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## STOP---READ THIS FIRST!

\*\*Read These Entire Instructions Before Starting Anything\*\*

# 1999-2006 GM 1500 TRUCK (6 Lug)

LIFT KIT INSTRUCTIONS (PART#50000)

#### **NOTE:**

- \* This kit will not work on vehicles with factory auto ride suspension.
- \* The factory wheels and tires will not fit on the front of the vehicle once the lift kit is installed. You must use at least a minimum size of a 17" wheel, 8" wide. The rim's maximum back space allowed is 4 5/8".
- \* If you alter the powder-coating or finish of any of the provided parts or stock components like zinc plating or chroming which can damage the strength and structure of the metal, any warranties will be null and void.
- \* If any parts are ground on or modified in any way then no returns will be accepted.
- \* Step #13 requires welding which should be done by a certified welder. Do not weld any other components other than step #13.
- \* Over-sized tires and heavier rims can cause premature ball joint, tie-rod, and idler arm wear. You may need to install new components sooner than factory recommendations based on the tires and rims that you choose.



- 1. Lower A-Frame Support Rods
- 2. Tie Rods
- 3. Skid Plate
- 4. CV Axle Spacers
- 5. Frame Support weld-in bracket
- 6. Front Crossmember
- 7. Sway Bar End Links
- 8. Rear Crossmember

- 9. Lift Spindles
- 10. Spare Tire Spacer
- 11. Hardware Bag
- 12. Passenger Diff. Drop Bracket
- 13. Torsion Bar Drops
- 14. Driver Diff. Drop Bracket
- 15. Rear Shocks
- 16. Compression Struts

- 17. Compression Strut Brackets
- 18. Rear Bump Stop Extenders
- 19. Rear Lift Blocks
- 20. U-Bolts
- 21. Lift Block Spacers
- 22. Add-A-Leafs (additional cost, must purchase separately, #50005)
- 23. Front Shocks



## FRONT INSTALLATION:

- **1.** Place wheel chalks behind the rear tires. With the parking brake set, use a jack and lift the front of the vehicle and place jack stands under the frame on each side. Remove the front tires.
- **2.** Using the proper torsion bar tool, measure/mark the exposed threads on the torsion bar adjusting bolts, and then UNLOAD and remove the cross member and bars. (Keep all the hardware)
- **3.** Remove the factory sway bar end links from the lower control arms and the sway bar. Take off the stock shocks which you will not re-use.
- **4.** Take off the bump stops (lower) from the frame and save them.
- **5.** Take off the front differential skid plate and splash shield.
- **6.** Using a rubber mallet, uninstall the tie-rods (hit the spindle to loosen the tie-rods). Be very careful to not damage the tie-rods.
- 7. Remove the brake hose bracket from the top of the spindle and unplug the ABS from the frame and control arm. Take off the brake caliper and move it out of the way. Take off the rotor, axle nut, and washer. Unbolt the hub by taking off the three hub bolts on the back side of the spindle. Remove the bearing hub assembly from the spindle.
- **8.** Take off the upper and lower ball joint nuts and remove the ball joints. You can remove them by using your rubber mallet and hitting the SPINDLE near the ball joints, NOT THE BALL JOINTS!
- **9.** If 4WD, uninstall the CV axles from the differential housing.
- 10. Take off the lower control arms.
- **11.** Take off the front drive shaft from the differential. Disconnect the vacuum line and electrical connection from the differential.
- **12.** Remove the differential housing assembly and diff. cross member. It may help to turn the steering wheel to the left or you may have to use a die-grinder to cut the backside of the driver side lower control arm pocket. In order to cut you will need to measure 1.5"

from the back side of the pocket (closest to the rear on the lower a-frame) and make a vertical cut line around the entire pocket.





**13.** Now that the pocket is cut-off and gone, use the re-enforcement plate provided in the kit and weld it to the driver's side. Once the welds are cool and the plate is clean, paint the piece so that it doesn't rust!

14. Install the McGaughy's rear cross member drop using the factory hardware. Install the passenger side differential drop, using the factory hardware, to the bottom factory mount on the frame. The wider end of the bracket should be facing the front of the vehicle. Bolt the driver side upper differential drop bracket (the closed end on the new bracket) using the factory bolt through the factory dif mount bracket. Bolt the open end of the upper differential drop bracket (use the 9/16 x 3 ½ bolt and nylock nut provided) to the factory driver side upper differential bushing. The dif. bracket may rub (on the stud that attaches the centerlink to the pitman arm), if so, cut off the extra stud hanging down past the nut. Don't tighten yet! Reinstall the factory differential with the factory hardware.







**15.** Install the **front cross member** into the factory a-arm pockets, using the factory hardware. Install the electrical connection and the vacuum line to the factory differential housing. Don't tighten yet!



17. Install the factory lower a-arms into the new cross-members, using the **lower a-frame support rods** over the pivot bolts, between the cross members. Use the provided 5/8" x 5" long bolts with 5/8" washers for the front a-arm pocket. Use the provided 5/8" x 6 1/4" bolt to bolt to the rear pockets. Make sure the bolts go from the front to the rear with the nuts closer to the rear of the vehicle.



**18.** Attach the **skid plate** to the back side of the front cross member using the provided ½" x 4 ½" bolt and lock nut. Use the provided ½" x 1 ¼" to bolt the back side of the skid plate to the **rear cross member**, the nut is already installed/welded onto the cross member for you. (torque the hardware to 50 ft lbs.)

**19.** Now tighten (torque to 70 ft. lbs) the passenger side differential housing mount bolts and the driver side differential bushing bolts (front and rear).

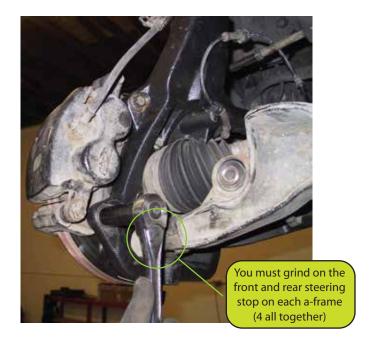
- **20.** Install the new front **bump stops** into the outside edge of the rear crossmember.
- **21.** Install the new McGaughy's **lift spindles**. Re-install original hub assembly back onto the new spindles and make sure to use lock-tite on the flange bolts and stock hardware. Torque to 130 ft. lbs.





**22.** Re-install the stock upper and lower ball joints and McGaughy's new tie-rods. Torque the ball joints to 70 ft. lbs and the tie-rods to 30 ft. lbs. Install the factory brake hose bracket to the new McGaughy's Lift spindle using the provided self-tapping bolts into the predrilled holes. Do not use andy air tools or electric drivers, use hand tools only to tighten





- **23.** Now, make sure that you have re-checked all of the front-end bolts to make sure that everything so far has been tightened. Make sure that you went back and tightened the parts that were originally left loose like the cross member and control arms. Make sure everything is torqued to the proper specifications.
- **24.** If the vehicle is a 4WD, re-install the CV axles and install the new 1" thick CV axle spacers which go between the CV axle and the differential housing. You will use the provided 10mm bolts and washers. Make sure to use lock-tite and torque to 55 ft. lbs in a star pattern. Next, install the axle nut (torque to 150 ft. lbs.).



**25.** Install the new provided **front shocks** using the factory hardware and shock hardware provided. Torque the top bushing to 15 ft. lbs. and the bottom bolt to 35 ft. lbs.



26. Install the original rotor as well as the caliper (torque to 70 ft. lbs.). Use the factory clamp for the ABS line and brake hose to the back side of the spindle and then to the a-arms using the provided ½" x 1" long bolts, nuts, and washers (torque to 5 ft. lbs.). Make sure the ABS line and brake hose are routed in a way so that you are not losing any turning radius when the wheel turns completely both directions. Also, use wire ties to keep the ABS line and brake hose hooked to the spindles and upper a-arms so that there isn't any rubbing on anything including the tires or any new suspension parts.

**27.** You may need to re-route your exhaust depending on how it is currently ran on the vehicle. Make sure a reputable muffler shop does any work if it is needed to clear the drive line so that it can be bolted back in. Once the exhaust is correct, re-install the front yoke with the original hardware and torque the bolts to the "U" joint strap to 20 ft. lbs. NEVER DRIVE THE VEHICLE WITHOUT THE DRIVELINE INSTALLED AS IT COULD CAUSE SEVERE DAMAGE AND OIL LEAKS.

**28.** Install new sway bar end links, using the original ruber grommets and hardware. Torque to 25 ft. lbs.

**29.** Just to make sure, re-check all the bolts on the front to make sure that at this point everything is tightened and that nothing has been left loose.

**30.** On the back side of the lower a-arms there are tabs that need to bolt to the new provided **compression struts**. Use the provided  $\frac{1}{2}$ " x 4" bolts, nuts, and washers to install but do not completely tighten yet.



**31.** Next, install the new provided **compression strut brackets** to the holes in the transmission mount crossmember. Make sure that the two transmission crossmember bolts are pointing towards the rear of the vehicle. Rotate the compression struts into the rear strut brackets and use 1/2" x 4" bolts and lock nut to bolt-in. Tighten/torque to 60 ft. lbs.



**32.** Next you will be installing the **torsion bar drop down brackets**. The new brackets will locate to the underside of the frame so that the center of the bracket's bushing hole is straight down from the center of the bushing on the original torsion bar. Use some "C" clamps and hold the bracket in place to the frame. Using a center-punch, mark the holes and drill 7/16" holes on the frame so that you can bolt in the new drop down bracket using the provided 7/16" x 1 ½" bolts, nuts, and washers (Torque to 65 ft. lbs.).



33. Install the original torsion bar cross member (using the original hardware) into the new **drop down brackets** and torque to 70 ft. lbs. Install the original torsion bars back onto the lower a-arms and to the cross member using the original adjusters. Put the adjusters back at the original spot that you originally marked on the threads. DO NOT "crank-up" the torsion bars which puts excessive and unnecessary pressure on the components and interferes with the alignment and front-end geometry. Install the tires and wheels and set the vehicle back on the ground. Tighten the lug nuts to manufacturer's specifications.

Check the front for tire clearance by turning the steering all the way each direction for clearance. If you are running an oversized tire you may need to trim the front bumper valance and/or bumper as well as anything else that they may be rubbing on.

Re-check all components and tighten all hardware.

#### THE FRONT INSTALLATION IS COMPLETE!

## **REAR INSTRUCTIONS:**

**34.** Using jack stands to support the rear frame, jack up the rear of the vehicle and support the rear differential. Un-clip the factory ABS line clip from the rear axle and on top of the frame. Remove the emergency brake cable factory bracket which is located on the driver's side on the frame. Lower down the rear-end making sure that you do not stretch the rear factory brake hose/lines.

**35.** (**IF YOU PURCHASED SEPARATELY**) Take off the factory shocks, U-bolts, and blocks. Clamp the factory leaf spring in the center of the leaf pack so that you can unbolt the center pin. Use the new provided **add-a-leaf** and install it to the leaf pack so that the leafs are in an order from smallest to largest with the longest leaf on the top. Bolt back in the factory center bolt with the head of the bolt on the bottom of the leaf spring pack. Cut-off any extra threads on the center pin protruding out past the nut.



**36.** Install the new **lift blocks** so that the center pin is on the bottom of the block and fits onto the axle. The block has a short and a long end. The long end of the block should be towards the rear and the short end towards the front of the vehicle. Use the new U-bolts, nuts, and washers and bolt together around the rear-end making sure that when tightening, the blocks, U-bolts, rear-end, and leaf springs are all staying aligned with each other and aren't shifting.



**37.** Unbolt the factory bump stops and using the provided 10mm socket head, allen bolt, bolt back through the factory bump stop and then through the new provided **rear bump stop extender** and then back into the factory frame hole.



**38.** Using the provided self drilling hex head screws, re-route the factory brake line bracket from the top of the frame to the underside of the frame. Check for clearance.

**39.** Install the McGaughy's **rear shocks**.

- **40.** Make sure the factory ABS line has enough slack so that when the rear-end is at its fullest downward travel, the line isn't stretched. Wire tie the ABS line to the U-bolt and anywhere else needed to keep it out of the way for clearance, again making sure there is enough slack.
- **41.** Take the driver side emergency brake cable out of the factory bracket and put the passenger side cable into its place. Bolt the bracket back in the same way it was originally installed using the original hardware.
- **42.** Double check the rear differential fluid and if it is not at the proper level then fill with the proper fluid.
- **43.** Double check all of the rear parts and hardware, make sure everything is tight. Check all parts for clearance, including the brake lines, hoses, and ABS line.
- **44.** Install tires and wheels and torque to manufacturer specifications. Set the vehicle back on the ground and check for clearance again for the front and rear including the front inner fender wells and bumper valance. Depending on the tire size you have, you may need to trim the bumper valance and/or inner fender wells for clearance.
- **45.** Get a front-end alignment and adjust the headlights. Make sure to re-check all the hardware and parts and re-tighten everything to make sure nothing has come loose. After 100 miles inspect & tighten everything again!

### THE REAR INSTALLATION IS COMPLETE!

\*\*\*NOTE: Part#10 in the kit picture is a spacer when running the spare tire so that it will clear the spindle\*\*\*