

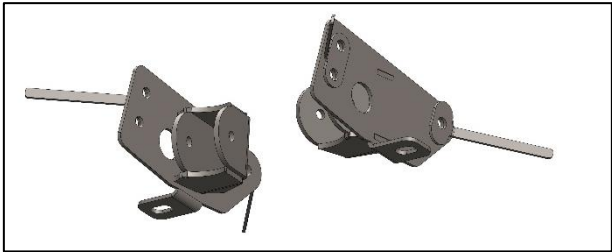
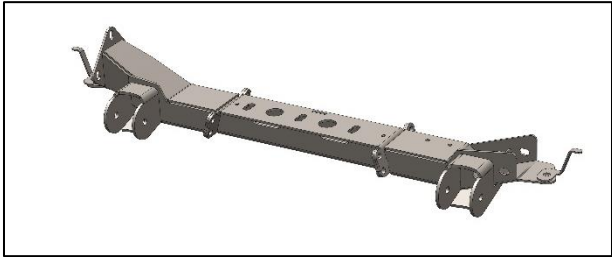


Part #	Description
WFO 8200	2018+ Jeep JL / 2019+ JT Front Crossmember Upper Link Mounts
WFO 8201	

10076 Streeer Road Suite #7, Auburn, CA 95602
 Phone: 530.268.9494 www.wfoconcepts.com

WFO 8203

BILL OF MATERIALS	
WFO 8200	Complete 3-piece crossmember
WFO 8201	Pair of Front Upper Link Mounts
TOOLS NEEDED	
Jack and/or Transmission Jack Metric Socket Set: 10mm, 13mm, 16mm, 18mm, 21mm, 24mm Metric Wrench Set: 18mm, 21mm, 24mm Standard Socket Set: 11/16", 13/16", 3/4", Standard Wrenches: 11/16", 13/16", 3/4", Allen Wrench Set: 6mm Impact Gun Torque Wrench Cutoff wheels / Sawzall / Plasma Cutter Grinder Semi-Flat Black Spray Paint Tape Measure	



WARNING!
<p>*** Read all instructions thoroughly from start to finish before beginning the job! If these instructions are not properly followed, severe frame, suspension, tire, or body damage may result to the vehicle!</p> <p>*** WFO Concepts recommends that you exercise extreme caution when working under vehicles supported by jack stands.</p> <p>*** WFO Concepts recommends all installation to be performed by a professional shop/service technician. Product failure due to improper installation will not be covered under WFO's warranty policy.</p>

TECH NOTES:
<ol style="list-style-type: none"> 1) This kit will fit 2018+ V6-3.6L, 2018+ I4-2.0 Turbo, and the 2020+ V6-3.0 Turbo Diesel. It will fit the 2021+ V8 392 models but will need extensive exhaust work to fit lift kit. On all V6 engine models we recommend installing an exhaust loop delete from AFE. Part #48-48024. You will not need it for the 3.0 Diesel engine, but you will have to remove most of the exhaust system in order to install the link mount and links. 2) WFO Suspension Components should be installed on a well-supported vehicle. Either supported by using appropriately rated jack stands under the front and rear frame rails OR by using an automotive lift. 3) This kit retains some of the factory jeep axle and frame hardware, keep all parts till the end. 4) This suspension kit requires removal of factory mounted suspension brackets. Returning back to stock suspension will not be possible. 5) WFO recommends replacing the stock driveline. With added travel, the stock driveline will bind in articulation. Aftermarket driveline will need to be purchased in order to get optimal suspension travel. 6) As a safety precaution we recommend removing the fuel tank before any plasma cutting is done. Removal of the fuel tank <u>isn't</u> necessary for the front crossmember, but if doing the full WFO Long Arm kit, it will need to be removed.

REMOVAL:

1. Support the jeep by either using jack stands under the frame or using an automotive lift, to allow the suspension to droop. These directions are for complete removal of the axle. If re using the factory Rubicon Axle, it is not necessary to fully remove it, it just makes it easier to cut, grind, and paint with the axle out of your way.
 - a. Support the front axle with a floor jack while you remove stock items: **Remember to save all hardware!**
 - b. Disconnect front sway bar links using a 18mm wrench and 6mm Allen Wrench.
 - c. A 15mm socket to remove the 4 driveline bolts at the axle.
 - d. Use a 10mm socket to remove the nut holding the brake line tab to the lower link.
 - e. A 21mm socket and wrench to remove the upper and lower track bar bolts. The lower nut is a flag nut that doesn't require a wrench.
 - f. 18mm socket and wrench to remove the top and bottom shock bolts. The top has a blind welded nut, so it's only a long bolt you will remove.
 - g. With the shocks out and brake lines loose, you are now able to droop the axle a little more to remove the coils. You may have to remove the lower draglink joint from the knuckle in order for the axle to droop enough.
 - h. You will need a 10mm socket to remove the heat shields that protect the upper link on the inside of the frame, 2 bolts on each side.
 - i. 18mm socket and wrench remove both the upper and lower bolts on the upper links.
 - j. A 24mm socket and wrench will remove the lower link hardware.
 - k. For the brake lines, do not un bolt the line from the caliper. Instead remove the entire caliper using a 21mm socket. Then take a wire or a strap and hang it from the frame rail. If re installing your stock Rubicon Axle, then you will not need to re bleed your brakes later. If installing a Dana 60 axle, you can swap the lines over later.
 - l. Un-clip the locker wire harness as well as the breather from the center of the axle housing. Also, un clip the 4wd actuator plug on the Passengerside tube.
 - m. Unplug the ABS sensors at the connector just inside the frame rails directly behind the coils.
2. As a safety precaution we recommend removing the fuel tank before any plasma cutting is done; or at a minimum use fire resistant blankets and/or thin pieces of sheet metal to cover any wiring or fuel lines. Removal of the fuel tank isn't necessary for the front crossmember, but if doing the full WFO Long Arm kit, it will need to be removed. Always have a fire extinguisher nearby when using a plasma cutter.
 - a. To removing the fuel tank, first support with a trani jack and/or floor jack. In the front of the tank, carefully un-clip the 2 front fuel lines just above the crossmember, the bigger of the 2 lines will be slightly under pressure.
 - b. In the rear of the tank, un screw the hose clamp on the main fuel filler hose closest to the fuel tank. Also, un-clip any lines going to the EVAP canister.
 - c. Using an 18mm and 16mm socket remove all necessary hardware from the frame as well as the inside straps holding the tank up. Slowly lower the tank about 6" to allow room for you to access the top of the fuel tank. There will be 2 more fuel pump connectors that you will have to un plug.
 - d. Once all fuel lines, wire harnesses, bolts, and filler hoses have been removed, you can now lower it all the way down and store the tank in a safe area away from plasma cutting and/or grinding.
3. Remove Stock Crossmember. **You will be reusing all Stock Crossmember Hardware**
 - a. First support the tail housing of the transfer case.
 - b. Remove the 3 transmission mount nuts in the center using a 21mm socket.
 - c. The 2 exhaust hanger bolts on top of the crossmember on the driver side with a 13mm socket.
 - d. The 3 bolts on the outside of the frame on the Passenger side using an 18mm socket.
 - e. Lastly remove the 2 bolts on the inside of the Driverside frame rail using an 18mm socket and 18mm wrench.
4. With all suspension components, crossmember, and fuel tank removed, it is now time to cut off your factory frame upper and lower link mounts **Fig. A**. It's easiest using a plasma cutter, but can be done with a grinder and cut-off wheel. Be sure to protect all wiring and hoses. Cut off both upper and lower mounts from frame, grind clean, and touch up with a semi flat black paint **Fig. B**.

Fig A



Fig B



5. Now is a good time to install the AFE exhaust loop delete, **Part #48-48024**, with everything out of the way. Follow their instructions before moving on.
6. On V8 392 Models you will need to remove the factory exhaust from the manifolds all the way back to the X-pipe just after the transfer case. This is the section that will need to be re-routed in order to fit the suspension kit.
7. On the Diesel models you will need to drop the particulate filter as well to install the lift kit and links. Re-install entire exhaust after all brackets and links are in and torqued.

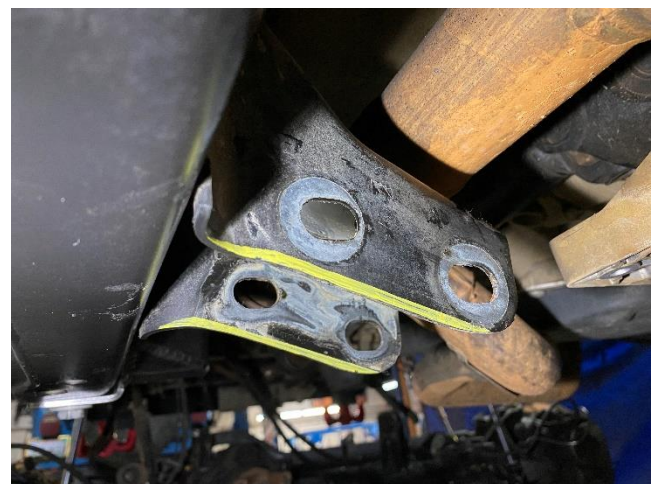
INSTALLATION:

8. Start with the driver side of your new WFO Crossmember. Slip it over the factory 2 bolt bracket and insert the factory bolts in the direction of front to back. So, the head of the bolt will be inside the new lower link mount bracket, leave Loose. **Fig. C**. On some newer models we've noticed you will need to grind off the bottom of the factory bracket so the crossmember sits flat up against the frame especially on 2020+ JT Gladiators and the V8 392 models. **Fig. D**

Fig. C



Fig. D



9. On the Passenger side of a JL you will re-use the factory M12x1.5 bolts and supplied M12x1.5 Nylock Nuts, leave loose. See **Fig. E**. If installing crossmember into a JT Gladiator, refer to included kit and instructions **WFO 8401** for additional crossmember pieces.

Fig. E



10. Slide the Center section up, making sure the transmission studs are lined up correctly in the top plate. Use the provided ½"-13x1.5" Grade 8 bolts, washers and nylock's to secure it to the side mounts, 8 total bolts. On the Passengerside you will take one of the Z shaped nut plates, see **Fig. F**, and slip it into the outside of the frame through the slot in the middle of the 3 crossmember bolts. Use the supplied ½"-13x1.75" G8 bolt, Lock Washer, and Washer to secure the Z shaped nut plate. See **Fig. G** for final fitment. On the driver side you will need to drill a ½" hole from the bottom side of the frame rail, **it may be easier to drill the hole after all the crossmember bolts are tight**. Once drilled use the other Z shaped nut plate and ½"-13x1.75" G8 bolt, Lock Washer, and Washer. You may now tighten up all the bolts making sure the new crossmember is tight up against the bottom of the frame. Refer to **Torque Table 1** for specifications.

Fig. F

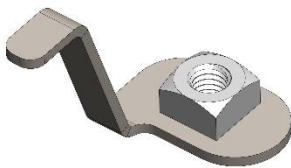


Fig G



Torque Table 1	
Description:	Torque Spec:
Center Crossmember - Qty. 8 - Supplied ½"-13x1.5" G8 bolt & nylock	56 Ft. Lbs.
Driverside – Qty. 2 - Factory M10 bolt and nut	85 Ft. Lbs.
Passengerside – Qty. 3 - Factory M10 bolts and supplied Nylock nuts	52 Ft. Lbs.
Center Transmission Nuts – Qty. 3 – Factory M14 nuts	22 Ft. Lbs.
Upper Link Mounts – Qty. 6 – Supplied ½"-13x1.75" G8 bolt, lock washer, & washer	55 Ft. LBS.
Upper Link Mounts – Qty. 2 – Factory M12 – Under Frame	52 Ft. Lbs.
Driver & Passenger Under Frame – Qty. 2 – Supplied ½"-13x1.75" G8 bolt, lock washer, & washer	55 ft. LBS.

11. Lower the Transmission onto the crossmember and re install the 3 Transmission nuts, **Refer to Torque Table 1 on previous page**, as well as the 2 small M10 bolts for the exhaust hanger.
12. Installing the front upper link mounts, blue lock tight is recommended on all hardware. You will use one factory bolt that held in the front most x-member brace into the bottom of the frame. See **Fig. H**. As well as 1 of the dual nut plates and one of the single nut plates with an angled tail. The single nut plate will go through the oval hole on the outside of the frame rail between the link mount and crossmember. See **Fig. I**. The dual nut plate will go in the hole just under the front body mount. All will use $\frac{1}{2}$ "-13x1.75" G8 bolt, Lock Washer, and Washer. See **Fig. J**. Refer to **Fig. K** for final result.

Fig. H

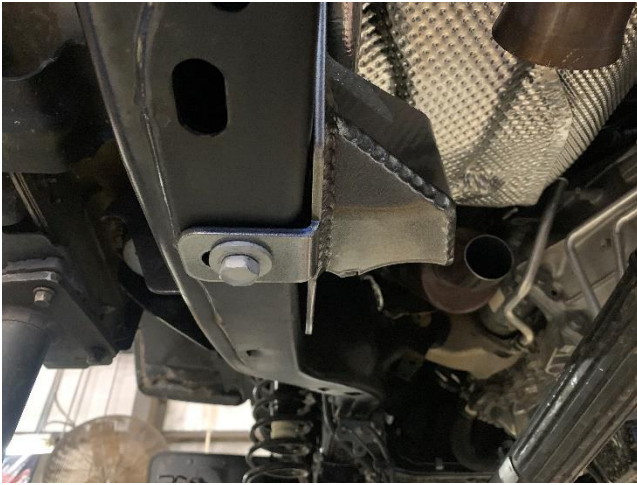


Fig. I



Fig. J



Fig. K



13. Double check all hardware is tight, **Refer to Torque Table 1**, and that all wire harnesses, brake lines, and fuel lines are re secured.

FINAL NOTES:

14. Be careful when finalizing up the front end that you may need to extend certain components.
 - a. For the ABS lines. On the inside of the frame rails, Jeep gave extra room in the harness for you to extend. Just unclip the lower half of the loop from the frame to gain a few more inches.
 - b. When using stock brake lines in front, we recommend on cutting of the small bolt bracket that was previously attaching the brake line to the lower link.
 - c. It is very recommended to purchase a new driveline if installing a 3" or more lift kit. You will not have enough angle in your upper CV joint on the driveline to accommodate the droop in suspension.





10076 Streeter Road Suite #7, Auburn, CA 95602
Phone: 530.268.9494 www.wfoconcepts.com

Follow us on all Social Media Platforms!
Remember to share your photos and tag #WFOCONCEPTS to be featured on our page!

