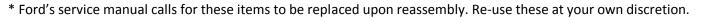
2011+ Mustang Lowering Springs Install Guide

Parts Needed:

- 1 x Set of Lowering Springs
- 4 x Strut to wheel spindle bolt *
- 4 x Strut to wheel spindle flagnut*
- 2 x Stabilizer bar link bolt*
- 2 x Stabilizer bar link upper nut *
- 8 x Strut upper mount nut*
- 2 x Strut rod nut*



Tools Required:

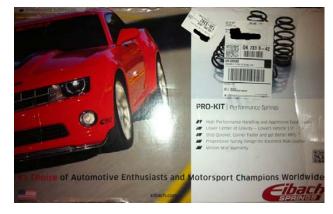
- Jack and stands (or access to a lift)
- Metric socket set with at least size 10, 13, 15, and 18mm sockets (deep well preferred)
- Metric wrenches in size 10, 13, 15, 17, 18, and 21mm
- T40 TORX bit for socket wrench
- Spring compressor
- Torque wrench(s) ranging from 14 lb-ft to 166 lb-ft
- Vice*
- Piece of chalk*
- Rubber Mallet *
- Impact wrench with impact sockets in above sizes *
- * While not actually required, these tools make for a much easier installation

Installation Instructions:

Preparation

- 1. With your Mustang in park or neutral, set the parking brake and prop open the hood.
- 2. Loosen, but do not remove, each wheel's lug nuts.
- 3. Using a lift or jack and stands, get your Mustang off the ground. Your jack stand points should allow the suspension to hang freely with the wheels off the ground. If you only have 2 jack stands, do the front and back springs separately.
- 4. All future fasteners marked with (*) are identified as
- 5. one time use by Ford. Reuse at your own discretion.

Front Springs



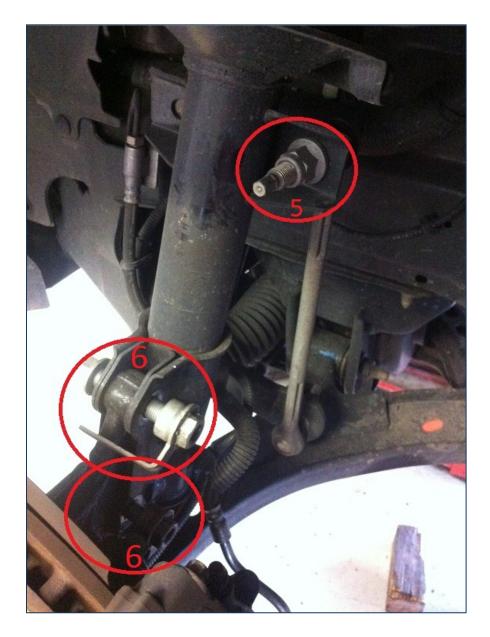
1. Under the hood, remove the 4 13mm upper strut mount nuts*. Torque to 26lb-ft upon reassembly.



- 2. Remove lug nuts and wheel and tire. Torque to 100lb-ft upon reassembly.
- 3. Remove the 10mm brake hose bracket bolt from the strut. Torque to 14lb-ft upon reassembly.
- 4. Remove the plastic push retainer holding the wheel speed sensor wire from the strut.



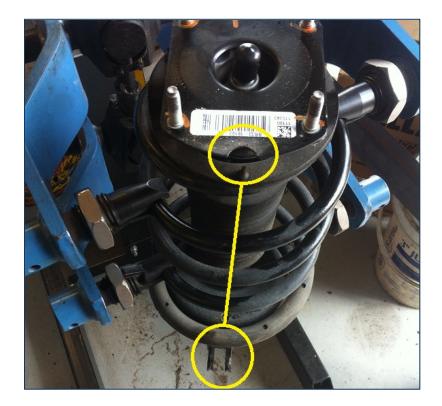
- 5. Remove the 18mm stabilizer bar link upper nut* and disconnect from the strut. Use a 17mm wrench on the head behind the bracket to hold the bolt in place. Torque to 85lb-ft upon reassembly.
- 6. Loosen but do not remove the 18mm strut to spindle bolts* and flagnuts*. Torque to 166lb-ft upon reassembly.



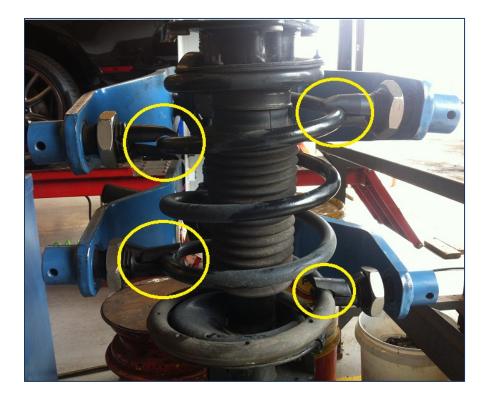
7. Using a spare jack stand to support the lower control arm assembly (supporting a wheel stud works great here), remove the strut to spindle bolts*. Do not allow the assembly to hang unsupported as this can damage the ball joints.



8. Remove the strut and spring assembly from the wheel well.



- 9. Take note the orientation of the strut and mount. It will need to be reassembled in the exact same orientation.
- 10. Using a spring compressor positioned on the coils above/below the spring perches, compress until there is no longer spring tension on the strut mounts. The stock springs require a great deal of compression. Keep at it.



11. Remove the 21mm strut rod nut* (impact wrench extremely handy here) and carefully separate the upper strut mount from the strut assembly. Set them aside. (Stock 2011+ upper mounts are notorious for falling apart and spilling bearings. They can be reassembled without issue, but extra care should be used at this step to keep them intact.)



- 12. Decompress the spring compressor until the stock spring is released.
- 13. Transfer the rubber coil insulators from the stock springs to the new springs if not already equipped.
- 14. Using a spring compressor positioned on the second to last coil at each end, compress your replacement aftermarket spring. Your new spring should be shorter and will not require as much compression as the stock spring.
- 15. Install strut into the new spring ensuring the lower spring end is snug against the lower seat stop and the bottom coil is in the spring pocket.



- 16. Reinstall the upper strut mount in the orientation you noted in step 9.
- 17. Reinstall the strut rod nut. A 10mm wrench on the strut rod is handy in holding it still. Torque to 76lb-ft.

18. Carefully and slowly decompress the spring compressor. Ensure the upper spring end is snug against the seat stop of the upper strut mount.



- 19. Remove spring compressor from your reassembled strut assembly.
- 20. Reassemble in reverse order from Step 8 and up.
- 21. Repeat for the other side.
- 22. Front springs install complete.

Rear Springs

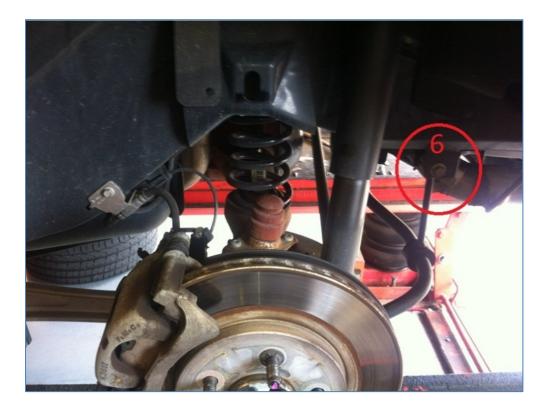
- 1. All steps will be done on both sides of the rear axle before attempting to remove stock springs.
- 2. Remove lug nuts and wheels and tires. Torque to 100lb-ft upon reassembly.

- 3. Using a piece of chalk, mark a line on the shock absorbers where the protective sleeves end.
- 4. Remove the 10mm bolts holding the brake hose brackets to the wheel wells. Torque to 14lb-ft upon reassembly.

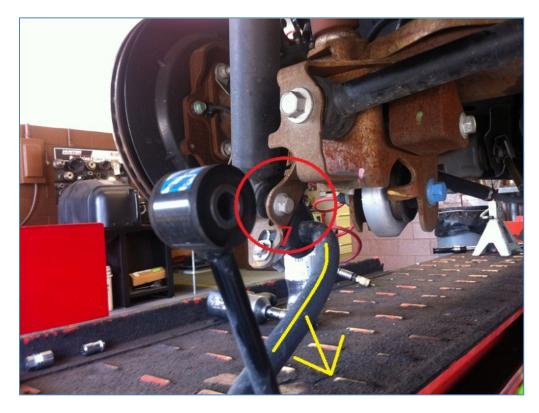


5. If this is a convertible, remove the support braces.

6. If your Mustang is equipped with a stabilizer bar, remove the 15mm stabilizer bar link bolts* and clip nuts*.



7. Lower the stabilizer bar to gain access to the shock absorbers' lower 15mm bolts*.



- 8. Using a jack, support the rear axle assembly. Care MUST be used if supporting by the differential housing to prevent damage.
- 9. Remove the shock absorbers' lower bolts* and flagnuts*.



10. Carefully lower the rear axle using the jack until there is clearance to lift the spring over the lower spring perches. Do not to lower to the point that stress is placed on the brake hoses.

11. Remove both springs.



- 12. Transfer the rubber coil insulators from the stock springs to the new springs if not already equipped.
- 13. Install new springs ensuring correct orientation and that the spring is centered with the rubber spring perches centered on the top and bottom.



14. If your springs came with new bump stops, pause here and follow the bump stop installation instructions.

Bump Stops

1. Remove T40 TORX bolts holding bump stops to axle.



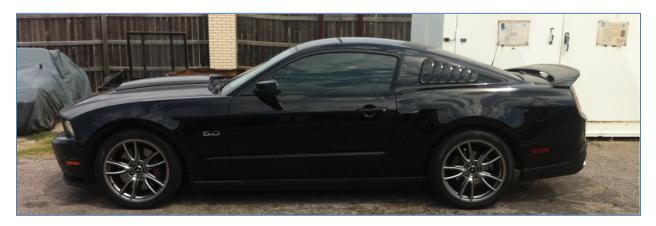
- 2. Using a vice to hold bracket, remove bump stop. (Leveraging it out to the side is useful for removal)
- 3. Install new bump stop into bracket. (Using vice to press both parts together is useful for installation)



- 4. Install bump stops back on axle and reinstall TORX bolts.
- 15. Carefully raise the rear axle until the shock absorbers are lined up with their mounts.
- 16. Reinstall the shock absorbers' lower bolts* and flagnuts*. Torque to 85lb-ft.
- 17. Raise the rear axle until the shock absorber chalk marks are back under the protective sleeves where they were marked in Step 3.
- 18. Raise the stabilizer bar and reinstall the stabilizer bar link bolts* and clip nuts*. Torque to 85lb-ft.
- 19. Reassemble in reverse order from Step 5 and up.

20. Rear springs install complete.

Completion



- 1. Congratulations! You've successfully lowered your Mustang!
- 2. Drive on your new springs for about two weeks to allow them to settle.
- 3. Get a wheel alignment done.

Installation Instructions provided by AmericanMuscle Customer Rob Lamb 8.28.2012