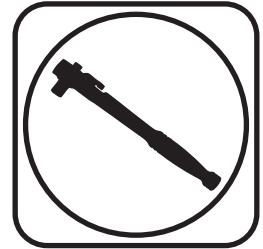
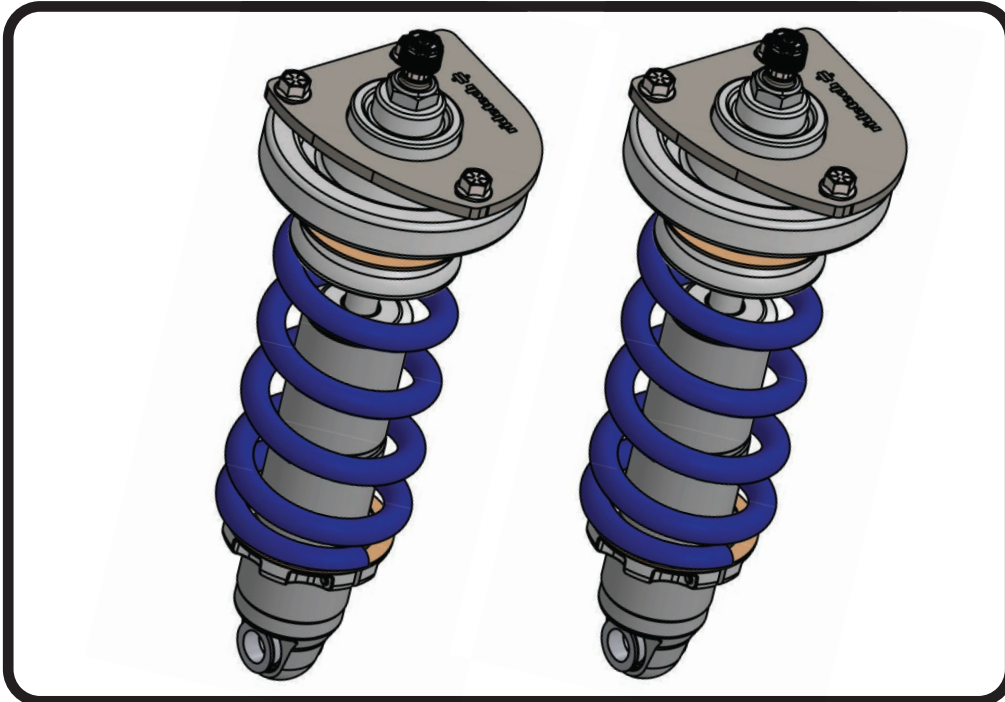




Part # 12283510 - 61-65 Ford Falcon Front HQ CoilOver for StrongArms

Recommended Tools



1961-1965 Ford Falcon HQ Series Front CoilOvers

Installation Instructions

THESE COILOVERS ARE DESIGNED TO BE USED WITH RIDETECH STRONGARMS

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CoilOver Dimensions:

Center of bearing to Stud Mounting Surface:

Compressed: 9.73"

Ride Height: 11.50"

Extended: 13.33"

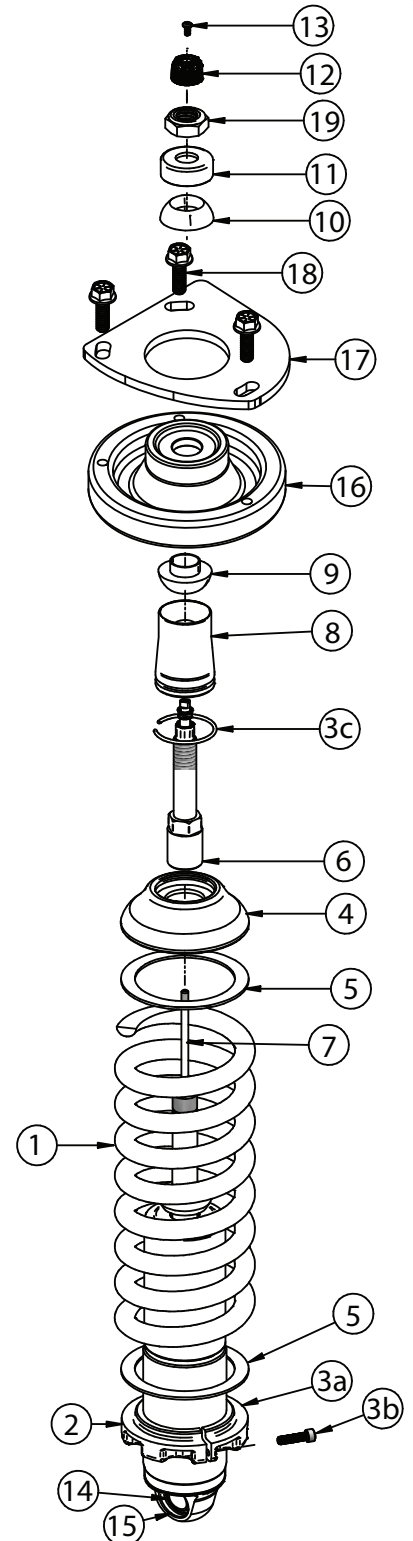
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Major ComponentsIn the box

Item #	Part #	Description	QTY
1	59080475	Coilspring 8" 475lb	2
2	982-10-803	3.6" Stroke HQ Series Shock	2
3a	803-00-199(kit)	Lower Spring Adjuster Nut	2
3b	803-00-199(kit)	Adjuster Nut Locking Screw	2
3c	803-00-199(kit)	CoilSpring Plate Retaining Ring	2
4	90002070	Dropped Upper CoilSpring Retainer	2
5	70010828	Delrin Spring Washer	4
6	90009988(kit)	2.00" Stud Adjuster Assembly	2
7	70012160	2.00" Metering Rod	2
8	90002312	2.00" Stud Top Base	2
9	90001903	Delrin Ball Lower Half	2
10	90001904	Delrin Ball Top Half	2
11	90001902	Delrin Ball Upper Cap	2
12	210-35-120-0	Shock Adjuster Knob	2
13	90009969	Adjuster Knob Retaining Screw	2
14	90001994	5/8" ID Bearing	2
15	90001995	Bearing Snap Ring	4
16	90003201	Upper Shock Mount	2
17	90003202	Upper Shock Mount Top Plate	2
18	99311012	5/16"-18 x 1" Flange Bolt	6
19	99562003	9/16-18" Nylok Nut	2





Getting Started.....

THESE COILOVERS ARE DESIGNED TO BE USED WITH RIDETECH STRONGARMS!

The front OEM Shock and Spring assemblies will need to be removed from the front of the car.

1. Raise the vehicle and support it by the frame, allowing the suspension to hang freely. Remove the wheels.
2. If you haven't installed the front StrongArms, do so before installing the CoilOvers. Refer to the StrongArms instructions.

Disassembly



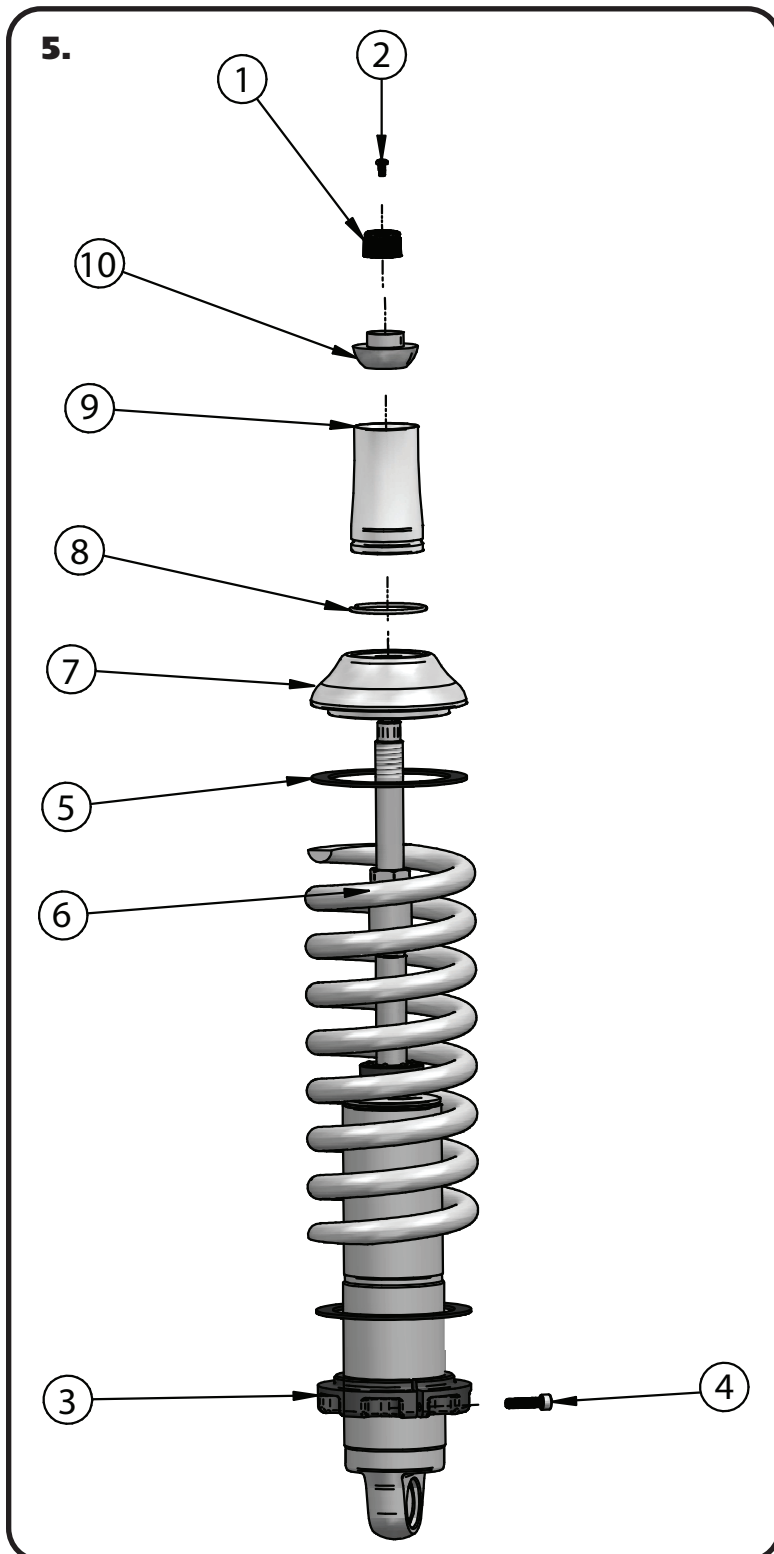
3. The OEM upper shock mount will need to be removed from the car. Remove the upper shock nut and unbolt the mount.



4. If you haven't done so already, remove the shock spring assembly out of the car.



CoilOver Assembly



- 5.** To Assemble the CoilOver you need to:
- a.** Remove Screw (2) from center of Adjustment Knob (1) and remove Adjustment Knob.
 - b.** Remove Nylok Nut, Delrin Upper Cap, Delrin Upper and Lower Balls, along with the base from the CoilOver stud.
 - c.** Thread Adjuster Nut (3) onto the CoilOver body. Once it is threaded on the shock body, lightly thread in the locking screw (4) into the Adjuster Nut.
 - d.** Install a Delrin Spring Washer (5) onto the Adjuster Nut.
 - e.** Slide the CoilSpring (6) onto the CoilOver.
 - f.** Install another Delrin Spring Washer (5) on top of the CoilSpring.
 - g.** Install the Dropped Upper CoilSpring Plate (7) onto the CoilSpring.
 - h.** Install the CoilSpring Retaining Ring (8) onto the Stud Top Base (9). It fits into the groove in the base.
 - i.** Slide the Stud Top Base onto the shock until it bottoms out on the stud. It may be necessary to thread the Adjuster Nut down the shock body (to lower the spring) if the base will not slide all the way down onto the stud.
 - j.** Slide the Lower Delrin Ball (10) (it has the collar sticking up around the center hole) on to the Stud Top.

Repeat on second CoilOver.



CoilOver Installation



6. Insert the aluminum shock mount up into the OEM shock tower from the bottom side. The RAISED center of the shock mount will point up.



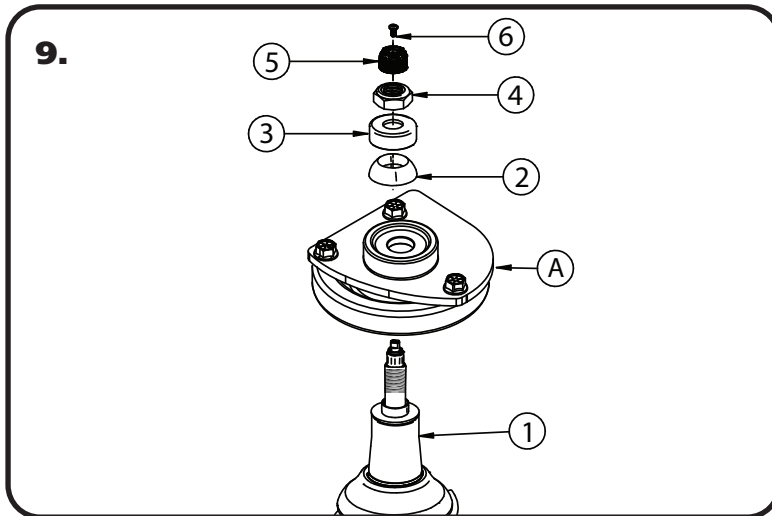
7. Hold the aluminum upper mount against the bottom of the shock tower, lining up the threaded holes with the factory slots in the shock tower.



8. Lay the upper plate on Top of the shock tower with the shock mount protruding through the large center hole. Line up the holes in the upper plate with the slots in the shock tower and the holes in the shock mount. Install a 5/16" x 1" Flange Bolt in each hole and tighten.



CoilOver Installation



9. Place the CoilOver into the coil spring pocket with the stud sticking through the Aluminum upper mount (A). See assembly **Diagram 9**.

- 1. CoilOver Assembly
- A. Upper Shock Mount
- 2. Delrin ball upper half
- 3. Aluminum cap
- 4. 9/16" SAE Nylok jam nut
- 5. Rebound adjusting knob
- 6. Screw



10. Install a bearing spacer in each side of the Bearing. The SMALL part of the spacer inserts into the Inside diameter of the shock bearing.



11. Raise the lower arm up to the CoilOver. The coilover/spacers will slip between the 2 shock mounting straps of the control arm. Line up the shock mounting holes with the through holes of shock. Install a 1/2" flat washer on a 1/2" x 3 1/2" hex bolt. Insert the bolt/washer in the aligned holes. Install a 1/2" flat washer and 1/2"-13 nylok nut on the threads of the bolt. Torque to 50 ftlbs.



CoilSpring Adjustment

12. Preload the springs of the CoilOver 1" to start. **Steps 12a - 12e** will assist you with preloading the coil spring. You may need to adjust the amount of preload in the spring, but this will be determined after the vehicle has been sat on the ground.

12a. Verify the adjuster nut locking screw is installed in the adjuster nut, but not tight.

12b. Thread the spring adjuster nut up the shock body until it is snug against the spring. You should NOT be able to move the spring up and down on the shock (0 preload). Verify the dropped upper coil spring cap is seated correctly on the upper shock stud.

12c. Measure from the bottom of the adjuster nut to the flat of the shock. You may want to write the measurement down.

12d. Using a spanner wrench, thread the adjuster up the shock an additional 1" (from the measurement you took in step 2) to preload the spring.

12e. Lock the adjusting nut in place by tightening the adjuster nut locking screw.

13. Reinstall the front wheels and tires and set the front of the vehicle back on the ground.

14. After entire weight of vehicle is on the wheels, jounce the suspension and roll the car forward and backward to alleviate suspension bind. **THIS IS NECESSARY BEFORE MEASURING RIDE HEIGHT.**

15. If you determine you need to adjust the ride height of the front suspension after getting the vehicle on the ground, **Steps 15a - 15e** will assist you in adjusting the ride height.

15a. Raise the vehicle and support it by the frame, allowing the suspension to hang freely. You do NOT need to remove the front wheels, but you may want to turn the steering wheel to gain better access to the CoilOver.

15b. Loosen the locking screw in the adjuster nut, but do not remove the locking screw.

15c. Measure from the bottom of the adjuster nut to the flat of the shock. You may want to write the measurement down.

15d. Using a spanner wrench, thread the adjuster up or down the shock to obtain the correct ride height. One complete revolution of the adjuster nut is approximately 1/8" at the wheel. Threading the adjuster nut up the shock will raise the ride height, threading it down will lower the ride height.

15e. Lock the adjusting nut in place by tightening the adjuster nut locking screw.

16. Turn the steering wheel until the front wheels are straight and set the front of the vehicle back on the ground.

17. After entire weight of vehicle is on the wheels, jounce the suspension and roll the vehicle forward and backward to alleviate suspension bind. **THIS IS NECESSARY BEFORE MEASURING RIDE HEIGHT.**

18. Recheck your ride height. If you need to readjust, repeat **Steps 15-17.**



Shock Adjustment

Shock Adjustment 101- Single Adjustable

Rebound Adjustment:

How to adjust your new shocks.

The rebound adjustment knob is located on the top of the shock absorber protruding from the eyelet.

You must first begin at the ZERO setting, then set the shock to a soft setting of 20.



-Begin with the shocks adjusted to the ZERO rebound position (full stiff). Do this by rotating the rebound adjuster knob clockwise until it stops.



-Now turn the rebound adjuster knob counter clock wise 20 clicks. This sets the shock at 20. (settings 21-24 are typically too soft for street use).

Take the vehicle for a test drive.



-if you are satisfied with the ride quality, do not do anything, you are set!

-if the ride quality is too soft increase the damping effect by rotating the rebound knob clock wise 3 clicks.

Take the vehicle for another test drive.



-if the vehicle is too soft increase the damping effect by rotating the rebound knob clock wise 3 additional clicks.



-If the vehicle is too stiff rotate the rebound adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

Note:

One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.

Shock Tuning Quick Guide

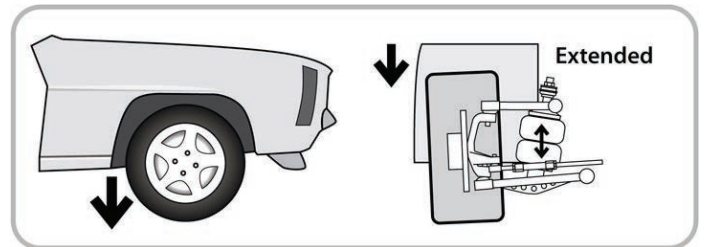
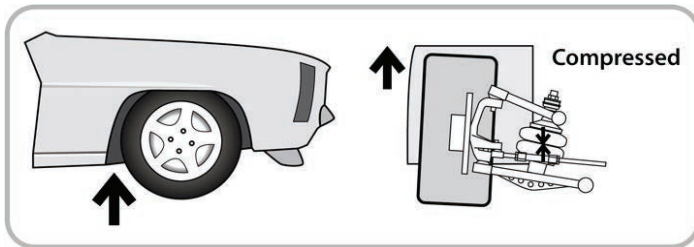


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Step 1. Understanding “compression” and “rebound”.

Compression is when the suspension compresses. This occurs when you would hit a bump in the road. The bump forces the wheel/tire/suspension assembly to “compress” or move upwards into the car.

Rebound is the opposite...when the wheel/tire/suspension assembly falls into a pothole, or simply “rebounds” from being compressed.



Step 2. How to turn the knob[s] on the shocks to control these forces.

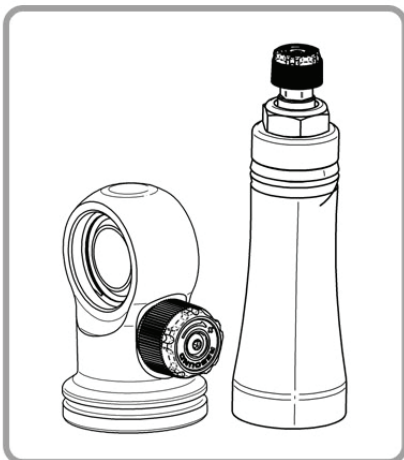
Clockwise is firm
 Counterclockwise is soft



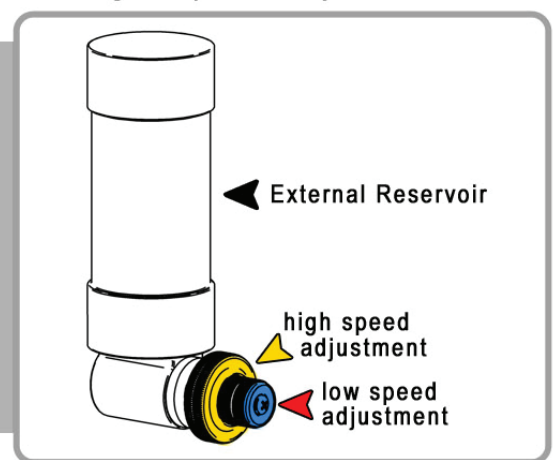
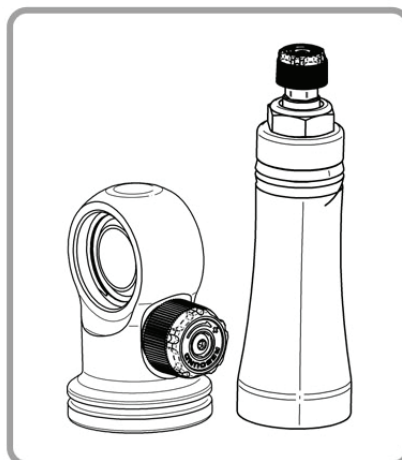
Step 3. Where are the knobs?

If you are working with the HQ Series shocks, you will have one rebound adjustment. If you are working with the TQ Series shocks, you will have 3 possible adjustments (dual stage compression adjustment and a single stage rebound adjustment like the HQ Series)

HQ Series
 Single rebound adjustment



TQ Series (3 possible adjustments)
 Single rebound like the HQ Series Dual stage compression adjustment



Step 4a. How to set your initial rebound adjustments

[on the HQ Series rebound adjustable units AND the TQ Series Triple adjustable units.]

- a. Set the adjustment knob fully firm [clockwise]
- b. Then back off all knobs by 10 clicks. This is approximately the middle of the adjustment range. [note: You may be able to count more clicks through the adjustment range, but the last 4-5 clicks toward “soft” are so insignificant to the valving that we do not consider them effective or repeatable. That is why we use full firm as a starting point.]
- c. Drive the car.
 - a. If the ride quality is harsh you may consider softening the rear shocks.
 - b. If the front end is bouncy, you may consider stiffening the front shocks.
 - c. We recommend that you experiment with the entire range of shock adjustment so you are aware of the wide range of influence that these shocks have on ride quality and handling performance.

Step 4b. How to set your initial compression adjustments

[on the TQ Series single rebound and dual compression adjustable units]

- a. Set both the high speed and low speed adjustment compression adjustments to full firm [clockwise]
- b. Turn the high speed compression adjustment [inner knob] counterclockwise [softer] by 10 clicks for a front shock and 15 clicks for a rear shock. [note: You may be able to count more clicks through the adjustment range, but the last 4-5 clicks toward “soft” are so insignificant to the valving that we do not consider them effective or repeatable. That is why we use full firm as a starting point.]
- c. Turn the high speed compression adjuster [outer ring] counterclockwise [softer] by 15 clicks for a front shock and 20 clicks for a rear shock. [yes, this very soft high speed compression adjustment is intended for best ride quality]
- d. Drive the car.
 - a. If the ride quality is harsh you may consider softening the low speed compression adjustment.
 - b. If the general ride quality and handling performance is good, but you still experience a harsh ride or even bottoming out on speed bumps or potholes, you may consider softening the high speed compression adjustment. The high speed compression adjustment will influence the events where shock piston velocity may exceed 20 in/sec. It will have only a minimal effect on the low speed circuits that influence general handling and ride quality.

Don't be afraid to explore the full range of shock adjustments available. This is what you've paid for! You cannot hurt anything by turning these knobs...you can always go back.

You will find these GENERAL RULES to apply:

- The rear shocks have the most influence on ride quality.
[because you sit closer to the rearend than the frontend]
- The front shocks usually have a much firmer setting all around than the rear because the front shocks “see” twice the weight [due to being mounted approx. halfway between the pivot point and the load point of the control arm].
- The front shocks will generally need 3-4 clicks of adjustment change in any direction to be felt.
- The rear shocks generally need 2 clicks of adjustment change in any direction to be felt.

We have an advanced shock tuning guide on our website (ridetech.com/tech) that will discuss tuning for autocross, road course, spring rates, tire pressures, alignment, and other relevant topics to optimize handling performance.