



Installation instructions for:

RTR Tactical Performance Adjustable
Coilovers

Part Number 1598-0420-01

2015-2019 Ford Mustang

Excludes MagneRide equipped vehicles

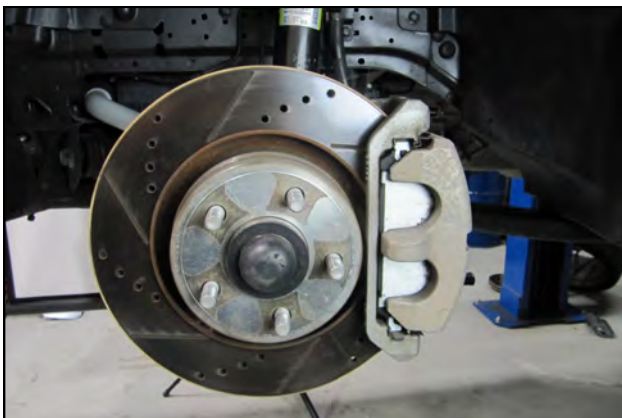


NOTE: All non locking fasteners removed in this installation require LOCTITE® 243 or equivalent to be applied prior to reassembly.

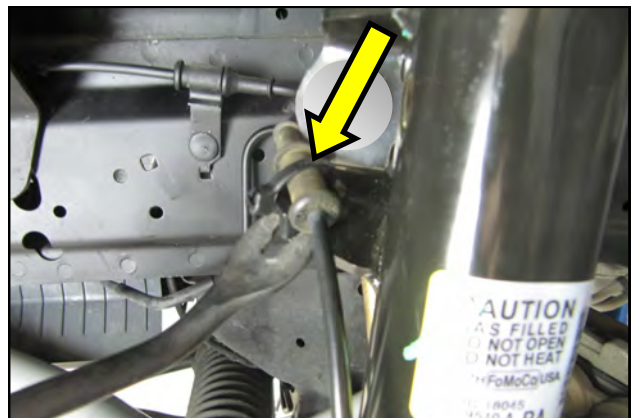
Please read through this installation manual in its entirety before beginning the installation .

Following the installation and a comprehensive test drive, a four wheel alignment should be performed on the vehicle for optimum handling and tire wear.

Baseline ride height is pre set at the factory to lower the vehicle approximately 28mm Front and 21mm Rear



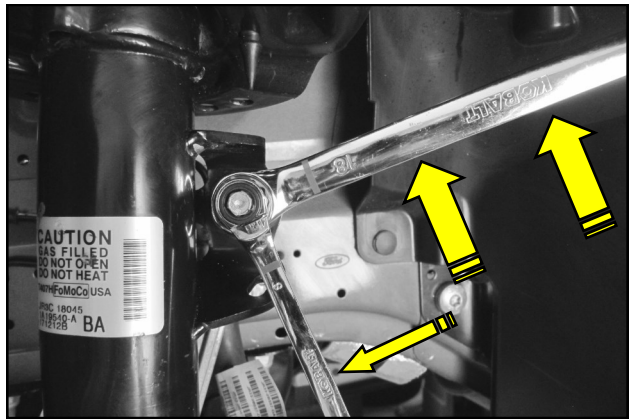
1. Raise the vehicle and safely support it using jack stands or a hoist. Remove all four wheels.



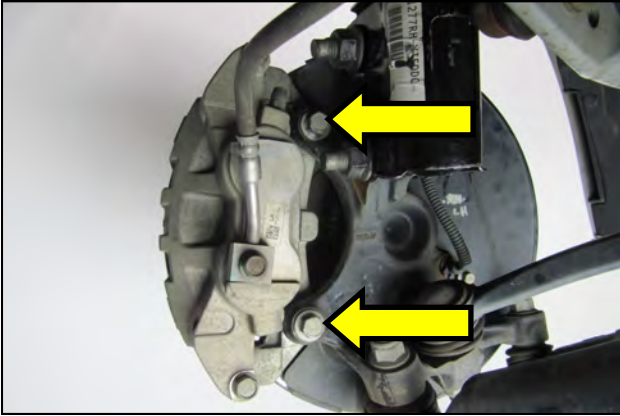
2. Installation of the Front suspension components is as follows: Pry the wheel speed sensor anchor out of the strut tab.



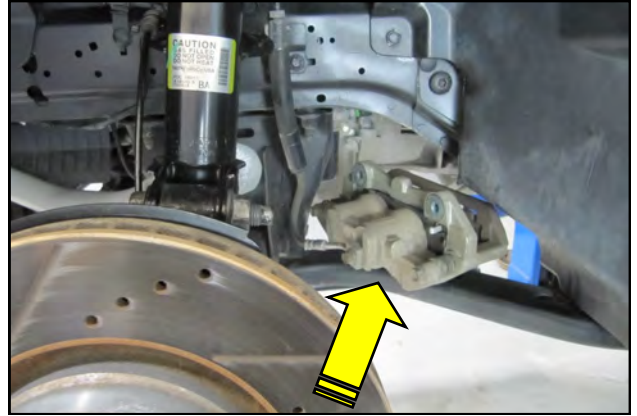
3. Pry the second wheel speed sensor anchor out of the strut mount.



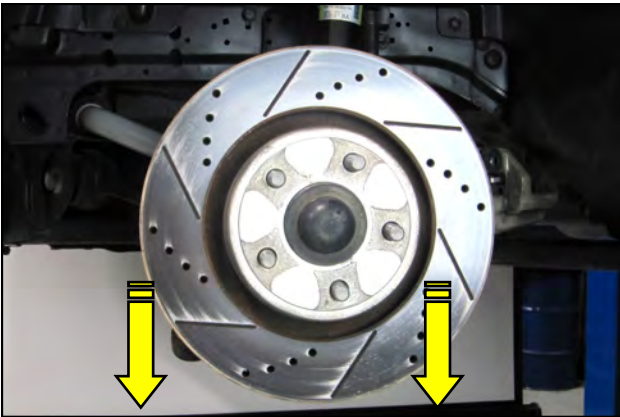
4. Disconnect the sway bar link from the strut as shown.



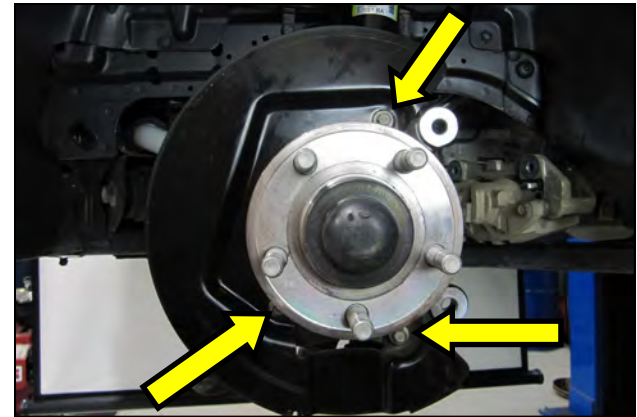
5. Remove the caliper anchor bolts and slide the caliper off of the brake rotor.



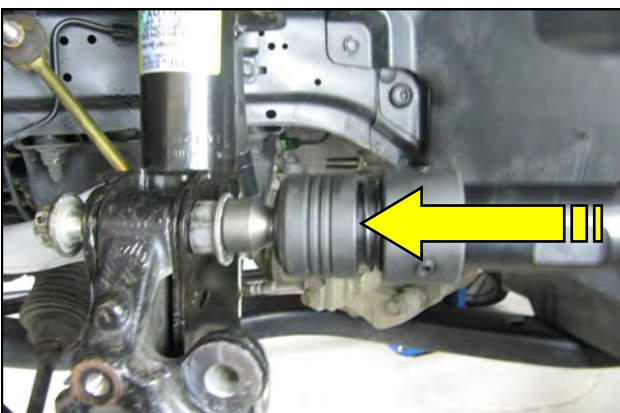
6. Slide the caliper up and onto the K member.



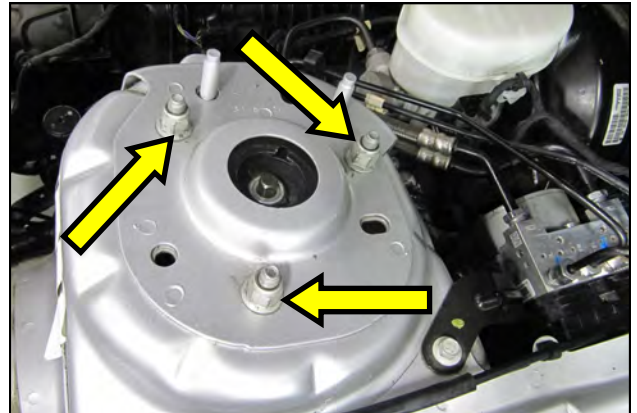
7. Slide the brake rotor off of the hub and set it aside.



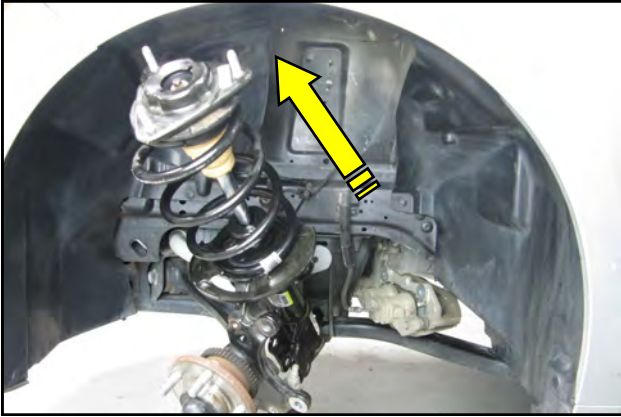
8. Remove the three bolts securing the debris shield to the spindle. Remove the shield and set it aside, if so equipped.



9. Remove the spindle nuts. Reinstall the nuts, flange side out until flush with the bolt. Using an air hammer or 5 Lb. sledge, carefully drive the splined bolts out of the spindle.



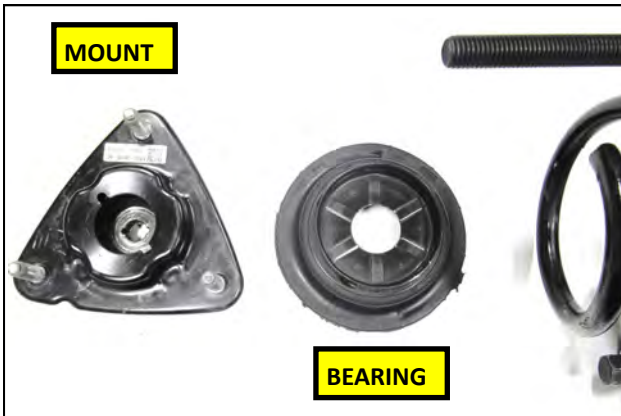
10. Remove the upper strut nuts and set them aside but within arms reach. These nuts will be reused.



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



12. Compress the OEM spring in the strut assembly until the tension is fully relieved.



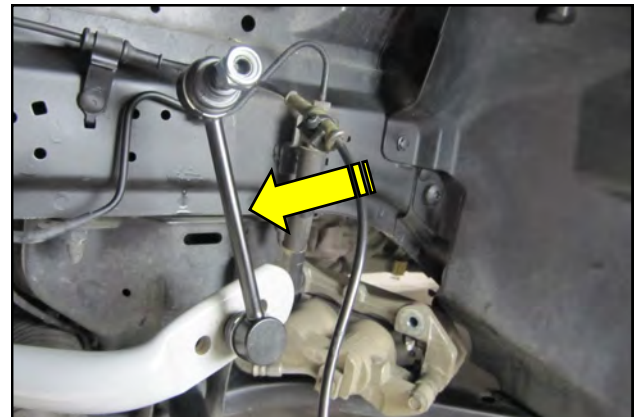
13. Remove the piston rod nut and upper strut mount with bearing and set them aside.



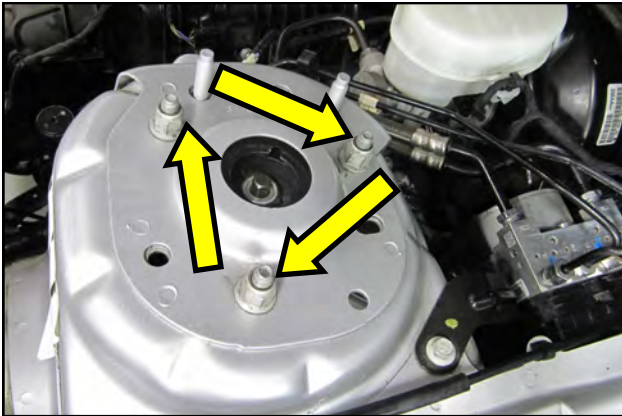
14. Transfer the OEM upper strut mount and bearing onto the RTR Coilover assembly.



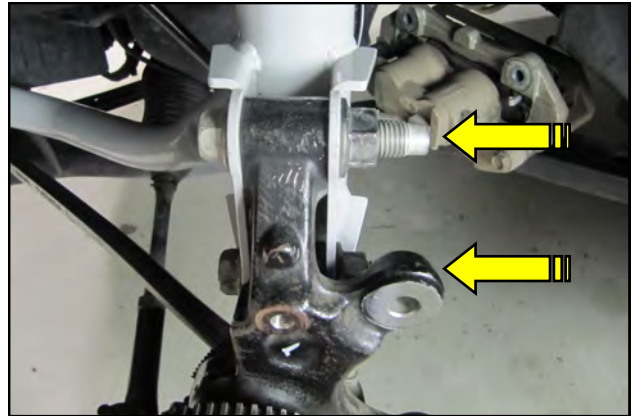
15. Use the supplied Nut to secure the mount and bearing onto the piston rod and torque to 26 lb.- ft.



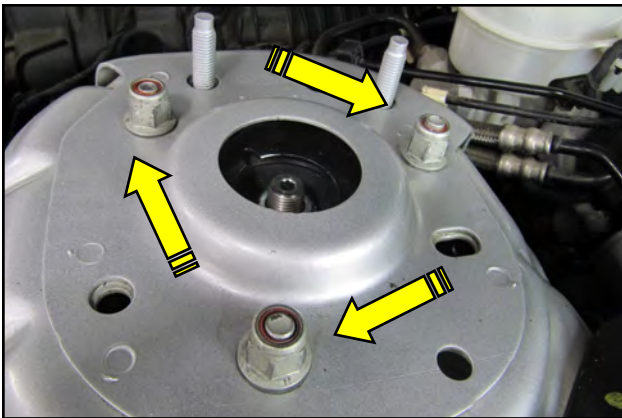
16. Replace the OEM sway bar link with the supplied link.



17. Lift the RTR Strut assembly into the vehicle and align the studs with the holes in the strut tower. Hand tighten the upper strut nuts onto the studs.



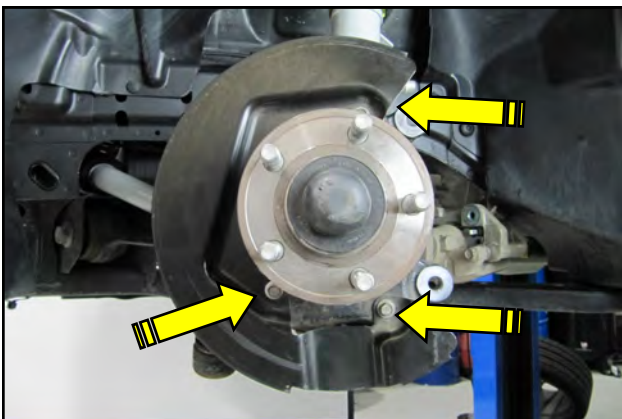
18. Slide the spindle into the strut and re install the strut-to-spindle bolts and nuts. Torque the fasteners to 184 lb.ft.



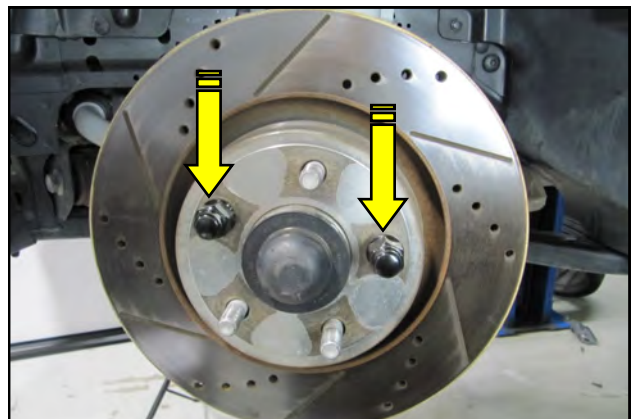
19. Torque the upper strut nuts to 46 lb.ft.



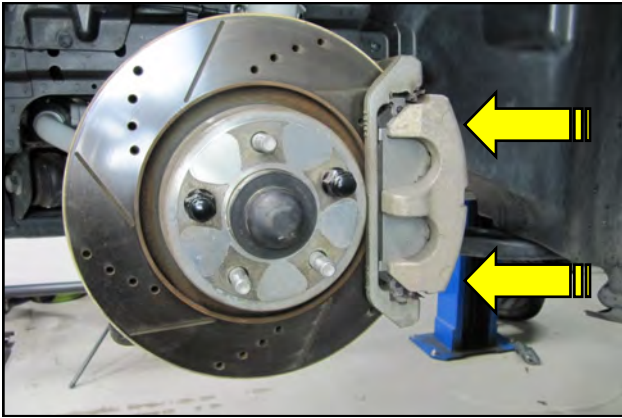
20. Insert the Sway Bar Link into the RTR Strut tab and use the supplied Nut to secure it. Torque the Link Nut to 85 lb.ft.



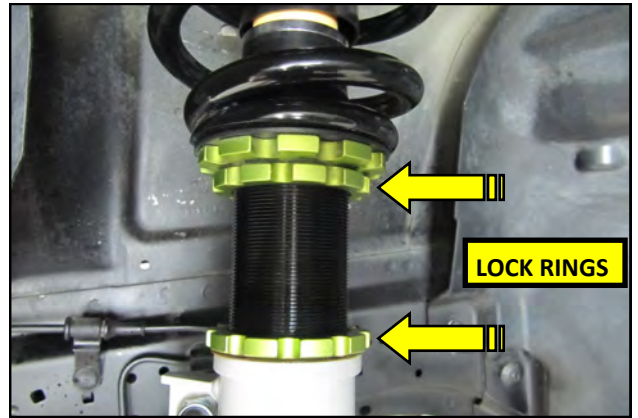
21. Reinstall the debris shield onto the spindle.



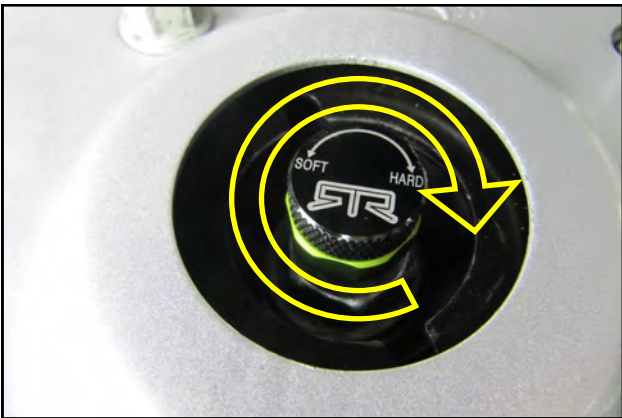
22. Slide the brake rotor back onto the hub and secure it using two lug nuts.



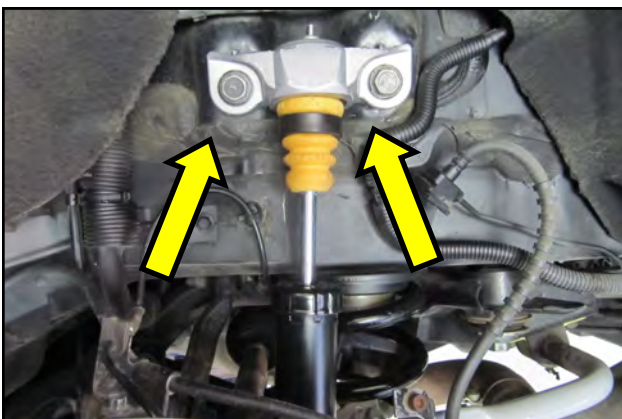
23. Slide the brake caliper back onto the rotor. Reinstall the anchor bolts and torque them to 85 lb.ft. Repeat steps **2-23** on the opposite side of the vehicle.



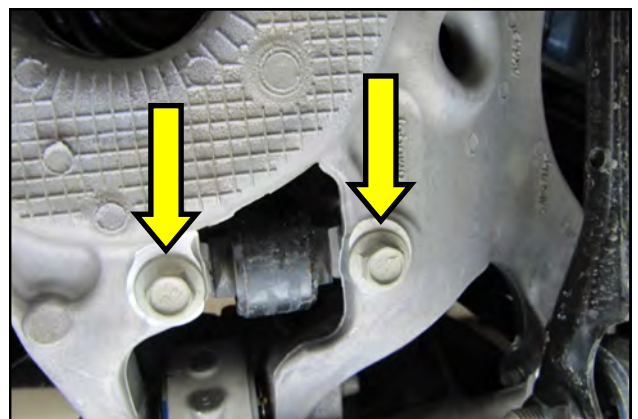
24. Using the supplied Spanner Wrenches, verify that the Lock Rings are tight.



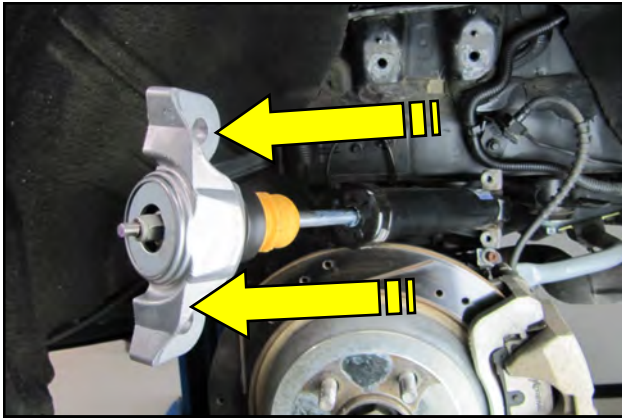
25. Twist the threaded Adjuster Cap onto the Piston Rod.



1. Installation of the Rear Suspension Components is as follows: Remove the rear upper shock mount bolts and set them aside.



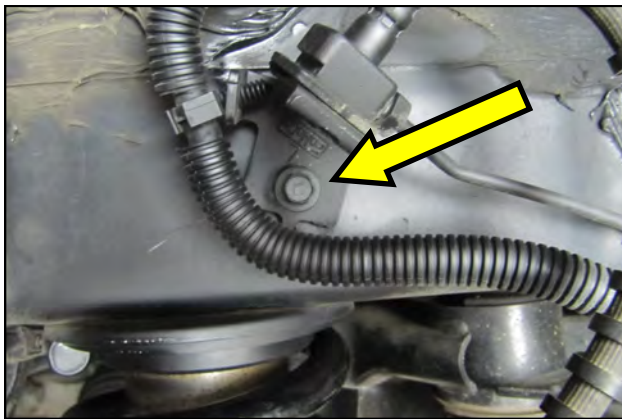
2. Remove the lower shock bolts in the control arm and set them aside.



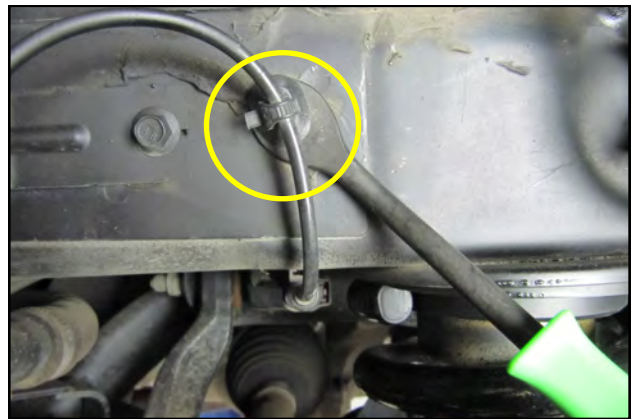
3. Remove the shocks from the vehicle and set them aside.



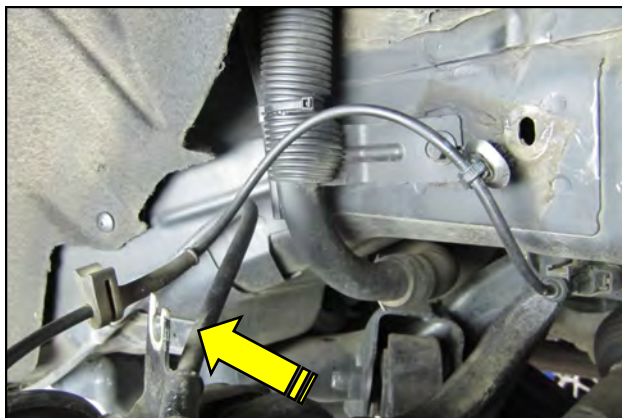
4. Support the differential using a jack as shown.



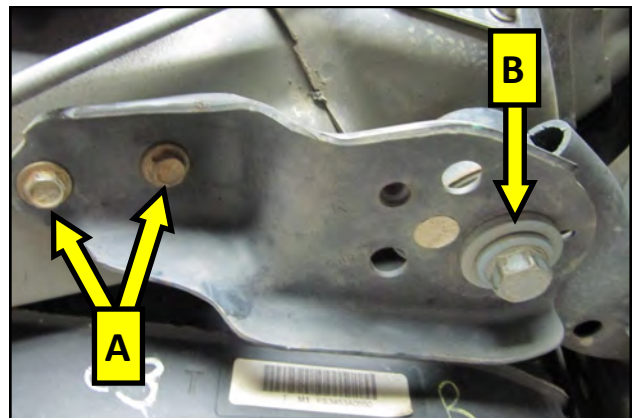
5. Remove the bolt in the hard line bracket and set it aside. Repeat this step on the opposite side of the vehicle.



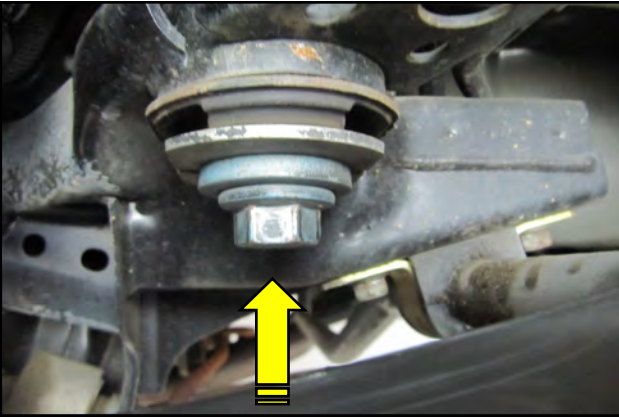
6. Pry the wheel speed sensor anchors out of the inner fenders.



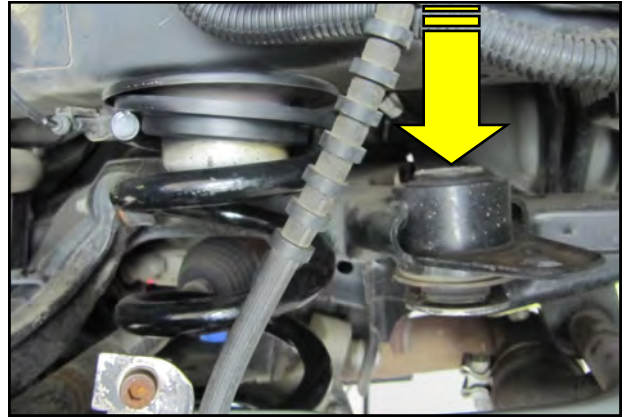
7. Slide the wheel speed sensor wire out of the parking brake cable bracket. Repeat this step on the opposite side of the vehicle.



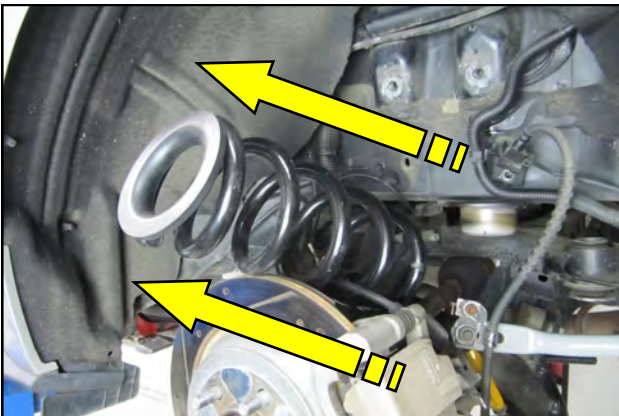
8. **A:** Remove the subframe bracket bolts on both sides of the vehicle and set them aside.
 B: Remove the front subframe bolts on both sides of the vehicle.



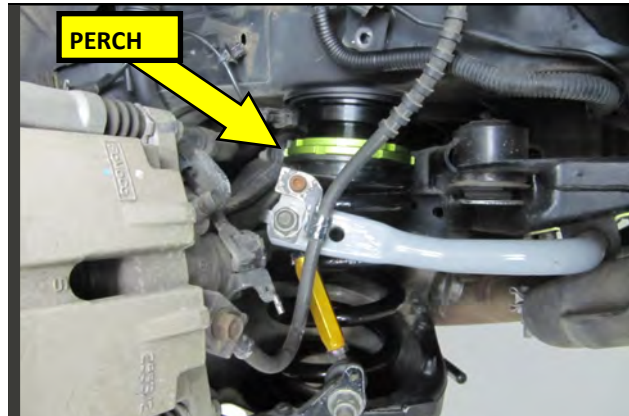
9. Remove the rear subframe bolts on both sides of the vehicle.



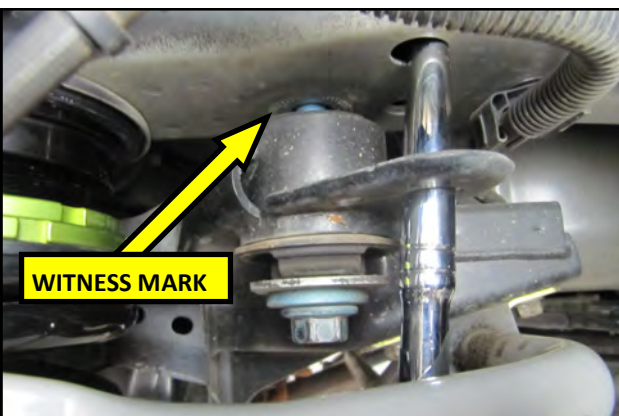
10. Lower the differential and subframe until the springs can be removed.



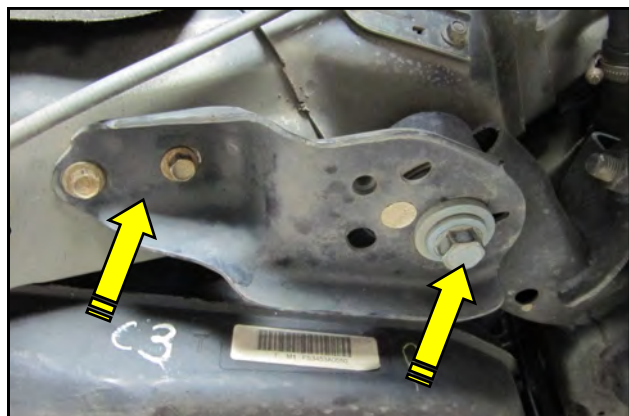
11. Remove the OEM spring and upper isolator from the vehicle.



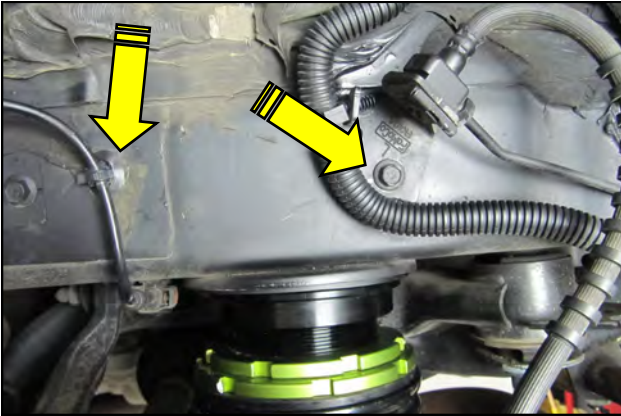
12. Install the RTR Spring and Adjustable Perch into the vehicle as shown. Rotate the Spring until the coil end bottoms against the isolator in the control arm. Repeat steps **31-38** on the opposite site of the vehicle.



13. Use a pry bar to guide sub frame while tightening the subframe bolts. Align the subframe mounts with the witness mark in the vehicle.



14. Torque the bracket bolts to 41 lb.ft. Torque the subframe bolts to 129 lb.ft.



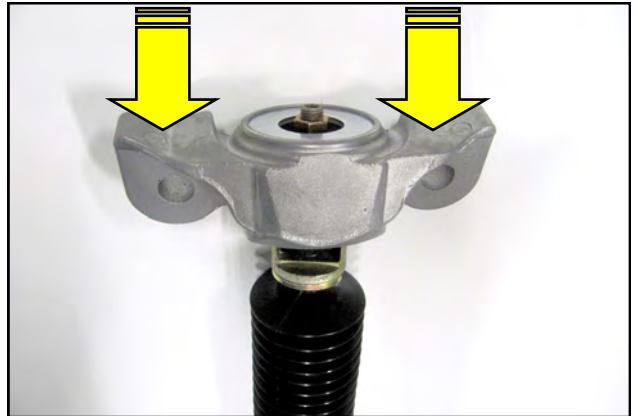
15. Secure the hard line bracket to the vehicle using the OEM bolt . Reattach the wheel speed sensor wire. Repeat these steps on the opposite side of the vehicle.



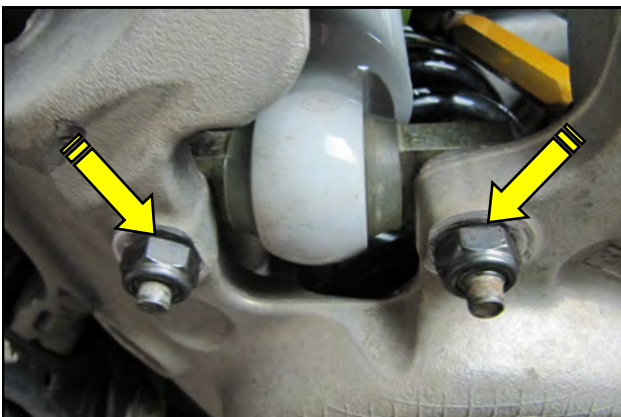
16. Remove the debris cap from the upper shock mount.



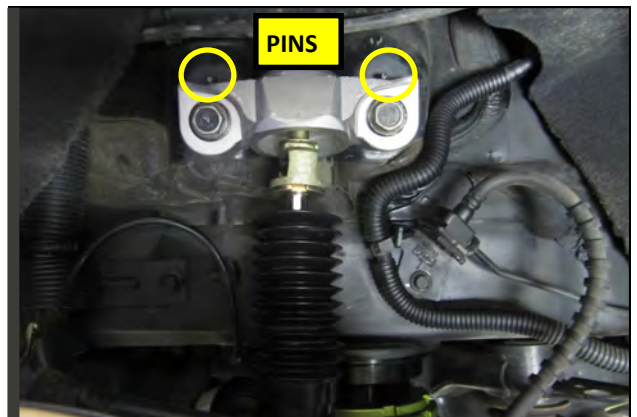
17. Remove the upper shock lock nut and mount.



18. Transfer the OEM shock mount onto the RTR Shock and secure it using the supplied Nut. Torque the Nut to 22 lb.ft.



19. Lower the Shock into the control arm. Using the OEM bolts and the supplied Nuts, mount the Shock as shown. Torque the fasteners to 35 lb.ft.



20. Compress the rear Shock and align the upper mount under the body alignment pins. Install the rear Shock upper bolts and torque them to 66 lb.ft . Reinstall the wheels and torque the lug nuts to 150 lb.-ft.



ADJUSTMENT

DAMPING FORCE

Rebound is adjustable and is divided into 30 positions between Full Soft and Full Hard

RIDE HEIGHT

NOTE: A Baseline ride height is preset at the factory.

Baseline settings will lower the vehicle approximately 28 mm Front and 21 mm Rear.

Always clean the shock body threads with compressed air and lubricate them prior to any adjustment. Always use the supplied Spanner Wrenches to adjust the Coilover Lock Rings.

If for any reason the spring becomes loose, tighten the Spring Perch until approximately 5mm of Spring preload is achieved, then tighten the Lock Nut against the Spring Perch.

Do not use Spring perch position to adjust ride height. This will adversely effect ride quality.

Ride height is adjusted by changing the shock body position inside the Spindle Mount and the Control Arm Mount.

Shock body position is changed by loosening the Lock Ring on the Mount and rotating it inside the mount, up or down.

NOTE: Loosening of the spindle bolts will aid in adjustment.

When adjusting the ride height, it is important to maintain a sufficient depth of thread engagement.

Minimum length of thread engagement FRONT: 80mm

Minimum length of thread engagement REAR: 25mm

After adjusting the Coilovers, verify the ride height and adjust accordingly.

When the desired ride height has been achieved, tighten all of the Lock rings and take distance measurements . Use the measurements to repeat the adjustment on the opposite side of the vehicle.

The Rebound Damping forces can be fine-tuned to personal driving style and road conditions by rotating the adjuster at the top of the Struts and Shocks .

Recommended Road Course settings when used with RTR Tactical Performance Adjustable Front Sway

Bars

Front Strut 10 Clicks from Full Soft

Front Bar Medium



Rear Shock 11 Clicks from Full Soft

Rear Bar Full Soft



Alignment Specifications

NOTE: Measurements listed at curb load. Curb load is defined as "full service fluids, full fuel tank, no passengers and no cargo".

Front	LH	RH	Total/Split
Camber — (Base Coupe, Base Conv., Perf. Pack. Conv., Track Pack. Conv.)	$-0.72^{\circ} \pm 0.75^{\circ}$	$-0.72^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Camber — (Performance Package Coupe, Track Package Coupe)	$-1.03^{\circ} \pm 0.75^{\circ}$	$-1.03^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Camber — (V8 - Performance Package Level 2)	$-1.11^{\circ} \pm 0.75^{\circ}$	$-1.11^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Camber — (GT350)	$-1.05^{\circ} \pm 0.75^{\circ}$	$-1.05^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Camber — (GT350R)	$-1.12^{\circ} \pm 0.75^{\circ}$	$-1.12^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Caster — (Base Coupe, Base Conv., Perf. Pack. Conv., Track Pack. Conv.)	$7.12^{\circ} \pm 0.75^{\circ}$	$7.12^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Caster — (Performance Package Coupe, Track Package Coupe)	$6.91^{\circ} \pm 0.75^{\circ}$	$6.91^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Caster — (V8 - Performance Package Level 2)	$6.97^{\circ} \pm 0.75^{\circ}$	$6.97^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Caster — (GT350)	$6.81^{\circ} \pm 0.75^{\circ}$	$6.81^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Caster — (GT350R)	$6.92^{\circ} \pm 0.75^{\circ}$	$6.92^{\circ} \pm 0.75^{\circ}$	$0.0^{\circ} \pm 0.75^{\circ}$
Toe — (All Models Except, GT350, GT350R, V8 - Performance Package Level 2)	—	—	$0.0^{\circ} \pm 0.20^{\circ}$
Toe — (V8 - Performance Package Level 2)	—	—	$-0.10^{\circ} \pm 0.20^{\circ}$
Toe — (GT350)	—	—	$-0.10^{\circ} \pm 0.20^{\circ}$
Toe — (GT350R)	—	—	$0.06^{\circ} \pm 0.20^{\circ}$
Rear	LH	RH	Total/Split
Camber — (All Models Except: GT350, GT350R, V8 – Perf. Pack. Level 2)	$-1.50^{\circ} \pm 0.75^{\circ}$	$-1.50^{\circ} \pm 0.75^{\circ}$	—
Camber — (V8 - Performance Package Level 2)	$-1.00^{\circ} \pm 0.75^{\circ}$	$-1.00^{\circ} \pm 0.75^{\circ}$	—
Camber — (GT350)	$-0.75^{\circ} \pm 0.75^{\circ}$	$-0.75^{\circ} \pm 0.75^{\circ}$	—
Camber — (GT350R)	$-0.70^{\circ} \pm 0.75^{\circ}$	$-0.70^{\circ} \pm 0.75^{\circ}$	—
Toe — (All Models Except, GT350, GT350R, V8 - Performance Package Level 2)	$0.12^{\circ} \pm 0.20^{\circ}$	$0.12^{\circ} \pm 0.20^{\circ}$	$0.23^{\circ} \pm 0.20^{\circ}$
Toe — (V8 - Performance Package Level 2)	$0.15^{\circ} \pm 0.20^{\circ}$	$0.15^{\circ} \pm 0.20^{\circ}$	$0.30^{\circ} \pm 0.20^{\circ}$
Toe — (GT350, GT350R)	$0.15^{\circ} \pm 0.20^{\circ}$	$0.15^{\circ} \pm 0.20^{\circ}$	$0.30^{\circ} \pm 0.20^{\circ}$

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