



McGAUGHY'S

S U S P E N S I O N P A R T S

*MUST USE 18" OR LARGER WHEELS

559-226-8196
4603 E. VINE AVE.
FRESNO, CA 93725
www.mcgaughys.com

2.5"/4" LOWERING KIT

2019+ GM 1500 TRUCKS, 2wd/4wd



- 1. Drop Spindles
- 2. Adjustable Front Struts
- 3. Rear Shocks
- 4. Front Lift Hangers
- 5. Hanger Support Brackets
- 6. Support Bracket Shims
- 7. Rear Flip Kit Saddles
- 8. Flip Kit Plates
- 9. U-Bolts
- 10. U-Bolt Retainer Brackets
- 11. Rear Bump Stops
- 12. Hardware

*NOTE: This flip kit will not work, without the installation of the provided hanger and support brackets.

READ THESE ENTIRE INSTRUCTIONS BEFORE STARTING ANYTHING

- If you are the installer only, and not the owner of the vehicle, please make sure the owner of the vehicle gets these instructions. They contain very important information about the kit, maintenance, and warranty.

-Before moving forward with installation, please layout all parts from boxes and ensure everything is present. If any parts are missing, please contact McGaughy's Suspension immediately at 559-226-8196.

-If you alter the finish of any of the provided components, like zinc plating, chroming, or powder-coating, which can cause damage to the strength and structure of the metal, any warranties will be null and void.

-If any components are ground on or modified in any way, then no returns or exchanges will be accepted and any warranties will be null and void.

-NO welding is required to install any part of this kit. Do not weld any components.

-Over-sized tires and heavier wheels can cause premature wear on factory and aftermarket components like ball joints, bushings, tie-rod ends, wheel bearings, idler arms, drive-lines, etc.... You may need to replace / install new components sooner than factory recommendations based on the tires and wheels you choose. Please note that the heavier and wider wheels and tires combined with aggressive driving (off-road and on highways) will cause more wear on ALL moving parts, factory and aftermarket. Especially when vehicle is in 4wd or Auto-4wd / AWD modes.

NOTE: Spindles and u-bolts are shipped with protective coating on surface. This allows them to be delivered to you without rust. We recommend you clean and paint the parts before you install, to protect against any future rust. Remember, spindles and u-bolts are bare metal. And will rust without paint.

WARRANTY INFORMATION

- McGaughy's warrants all **McGaughy's** products against manufacturer's defects in materials or workmanship for a period of **ONE-YEAR** from the date of original purchase. All McGaughy's spindles carry a **LIFETIME** warranty against manufacturer's defects.
- Warranty will not extend to any product or part there in, that has been improperly installed, abused, or neglected.
- Any warranty will be void on kits or components that are installed along with another company's components. All McGaughy's parts are designed to work with factory components or other McGaughy's components only.
- McGaughy's will not warranty any product(s) that were modified in any way. Check fit all products prior to custom painting, powder-coating, or any form of fabrication (sanding, drilling, painting, chroming, etc).
- There are **NO WARRANTIES** neither expressed nor implied for powder-coating on any McGaughy's products.
- McGaughy's is not responsible for damages and/or warranty of other vehicle parts (factory or aftermarket) related or non-related to the install of McGaughy's component(s).
- Warranty is limited to the repair or replacement (of McGaughy's product only), at McGaughy's discretion. And only after inspection of the defective part, once returned to McGaughy's with proof of purchase, date of purchase, and all shipping costs prepaid.
- Any cost of labor, freight, incidental or consequential damages are expressly excluded from warranty.

FRONT INSTALLATION

Always use the proper tools and consult the factory service manual for torque values and procedures. With the vehicle turned off and the parking brake set, secure the rear wheels/tires with wheel chocks. Use a jack and lift the front of the vehicle. Place jack stands under the frame on both side of the vehicle. Remove the front wheels.

1. Remove tie rod nut. Use 21mm.
2. Remove ABS wire. Use 10mm.
3. Remove all brake lines and wires from spindle. **DO NOT DISCONNECT BRAKE HOSE FROM CALIPER.**

4. Remove caliper bolts. Use 18mm. Secure caliper with bungee or wire. Be sure to not stretch any wires or hoses.

5. Remove rotor. Use T30.

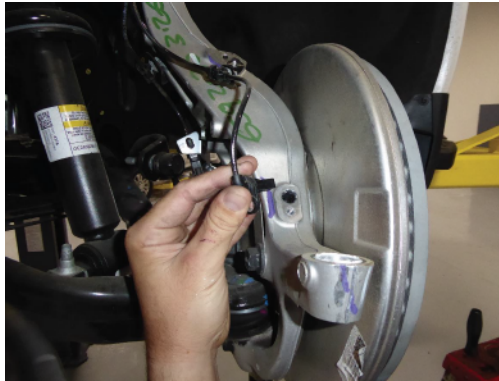
6. Remove upper ball joint nut. Use 18mm.

7. Remove lower ball joint nut. Use 24mm.

8. Refer to GM tech manual for proper disassembly of ball joints from spindle.

9. Remove bearing bolts from spindle. Use 18mm.

10. Remove bearing assembly from spindle. It will be very tight. DO NOT use a pry bar as it will bend and damage the dust shield. You will need to slowly work off.



11. Remove O-ring from factory spindle and reinstall on new McGaughy's drop spindle. (pic on left)

12. Clean back surface of bearing assembly. Make sure O-ring is still in place. (pic on right)



13. Install bearing assembly onto new McGaughy's drop spindle. Line up dust shield and hub. Install with factory bolts. Be sure to use loctite on the four bolts. Torque to factory specs.

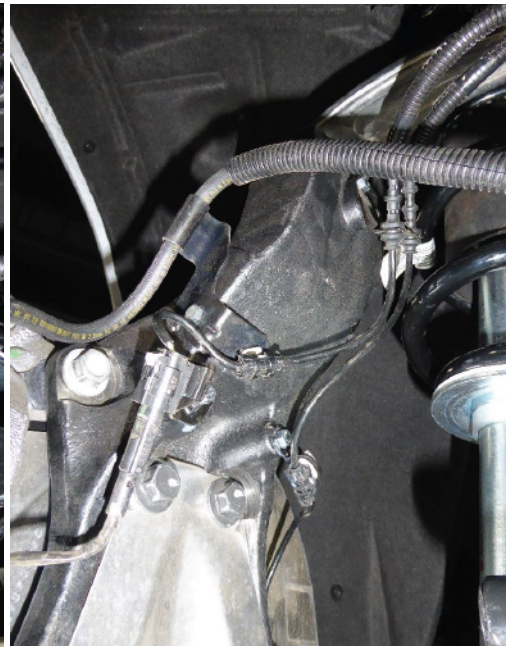
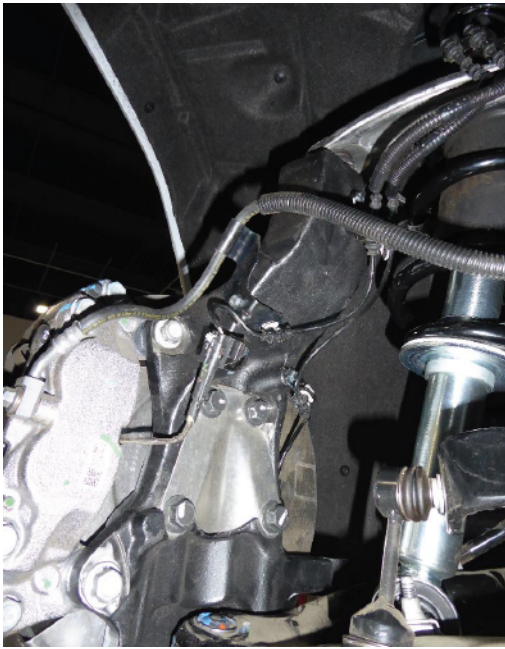
14. Install spindle on vehicle. Use provided locking lower ball joint nut. Upper ball joint will use the factory hardware. Torque to factory specs.

15. Install rotor.

16. Install caliper using loctite on the factory bolts. Torque to factory specs.



****NOTE: If you are running 18"-19" wheels. You will need to cut off the excess stud of the lower ball joint.**



17. Install ABS sensor wire onto new drop spindle using the factory bolt.
18. Install all brake lines and wires onto new spindle using the provided bolts on the spindle.
19. Turn spindle to the left and right fully. Make sure no wires or lines are stretched or pinched.
20. Install factory tie rod end using the factory hardware. Torque to factory specs.

21. Remove the three nuts on the top of the factory strut. Use 18mm.
22. Remove bottom bolts on the factory strut where it is mounted to the lower a-arms. Use 15mm.



23. Remove factory strut from vehicle.
24. New strut is adjustable from 1/2" drop to 3" drop. Out of the box, the strut has all five rings and will be at the 1/2" drop position.
25. DO NOT REMOVE THE RETAINER RING FROM STRUT. This is the largest ring at the bottom of the ring stack. It is what hold the bottom coil seat from coming loose.

26. Use a coil compressor to remove the factory coil and top mount from the factory strut.

27. Remove the lower retainer nut clips on the bottom of the factory strut. Reinstall them on the new strut.
28. Be sure to remove the factory bump stop.

29. Install Factory coil and top mount on to the new strut.

30. Be sure to use the new provided lower coil seat and plastic isolator.
- NOTE: Upper strut mount only goes one way.



31. Install new strut on to vehicle. Torque upper nuts and lower bolts to factory specs.
32. Be sure to install the plastic factory loom holder back on to the upper bolts.

***** BE SURE TO FULLY CYCLE THE NEW STRUTS BEFORE ASSEMBLING *****
IN THE UPRIGHT POSTION, FULLY COMPRESS AND EXTEND THE NEW STRUTS 3-5 TIMES

5 rings = 1/2" drop
4 rings = 1" drop
3 rings = 1-1/2" drop
2 rings = 2" drop
1 ring = 2-1/2" drop
0 rings = 3" drop

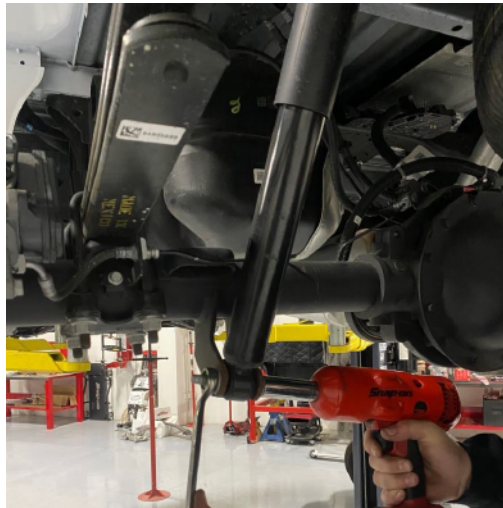
NOTE: Bottom retainer ring must be present on strut at all times. DO NOT REMOVE. This ring prevents the lower coil seat from coming loose. Strut comes with 1/2" drop out of the box. Strut can adjust up to 3" of drop in 1/2" increments. Each ring removed will add an additional 1/2" of drop.

****MAKE SURE YOU ALIGN YOUR VEHICLE BEFORE DRIVING****

Double check all hardware and make sure everything is torqued to the proper specs.
Install wheel and rotate fully to check if there are any clearance issues.

REAR INSTALLATION

With the vehicle turned off and the parking brake set, secure the front wheels/tires with wheel chocks. Use a jack and lift the rear of the vehicle. Place jack stands under the frame on both side of the vehicle. Remove the rear wheels.



1. With the vehicle properly supported, make sure to secure the rear end with jack stand or a proper rear end support.
2. Start by removing the factory rear bump stops. Next, disconnect the factory rear shocks from the lower mounts on the rear end. Then, remove the factory u-bolts from the truck. **Only do one side at a time.**



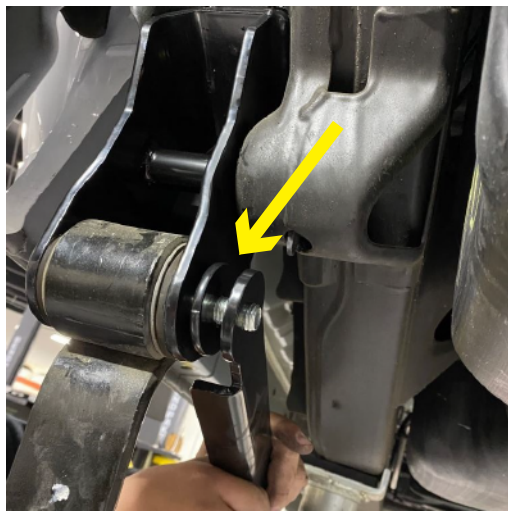


3. Loosen the leaf spring bolt on the shackle side, and remove the bolts that connect the leaf spring to the hangers.
4. Now remove the leaf spring pack from the vehicle. Next, clamp the leaf pack together and remove the factory center pin. With the pin removed, take off the factory u-bolt retainer and re-install the factory center pin.

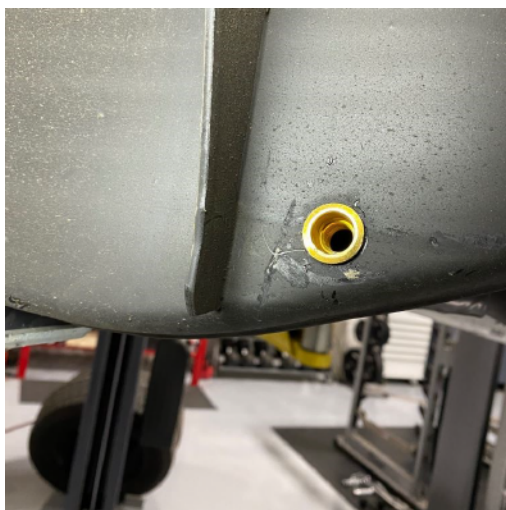
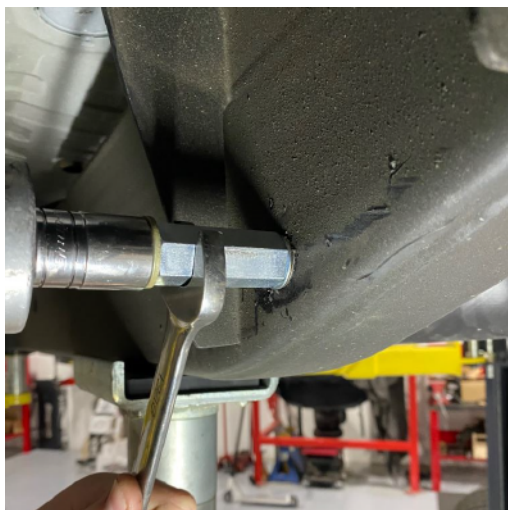
5. Make sure the factory center pin is installed with the nut towards the bottom and round head at the top. Again, make sure you are only working on one side at a time. Once the side is complete, then you can move on and do the same on the opposite side.



6. Install the provided front hanger bracket into the factory front hanger. There is a left and right bracket. Driver side is shown. Use the factory hardware to install in the factory hanger mount and the provided 3/8" x 1-1/2" hardware (bolt, washers, lock nut) on the top hole on the bracket. This hardware will bolt through a factory hole on the frame. Be sure to tighten the 3/8" hardware first.



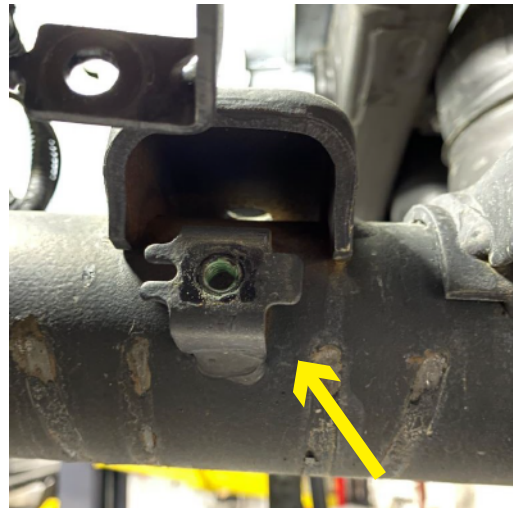
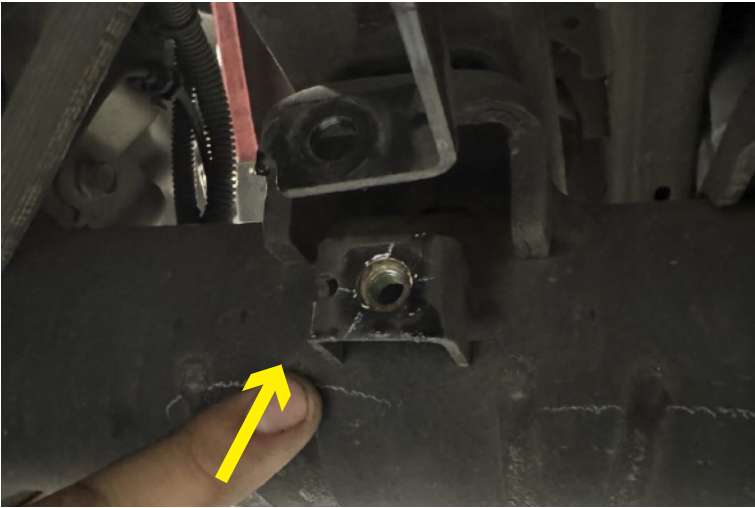
7. Re-install the factory leaf springs into the newly install front hanger bracket. Use the provided hardware to install. Make sure you use the spacer washer (yellow arrow) and the reinforcement bracket. With the reinforcement bracket secure but not fully tightened, swing it into place where it can be mounted on the frame. Marke the hole and drill out to 11/16".



8. With the hole on the frame drilled out, insert provided rivet nut into the frame. Make sure it is a snug fit, do not drill the hole too big. Thread the provided tool into the rivet nut until it bottoms out. Put a wrench on the oversized nut to prevent it from spinning and a socket on the bolt head. Now tighten the bolt. This will collapse the rivet nut on the back side and lock it into the hole. Tighten down until it will not tighten any more. If it is not tight enough, you risk the rivet nut spinning in the hole later on. With the rivet nut installed, now swing up the reinforcement bracket and use the provided 1/2" hardware to install.

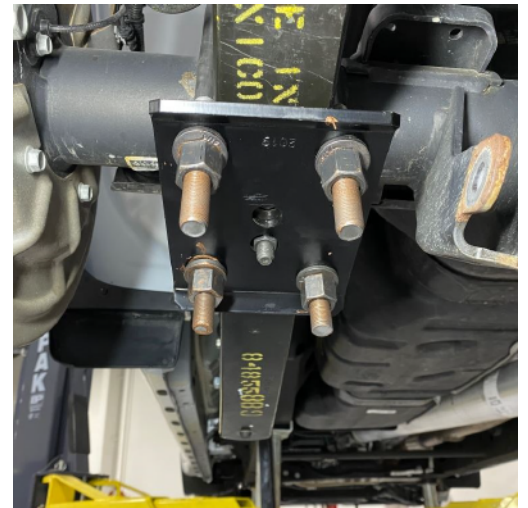
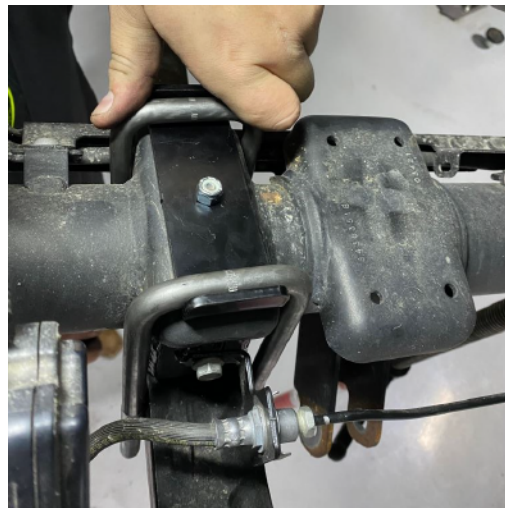
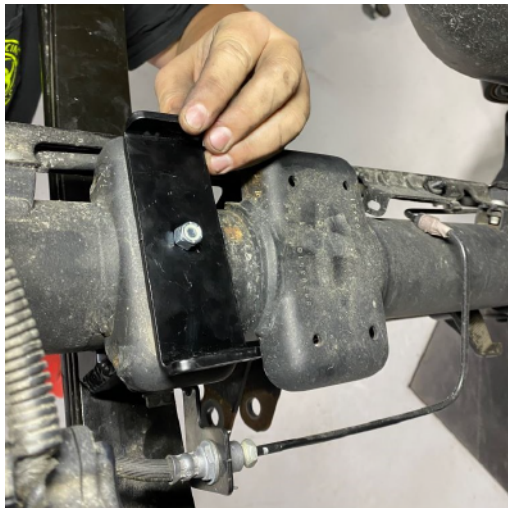


9. To install the flip kit on the rear end, you will need to remove the factory brake line bracket on the driver side and the passenger side. Now, with the bracket removed, you will cut off the the factory mount on the axle. Your mount will look like either of the pics below. Be sure to remove the whole factory mount and smooth any high spots with a grinder. DO NOT cut into your rear axle. Once the factory mount is removed and cleaned up, slide the flip saddle into place.





10. The flip kit saddle will have a tapped hole for you to re-install your factory bracket line bracket. Be sure to have the factory bracket completely secure using the locator holes and bolt down the factory bracket to the flip kit using the new provided bolt and washer.





11. Make sure your shackle is installed on the leaf spring, but not fully tightened down. This will allow your leaf spring to move freely into place. Now with the leaf spring installed on the front hanger, swing up and install the shackle into the factory rear hanger.

12. Use the provided u-bolt retainer plate on top of the rear end. Then install the provided u-bolts and bottom u-bolt plate on the leaf springs. Make sure the leaf spring center pin is installed through the front hole (furthest hole towards the front of the vehicle). Torque down all u-bolts.

13. Install the new provided shocks using the factory hardware. Make sure new shocks are installed with the shock body towards the ground. Torque to factory specs.

14. Re-install the factory brake line bracket into the factory location using the factory hardware. Torque to factory specs. Make sure nothing is rubbing or coming into contact with brake lines, which could cause them to fail.

15. Install the new provided bump stops into the factory location, using the provided hardware.

16. Now repeat steps 1-14 on the opposite side of the vehicle.

17. Now go over all hardware and make sure brackets and u-bolts are tight and installed correctly. **DO NOT FULLY TIGHTEN LEAF SPRINGS OR SHACKLES YET.**

18. Place vehicle on the ground so that the full weight is on the suspension. Now torque down the shackle bolts and the front leaf spring bolts on the vehicle.

*** Double check all of the front and rear fasteners and components, making sure everything has been torqued to the proper specifications. This MUST be done before operating the vehicle.**

*** Vehicle MUST be properly aligned before driving.**

*** After 500 miles, be sure to go over all of the front and rear suspension and lift components to make sure nothing has come loose and everything is still tight.**

*** We recommend periodically checking all of the front and rear suspension and lift components to be sure they are tight and in proper working order.**