

Ford F-150 - Project Phenom

Big Lift, Big Wheels, Big Tires, and Big-Time Looks

Harley Camilleri - Feb 26, 2014

Photographers: Dan Ward



Suspension lift kits have the innate ability to turn any truck into a burly looking beast. Adding inches to the suspension allows the installation of larger and more aggressive tires, plus a wider wheel. Those combine to give trucks a wider and taller stance, which looks menacing in the rearview mirror of slow-moving compact cars. Of course, for those of us that actually go off road, the extra height and off-road tires make traversing uneven terrain that much easier. It's the best of both worlds.

Having a Ford F-150 EcoBoost handy, we thought it was high time to put a suspension lift under it to contrast our lowered brethren sharing the shop. McGaughys Suspension had a 6½-inch system that we knew would look perfect, perform great, and be easy to install ourselves. Made from thick laser-cut plate steel, CNC-formed and welded in-house at McGaughys, we knew we were getting a quality product that would last the life of the truck. Our suspension lift came powdercoated in a brilliant metallic silver that would look good under the darker shade of the F-150's Sterling Gray Metallic coating. Going with the darker theme, we chose Gear Alloys 726MB Big Block wheels in and aggressive 20x10-inch size, and then wrapped them in 35-inch Nitto Trail Grappler M/T tires. For just a day's worth of work, the new lift and wheels and tires completely transformed our truck. Check out how we did it and give McGaughys a call if your truck needs an altitude adjustment.



1. Before: This EcoBoost F-150 was still fairly original when it rolled into our shop. Our goal was to make it something way more fun to drive.



2. Even though the truck rode on stock wheels and tires, it had been given a leveled stance from these adjustable Bilstein struts.



3. The tie rods were removed from the steering knuckles and the brakes set aside to allow us access to the suspension components.



4. Using an electric impact, the ball joint nuts were loosened and the knuckles were busted free from the control arms.



5. The upper and lower hardware holding the Bilstein struts in place was removed.



8. The F-150's lower control arms were next on the removal list.



6. We then slipped the struts out of the truck and set them off to the side.



9. One modification needed to be addressed prior to installing any of the suspension lift components. It started with pulling this support crossmember from the Ford.



7. Using an Ingersoll Rand electric impact again, the front sway bar was disconnected and dropped from the frame.



10. The "foot" on this frame mount was in the way of the McGaughys crossmember's new placement. Following the instructions included with our lift kit, it was cut off with a reciprocating saw.



11. Original hardware held the new front crossmember into the frame mounts where the control arms used to reside.



12. The rear crossmember slipped right into the previously chopped mount with the stock bolts.



13. McGaughys created these mounts to allow the sway bar to work as designed with its lift system.



14. Getting the truck aligned was going to be easy since the kit was designed to offset the lower control arms with eccentric cams.



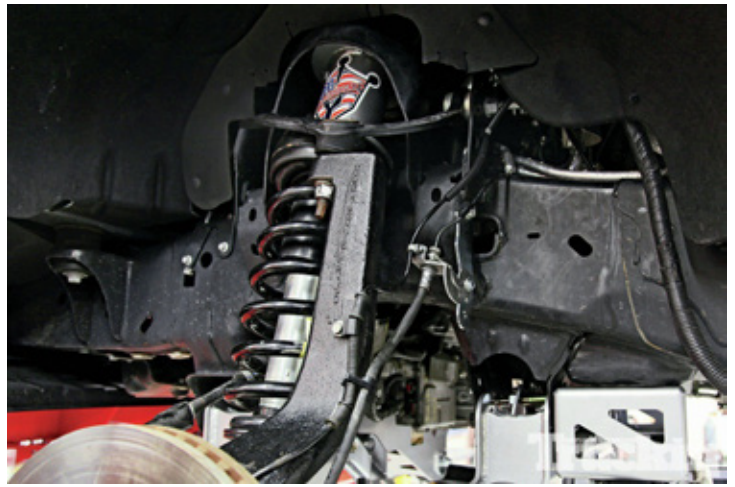
15. Even though we could have left the additional two inches in place on the Bilstein struts, the decision was made to drop the spring setting to stock to assess the truck's lifted height unassisted.



16. Fabricated tubular mounts were added to the struts' upper mounting plate.



17. Pre-prep work on the workbench had our unit bearings swapped from the old knuckles to the taller McGaughys counterparts.



20. We buttoned up the front suspension by routing the brake and ABS lines. New mounts were part of the kit to allow everything to work correctly at the now extended position.



18. Even with the added height of the new upper mount, the strut assemblies could be set right into place.



21. To prevent the taller crossmembers from moving, compression struts were employed. A threaded insert was slipped inside the transmission crossmember to accommodate the rear mounts.



19. The new knuckles dropped right into place between the control arms using the factory ball joint nuts.



22. Everything was left loose to make installing the compression struts manageable.



23. All tightened up, we noted how nicely McGaughys had tucked everything to maximize allowable ground clearance.



26. Extended-length gas charged shocks were bolted between the shock mounts.



24. Installing the rear suspension lift was a quick affair. First the shocks were removed.



25. With the rear axle supported, the original U-bolts were tossed and the new McGaughys 4 1/2-inch lift blocks were installed with longer U-bolts.