

McGAUGHYS

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

2019+ DODGE RAM 2500 6" LIFT KIT PART# 54410

STOP! READ THIS FIRST!

****READ THESE ENTIRE INSTRUCTIONS BEFORE STARTING ANYTHING****

NOTE:

- The factory wheels and tires WILL fit on the front of the vehicle once the lift kit is installed if they are 18" or larger.
- If you alter the powder-coating or finish of any of the provided parts or stock components like the 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.
- NO welding is required to install any part of this lift kit. Do not weld any components.
- Oversized 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 you choose.

6" LIFT KIT (COIL SPRING REAR)



FRONT INSTALLATION:

Before starting this installation, we recommend loosening the factory front shocks with the truck on the ground. Once the vehicle is in the air, it is extremely difficult to access the upper shock nuts and they have a significant amount of tension on them. Loosen the top nut with a 21mm wrench but **DO NOT** remove it all the way off since it holds up the front suspension. (Photo 1)



Always use the proper tools and consult the factory service manual for recommended torque values and procedures. With the parking brake set and chocks behind the rear tires, use a jack and lift the front of the vehicle and place jack stands under the frame on each side. Remove the front tires and wheels.

1. Using a 13mm wrench, unbolt the brake line brackets (L&R) from the frame. Also, unbolt the brake line bracket from the front axle for extra maneuverability. (Photo 2)

2. Support the front driveline with a suitable strap and remove the four front driveshaft flange bolts using a 15mm socket. (Photo 3)



3. Remove the driver's side drag link to pitman arm nut using a 21mm socket. Use a tie-rod removal tool to avoid damaging you stock tie-rod ends. (Photo 4)

4. Remove the pitman arm-to-steering box nut using a 46mm socket. (Photo 5)

5. Using a pitman arm puller, remove the pitman arm from the steering box output shaft. (Photo 6)

6. Remove the sway bar end link top nuts (L&R) using a 18mm socket. Separate the sway bar from the end links. (Photo 7)





7. Remove the sway bar mounting bolts from the frame using a 15mm socket. (Photo 8)

8. Remove the sway bar.

9. Support the front axle and remove the front shock top nuts.

10. Remove the front shock lower mounting bolt using a 21mm socket. Remove the shocks from the vehicle. (Photo 9)

11. Lower the front axle until the front coil spring tension is released.

12. Remove the coil springs. (Photo 10)



13. Use a cut-off wheel to remove the front bump stop mounts (L&R) from the frame. **NOTE: The frame mounts will be reused so do not destroy them, cut the factory weld only.** (Photo 11)

14. Clean the remaining weld material from the frame using an abrasive disc or flap wheel. Clean and paint the bare metal. (pic 12)

15. Use provided tap on the existing holes that were located under the factory bump stop cup on the frame. (pic 13)

16. Clean the remaining weld material from the factory bump stop cup that was removed from the frame. Use an abrasive disc or flap wheel. Paint any bare metal on the cup.



17. Install the bump stop cups on to the new bump stop brackets. Use the provided 3/8" button head allen bolts.

18. Install the original bump stops back into the bump stop cup. This will take some force. (pic 14)

19. Next, install the new bump stop assemblies into the vehicle using the supplied 7/16" x 3/4" bolts. (pic 15)

20. Install new track bar drop bracket using original hardware. Place the 3 laser cut 16 gauge washer on top of the new track bar bracket over the original hardware before installing the new track bar bracket bolt into the original location. (pic 16-17) Once you have started the 3 bolts, use the last two original bolts and install them into the side of the original frame mount passing through the new track bar bracket. Use the provided 14mm locking nuts. Now tighten all five bolts, starting with the bolt in pic 16 first, then the two bolts in pic 18, and lastly the two bolts in pic 19. Torque all to factory specs



21. Remove the upper radius arm to axle bolts using a 27mm socket. Remove the lower radius arm to axle bolts using a 24mm wrench.

22. Remove the radius arm to frame bolts using a 27mm socket. Now remove the factory radius arms from the vehicle.



23. Install new McGaughy's radius arms in the factory location, using the factory hardware at the front and the rear mounts. (pic 20)

24. Be sure to set the cam bolts the same on both sides when installing. Torque to factory specs. (pic 21-22)

25. On the rear radius arm bolts, do not tighten yet. Leave those snug until truck is on the ground. Torque to factory spec.

*****MUST ALIGN BEFORE DRIVING*****



23.

26. Track bar alignment cam must be used in the position shown. Place cam in front and behind track bar bracket so that the bolt can pass through with no obstruction. (pic 23)

27. Install the track bar into new track bar drop bracket using supplied 18mm x 90mm bolt, washers, cams and locknut. Torque to factory specs.



24.



25.

28. Install new McGaughy's lift coil. Be sure to use the factory coil isolators in the factory location. Tighter windings face up and the more open windings face down. (pic 24-25)



26.

29. Install the new shocks into the factory location using the factory hardware on the lower mount and new provided hardware for the upper mount. (pic 26)



27.



28.



29.

30. Redirect brake line, so passenger side brake line bracket faces down instead of to the rear. (pic 27)

31. Install supplied brake line drop brackets on the frame using the stock hardware. Next, install the factory brake line bracket to the new drop down bracket with the supplied 5/16" x 3/4" hardware. (pic 28-29)

32. Repeat steps 30 and 31 for the driver side brake line bracket. (pic 31-32)

*** MAKE SURE THAT THE ORIGINAL BRAKE LINE ISN'T RUBBING AGAINST ANYTHING THAT COULD CAUSE FAILURE ***



30.



31.



32.



33. Before installing new drop pitman arm, clean the factory splines and threads so there is no debris or oil. Clean the threads on the nut as well. Now you can install new drop pitman arm. Apply the supplied red thread locker to the factory pitman retention nut and tighten to factory specs. Make sure you install it the same way it came off the vehicle lining up the four alignment channels. (pic 33-34)
Torque to factory specs



34. Using 18mm, loosen drag link clamp. (pic 35)

35. Loosen and remove drag link adjuster (hex head nut between drag link clamp and tie rod) by turning the nut clockwise while holding the tie rod in place so not to spin. (pic 36)



36. Make sure to note where position of tie rod is when removed from drag link. (pic 37)

37. Now remove drag link adjuster from tie rod. (pic 38)



38. Once drag link adjuster is removed, you must grind down flat the hexagon sides of the tie rod. Grind up to the threads. DO NOT grind any threads. When grinding the end of the tie rod, the goal is to extend the hexagon shaft right to the end of the threads, Making sure it is the same size from one end to the other. Be sure to stop at the end of the threads. You do not want to grind too much away. (pic 39-40)



39. After grinding the tie rod sides flat, reinstall the drag link adjuster on to the tie rod. The tie rod must sit about 1/8" down inside the adjuster. (pic 41)

40. Now install the tie rod in to the drag link with the tie rod now facing up. (pic 42)

41. Once installed, tighten drag link clamp. Torque to factory specs. (pic 43)



44. Install sway bar end link and tighten to factory specs.



42. Mount the new sway bar drop brackets on the frame in the original location. Use factory hardware. Mount brackets so that they are angled away from the axle. (pic 44)

43. Attach the sway bar to the new drop down brackets using the supplied 3/8" x 1-1/4" hardware. (pic 45)



45. This kit requires a transfer case redocking ring. You will need to remove the original transmission crossmember from the frame. Once you have supported the transmission, one of the bolts on the passenger side cannot be removed because it will hit the exhaust. Remove the nut and push the bolt back through, exposing the head of the bolt. Cut the head of the bolt off and pull it back through the opposite way. (pic 46) We provide you a new replacement bolt to use.

*** Before moving any further. Please refer to redocking ring instructions.***



46. Install provided transmission shim before installing new transmission crossmember. (pic 47)
47. Install new transmission crossmember. Use the three remaining factory bolts and the one new bolt to replace the bolt that had to be cut. (pic 48)
48. Install wire loom relocating bracket on driver side rear of transmission crossmember. Use the factory plastic clip to hold the wire loom in place. The clip will snap into the new loom bracket. (pic 49) Now torque all bolts to factory specs.



49. Make sure you open the factory clip inside the original driveline before installing it over the factory splines on the transfer case. Once the driveline is pushed all the way into place, the original clip will close locking on to the transfer case splines. Make sure you use the original rubber boot clamp from the transfer case to the driveline. This is to prevent debris from getting in. (pic 50)
50. Apply the supplied thread-locking compound to the driveshaft flange retaining bolts. Align the driveshaft flange to the axle flange and thread in the bolts. Tighten bolts to factory specification. (pic 51)

If you are not using a lift, be sure to tighten the radius arm bolts on the frame that you left snug until the truck was back on the ground. Torque to factory specs.

REAR INSTALLATION: (COIL REAR ONLY)

51. Support the rear axle and remove the parking brake cable retainer bracket nut. (pic 52)



52. Remove the top shock nut using a 18mm socket.

53. Remove the bottom shock hardware using a 21mm socket and 21mm wrench. (pic 53)

54. Remove the shock absorber. (pic 54)



55. Repeat steps 51 through 54 for the opposite side.

56. Remove the sway bar end link upper mounting hardware. (pic 55)

57. Remove the sway bar end link lower mounting hardware. (pic 56)

58. Remove the sway bar end link.

59. Repeat steps 56 through 58 for the opposite side.

60. Remove the panhard bar to axle hardware. (pic 57)

61. Lower the rear axle until spring pressure has been safely released.

62. Remove the rear coil springs. (pic 58)

63. Open the existing hole in the factory lower track bar bracket with a 1/2" drill bit as shown. (pic 59)





64. Install McGaughy's coil spring spacer on the axle and align with the existing holes. Mount the spacer using the provided $3/8"$ x $1-1/4"$ hardware. (pic 60)

65. Install the new track bar bracket into the lower track bar mount. Insert the original bolt through the lower hole, going through the brackets. (pic 61)

66. Using the $9/16"$ bolt, place the track bar reinforcement brace in front of the track bar mount and place new bolt through the hole that runs through the track bar bracket and through the track bar brace.

67. Track bar brace will sit on top of the mounting tab of the new coil spacer. Use $3/8"$ x $1-3/4"$ hardware through the track bar brace, coil spacer, original spring pad, and track bar bracket.



68. Mark two holes in the track bar brace. Drill the hole on the side facing outward to $1/2"$ and install the new $1/2"$ x $1-1/2"$ bolt. (pic 62)
Drill the front hole facing inward to $3/8"$ and insert the $3/8"$ x $1-1/2"$ bolt. (pic 63)



69. Insert the $1/2"$ x $1-1/2"$ bolt through the hole under the rear lower track bar bracket you drilled out earlier to $1/2"$. (pic 64)
Remove the $9/16"$ bolt from the track bar bracket and track bar brace (was used for alignment) and reinstall the factory track bar into the new track bar bracket and brace. (pic 65)
Tighten all bolts.

70. Remove the factory bumpstops using a 15mm socket. (pic 66)

71. Install the McGaughy's rear bump stop extension to frame using the factory hardware. Repeat for opposite side.

72. Mount the bumpstops to the spacers using the supplied 3/8" x 1 1/4" bolts, washers, and locknuts. (pic 67)



73. Install the new sway bar end links using the supplied 1/2" x 2 1/2" bolts, washers, and locknuts. Install these with the larger washer outside and the standard washer inside. (pic 68)

74. Install the new shock body down using the factory hardware. (pic 69)

75. Set the rear at ride height then proceed to tighten the panhard bar to the McGaughy's extension bracket. Torque to factory specs.

76. **IMPORTANT:** Double check all of the front and rear fasteners and components, making sure everything has been properly torqued as outlined in these instructions to factory specifications. This **MUST** be done prior to operating the vehicle. We recommend periodically checking all of the front suspension and lift kit components and fasteners to be certain they are tight and in proper working order. We recommend periodically checking all of the front and rear suspension.