removed. Once you remove these, slowly let the floor jack down and the lower control arm will swing downwards and you can remove the factory spring. Be sure to use a support on the rear knuckle. Note you will be reusing the factory isolators on the top and the bottom of the springs. Clean the lower control arm area that will be receiving the new MFC Offroad custom coil spacer.



### Step 3:

Take the rear spacers out of the box. You will note on the bottom of them there is a recessed set screw location. Apply a liberal amount of thread lock onto the black set screw that shipped with your kit leaving 1/4" of exposed set screw. Install the spacer and align with the factory location of the hole that it will rest in on the lower control arm. Place the lower factory plastic isolator on top of the MFC Offroad spacer allowing the two to seat with their corresponding parts. Once positioned, you may start to reposition the factory spring back into position and the factory lower control arm to the knuckle and reinstall the bolt and nut. Repeat the same process on the other side.



### Helpfull Hint:

If you are having trouble moving the front knuckle down low enough to get both spacers installed during installation, install the upper one first. It will be installed tightly against the brake line bracket that is welded to the strut from the factory. Then you can use a flat head screwdriver in between that and the top of the factory knuckle and spread the gap between the two to get the second spacer installed. This can be done also instead of using the rubber mallet technique.

This technique needs to be used on all 2019 and 2020 Trailhawks. However, it can be used on all trim levels and years of the newer body style Cherokee.

