



Installation instructions for:
RTR Tactical Performance Lowering Springs
2015-2024 GT and EcoBoost
 For MagneRide equipped vehicles



NOTE: Installation of the RTR springs will lower the vehicle ride height 28mm Front and 20 mm Rear.

All non locking fasteners removed in this installation require LOCTITE® 243 or equivalent be applied prior to reassembly.

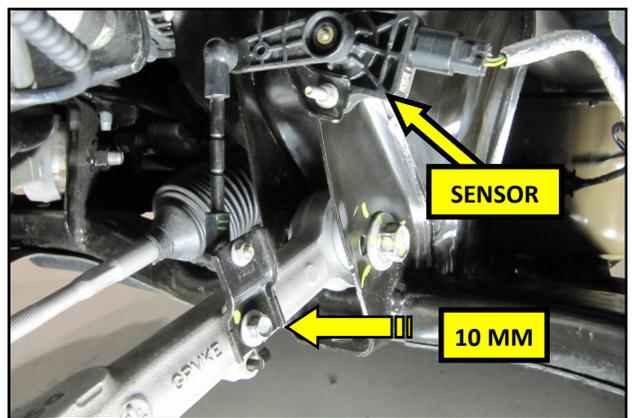
This manual illustrates the installation of the RTR Springs onto the RTR Struts and Shocks. While some components may appear different, The general installation procedure will be the same.

In addition to common hand tools, installation of this product is best accomplished using a 2 post lift, high quality spring compressor, 21 mm articulating socket and an under hoist jack.

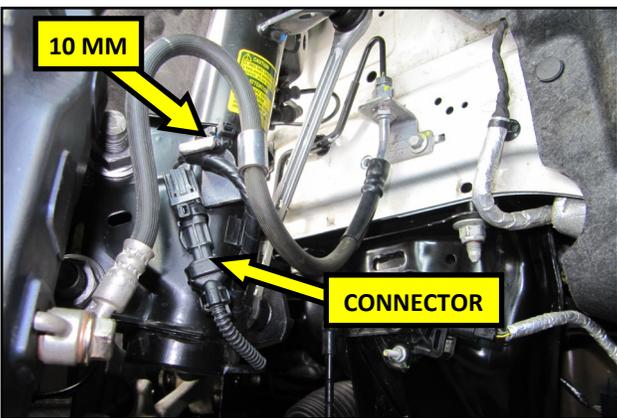
NOTE: The Front MagneRide Springs are common and are not side specific. The Rear Magneride springs are side specific-Left Rear and a Right Rear. The Right Rear Spring is marked **1598-0416-01 RW** and also marked with a Blue circular decal on the top coil.



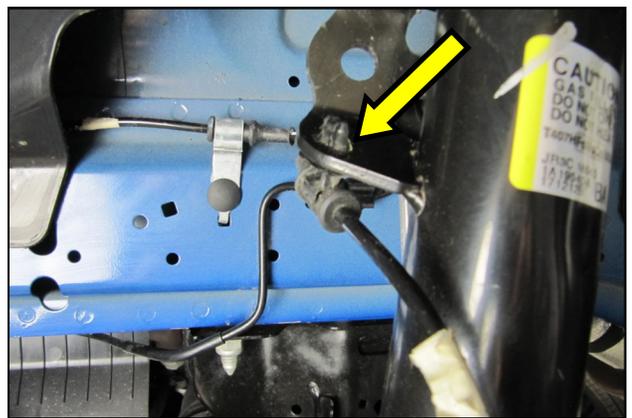
1. Raise the vehicle and remove all four wheels.



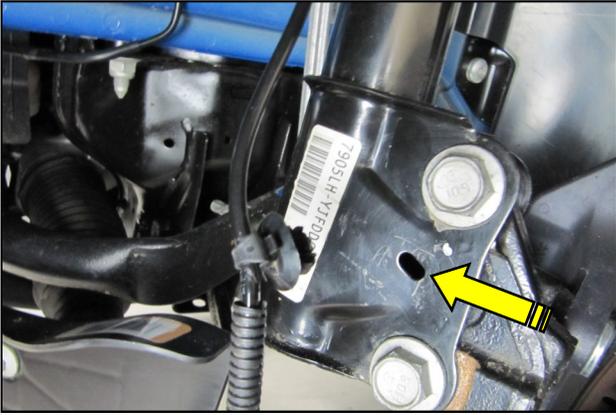
2. FRONT SPRINGS Using a 10 mm socket, disconnect the ride height sensor from the control arm.



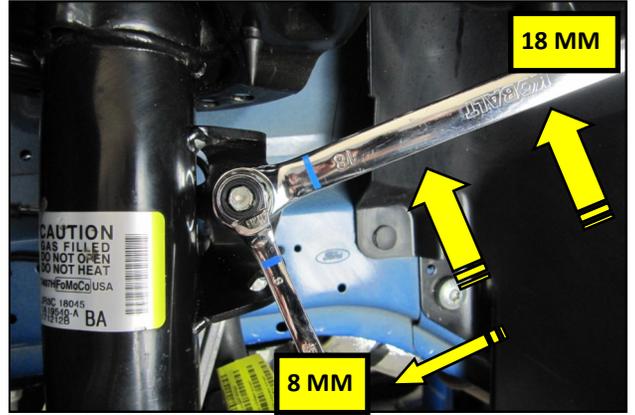
3. Using a 10 mm socket, Unbolt the brake hose bracket from the strut body. Disconnect the MagneRide harness at the bottom of the strut.



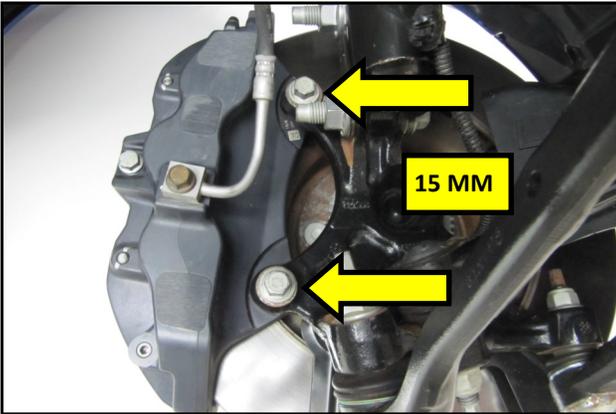
4. Pry the wheel speed sensor anchor out of the strut tab.



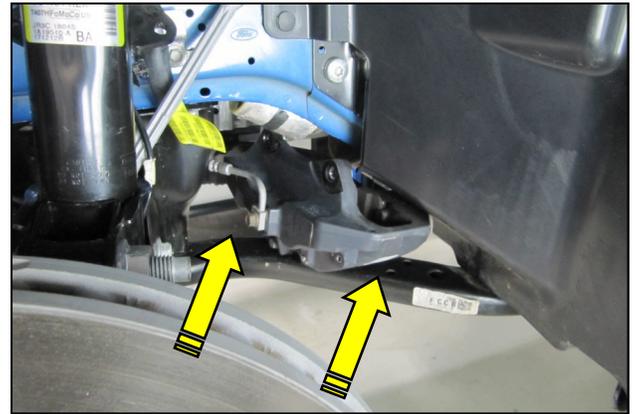
5. Pry the second wheel speed sensor anchor out of the strut mount.



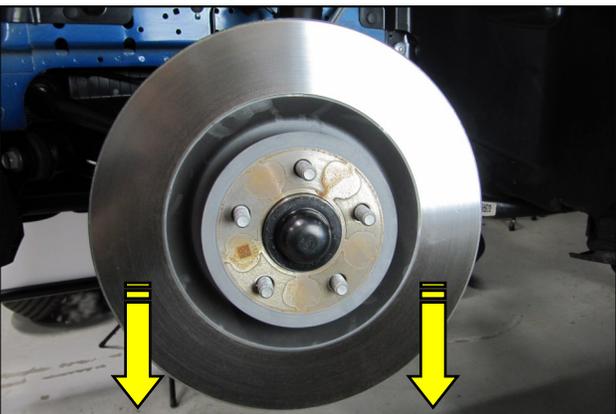
6. Disconnect the sway bar link from the strut as shown.



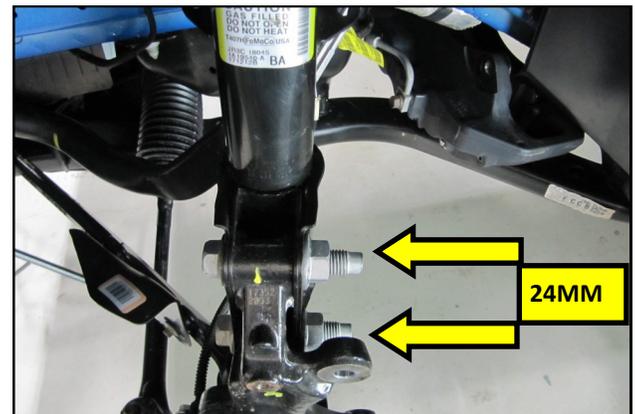
7. Remove the caliper anchor bolts and slide the caliper off of the brake rotor.



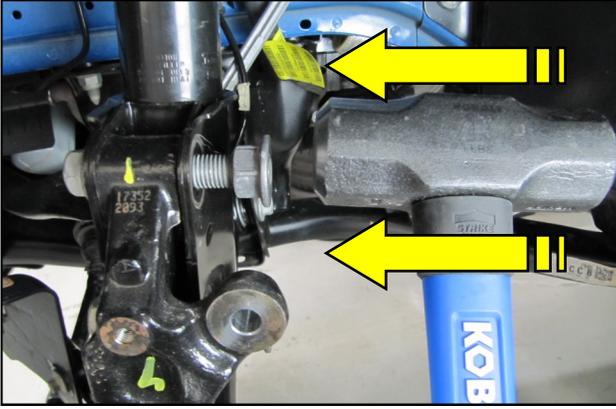
8. Slide the caliper up onto the K member or support it using a suitable strap.



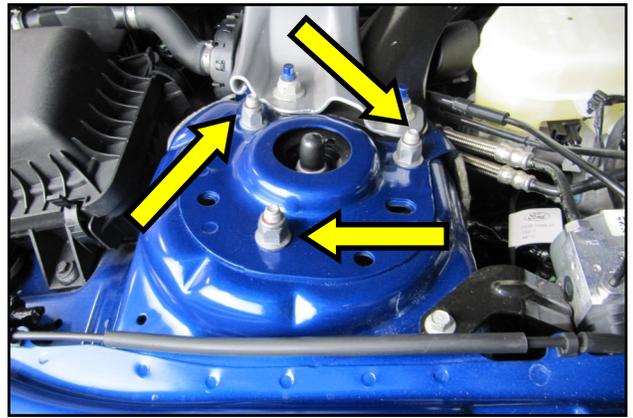
9. Slide the brake rotor off of the hub and set it aside.



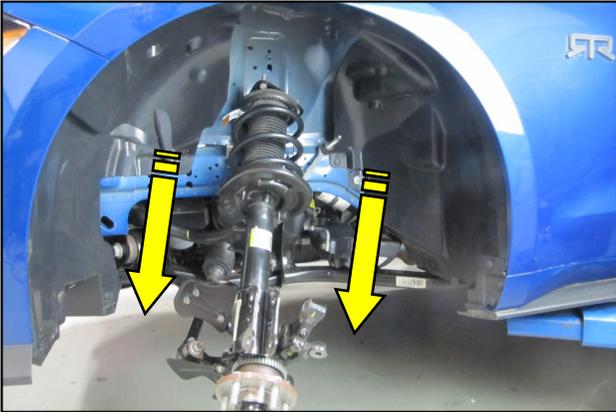
10. Remove the strut to spindle nuts.



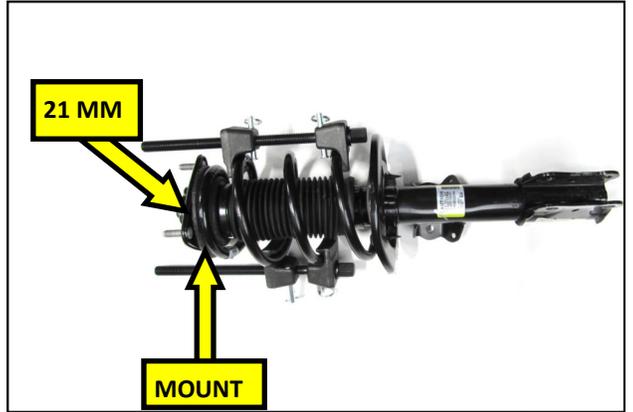
11. Reinstall the nuts, flange side out until flush with the bolt. Using a 5 Lb. sledge hammer, carefully drive the bolts out of the spindle. Remove the bolts and nuts and set them aside.



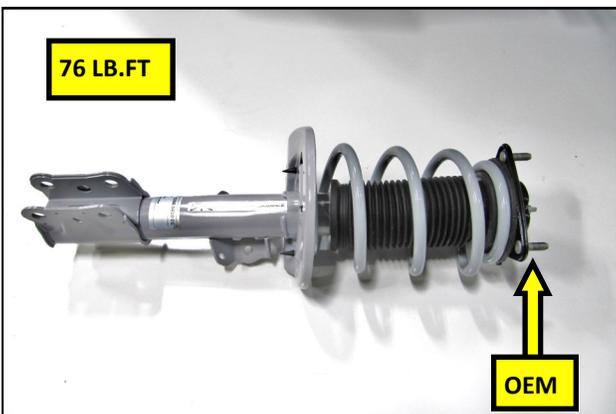
12. Remove the upper strut nuts and set them aside but within arms reach. These nuts will be reused.



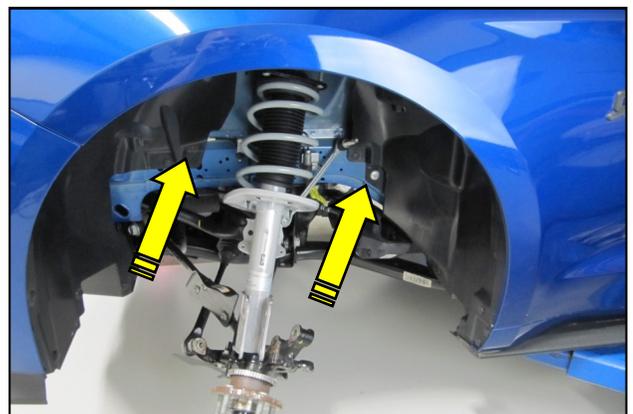
13. Pull the spindle away from the vehicle and remove the strut assembly.



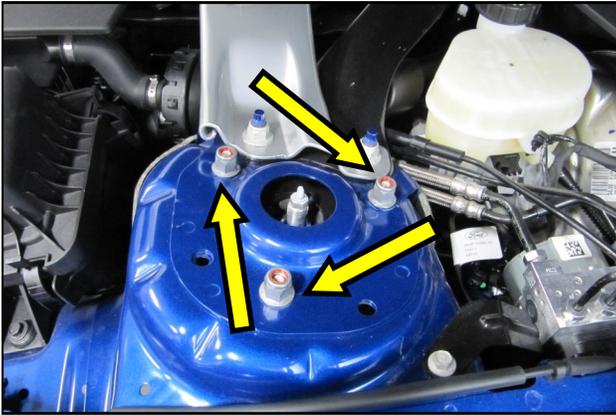
14. Compress the OEM spring in the strut assembly until the tension is fully relieved. Remove the nut and upper strut mount and set them aside.



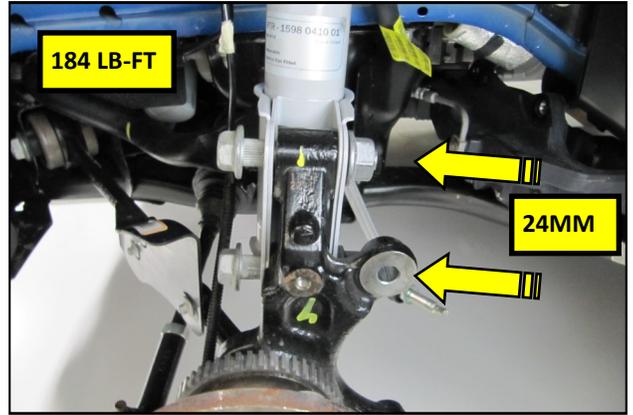
15. Compress the RTR Spring and reuse the OEM strut mount and nut from step 14 to build the assembly. Torque the strut nut to 76 lb.ft.



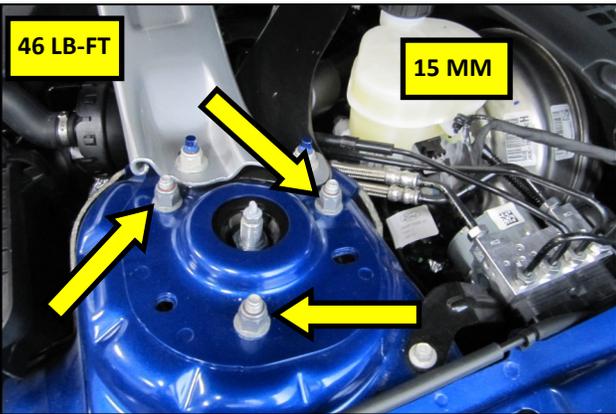
16. Lift the Strut assembly into the vehicle and align the studs with the holes in the strut tower.



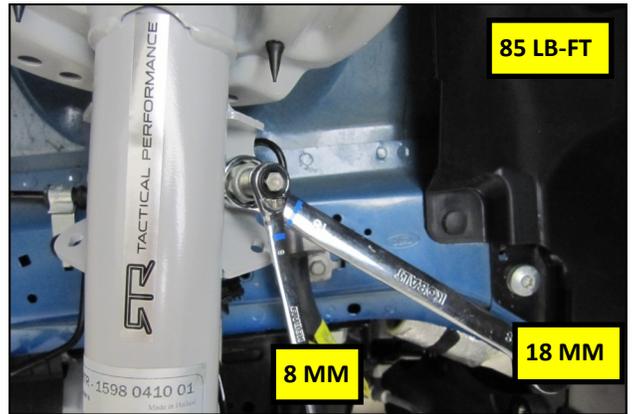
17. Hand tighten the upper strut nuts onto the studs.



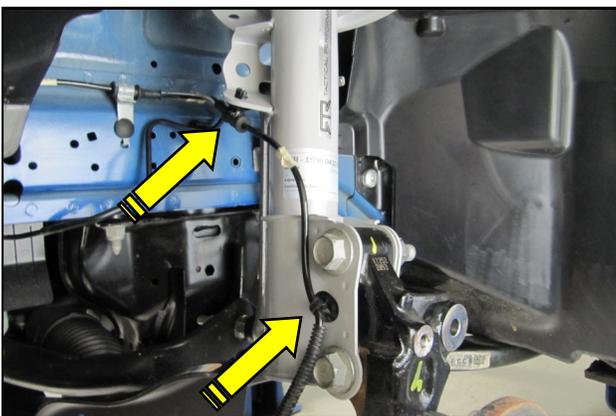
18. Slide the spindle into the strut and re install the strut-to-spindle bolts and nuts. Torque the fasteners to 184 lb.ft.



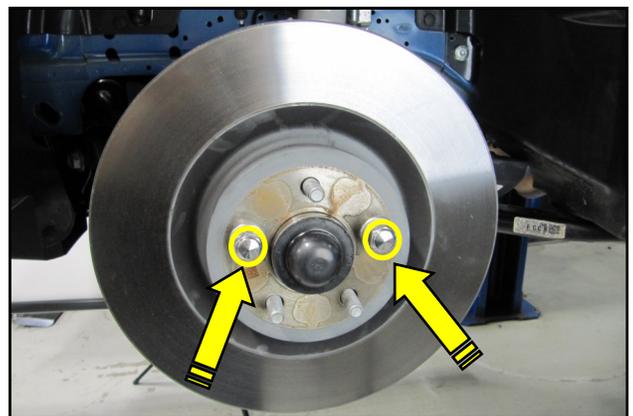
19. Torque the upper strut nuts to 46 lb.ft.



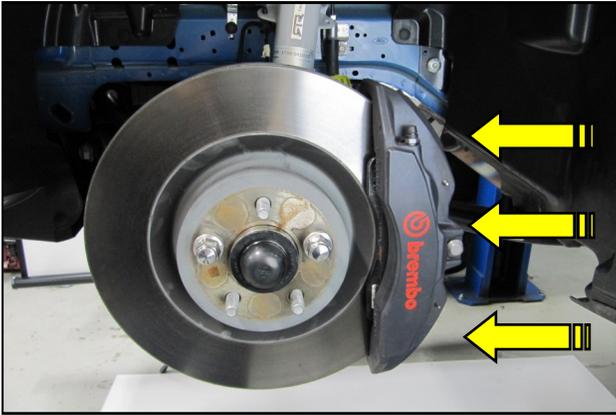
20. Insert the front sway bar link into the RTR Strut tab and re use the OEM nut to secure it. Torque the link nut to 85 lb.ft.



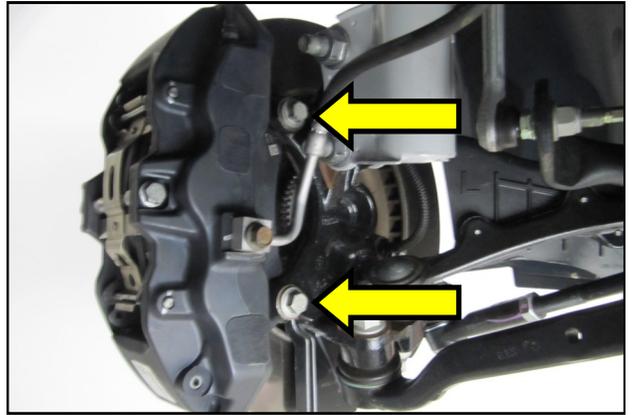
21. Insert the wheel speed sensor wire anchors into the Strut as shown. Reconnect the MagneRide harness, ride height sensor, and the brake hose.



22. Slide the brake rotor back onto the hub and secure it using two lug nuts.

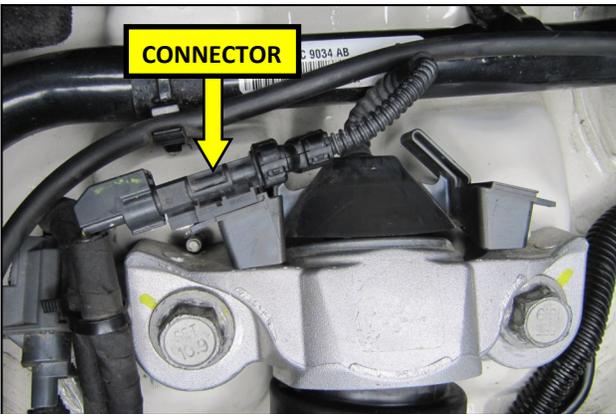


23. Slide the brake caliper back onto the rotor.

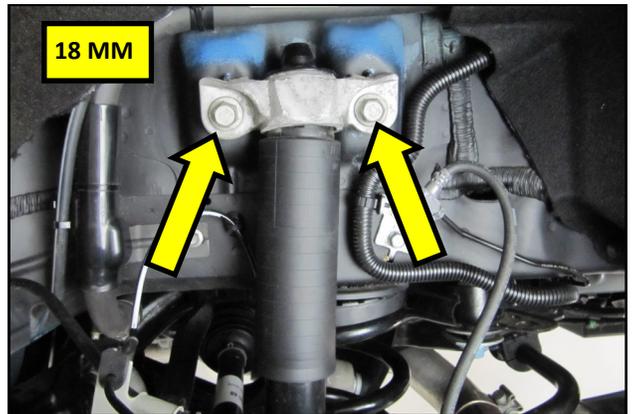


24. Reinstall the anchor bolts and torque them to 85 lb.ft. Repeat steps 2-24 on the opposite side of the vehicle.

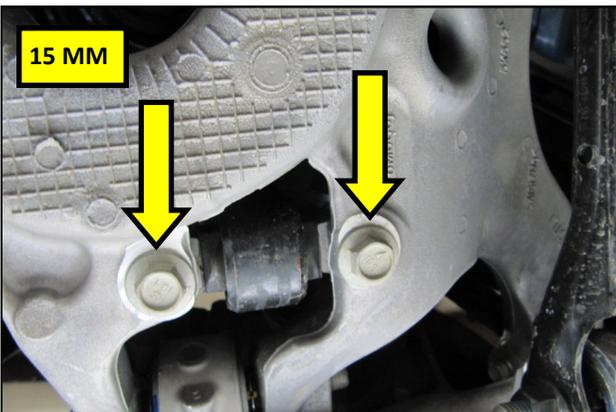
24B. Reinstall the brake hose onto the strut using the OEM hardware, if so equipped.



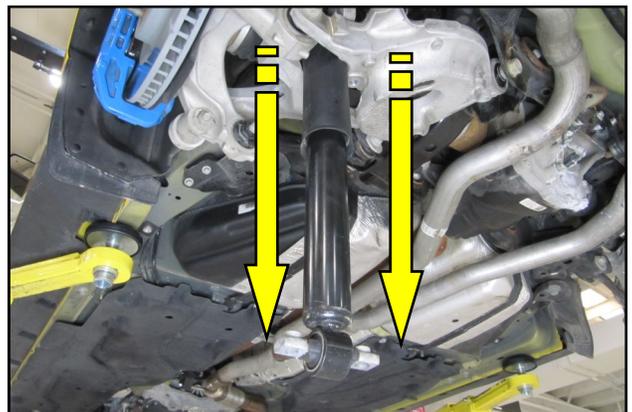
25. REAR SPRINGS Disconnect the MagneRide connector at the top of the shock.



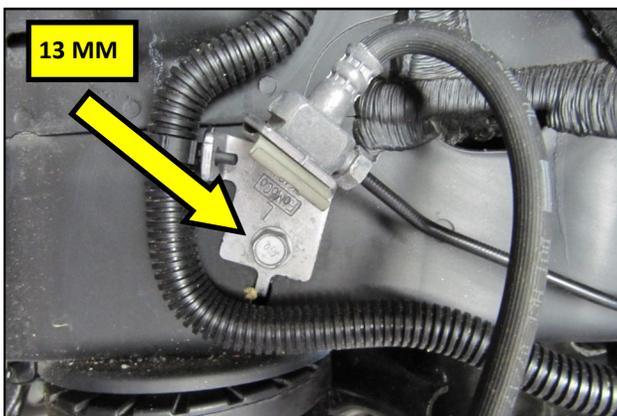
26. Remove the rear upper shock mount bolts and set them aside.



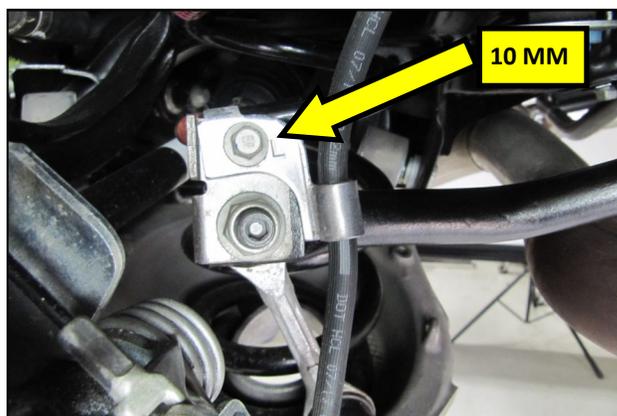
27. Remove the lower shock bolts in the control arm and set them aside.



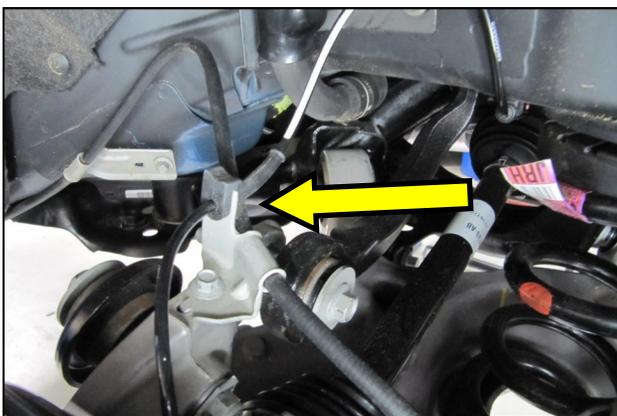
28. Lower the shock down into the control arm as shown, and let it hang. The shock is not to be removed.



29. Remove the bolt in the hard line bracket and set it aside. Repeat this step on the opposite side of the vehicle.



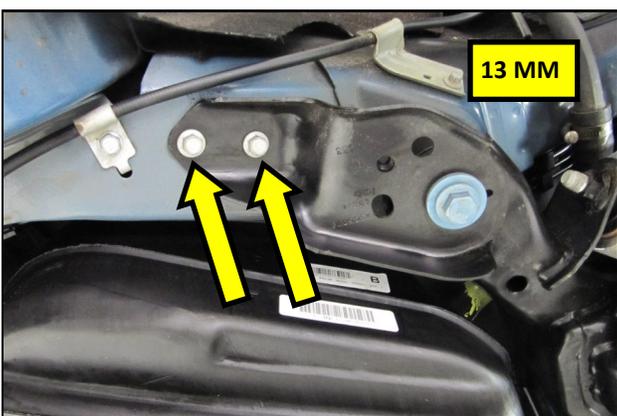
30. Remove the bolt securing the brake hose bracket to the sway bar. Repeat this step on the opposite side of the vehicle.



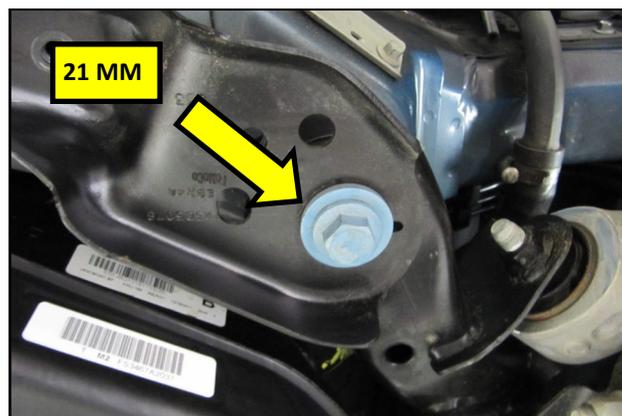
31. Slide the wheel speed sensor wire out of the parking brake cable bracket. Repeat this step on the opposite side of the vehicle.



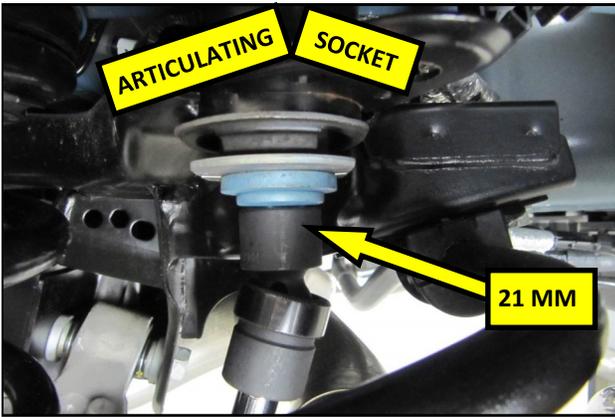
32. Support the differential using a jack as shown.



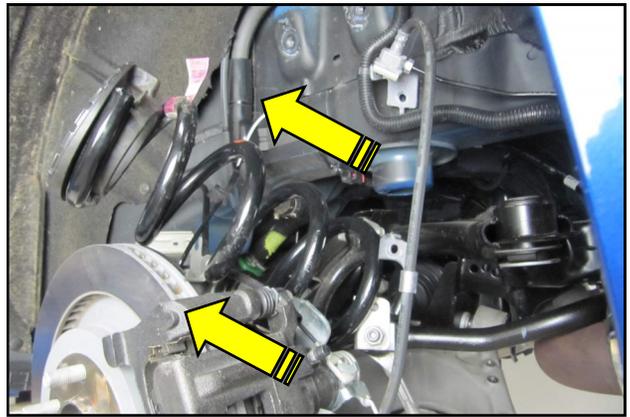
33. Remove the subframe bracket bolts on both sides of the vehicle and set them aside.



34. Remove the front subframe bolts on both sides of the vehicle.



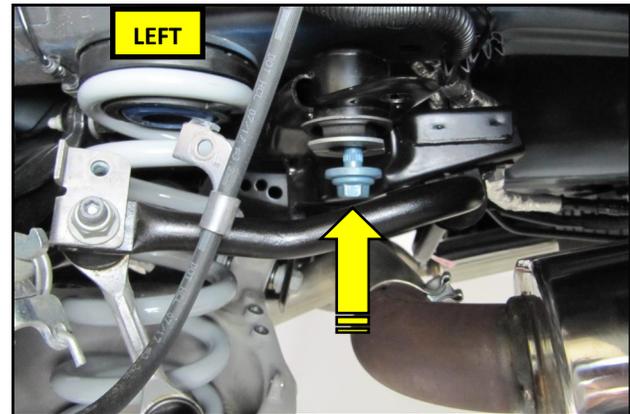
35. Using a 21 mm Articulating socket, remove the rear subframe bolts on both sides of the vehicle and lower the differential and subframe until the springs can be removed.



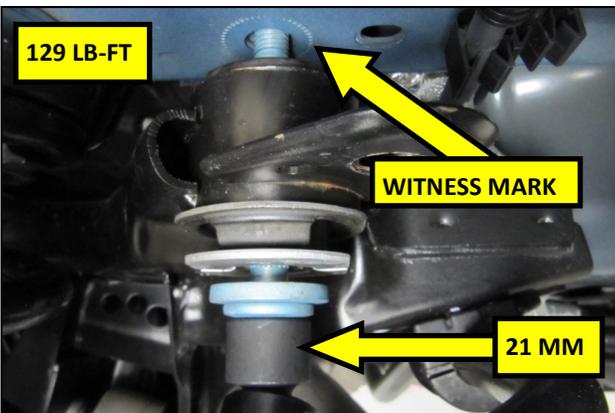
36. Remove the OEM spring and upper isolator from the vehicle.



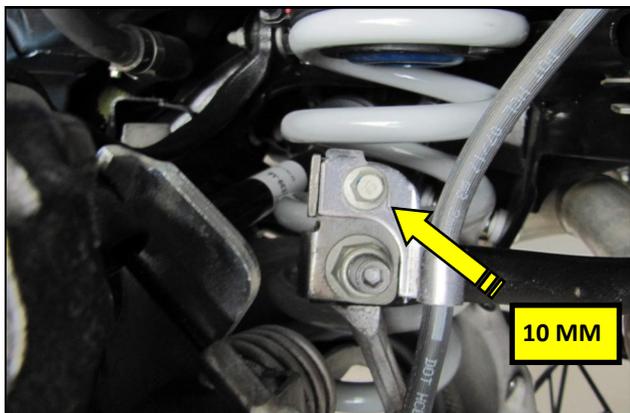
37. Transfer the OEM isolator onto the RTR Spring. Rotate the isolator in the spring until the coil end bottoms against the isolator



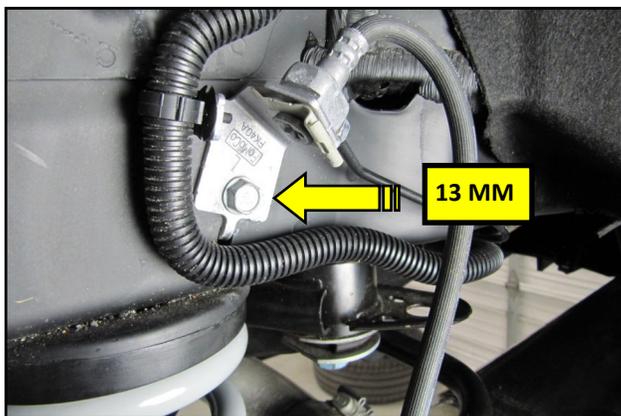
38. Install the side specific RTR spring into the vehicle. Start the sub frame bolts and the subframe bracket bolts. Repeat steps 50, 51 and 52 on the opposite site of the vehicle.



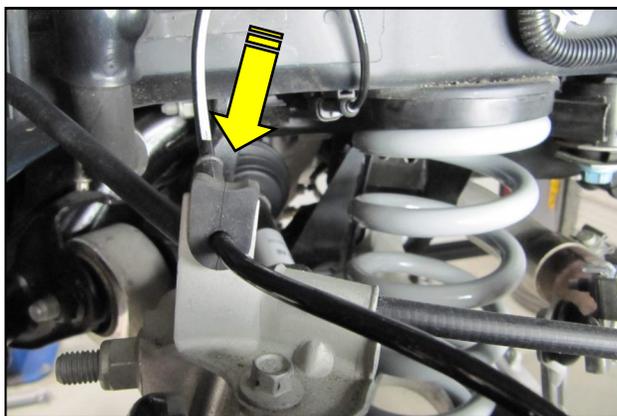
39. Use a pry bar to guide sub frame while tightening the subframe bolts. Align the subframe mounts with the witness mark in the vehicle. Torque the bracket bolts to 41 lb.ft. Torque the subframe bolts to 129 lb.ft.



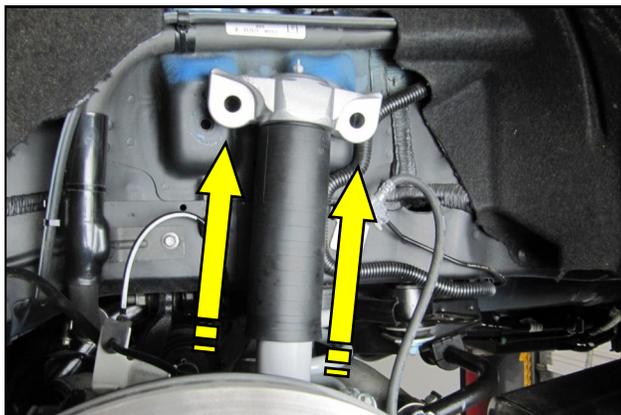
40. Secure the brake hose to the sway bar link using the OEM bolt.



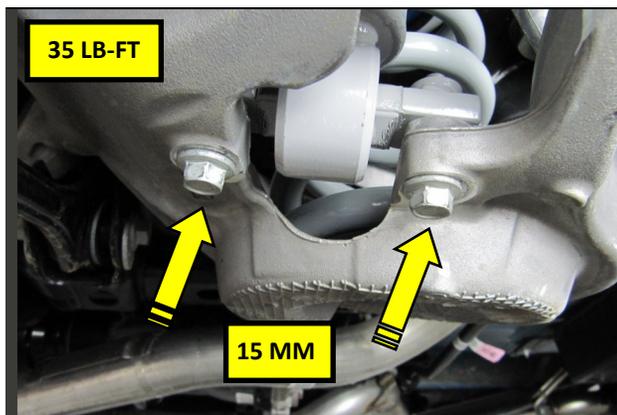
41. Secure the hard line bracket to the vehicle using the OEM bolt.



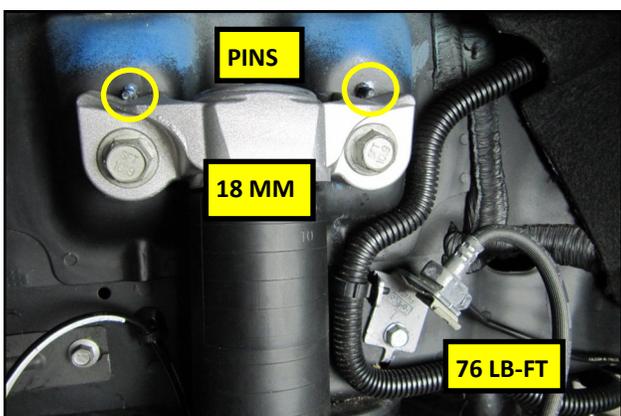
42. Insert the wheel speed sensor wire into the parking brake cable bracket.



43. Raise the shock out of the lower control arm.



44. Install the lower Shock bolts. Torque the bolts to 35 lb.ft.



45. Compress the rear Shock and align the upper mount under the body alignment pins.
Install the rear Shock upper bolts and torque them to 76 lb.ft .



46. Reconnect the MagneRide harness at the top of the shock. Repeat steps 40-46 on the opposite side of the vehicle.

Perform a comprehensive test drive and have the vehicle aligned.