

CorkSport Performance

AXO-3-306 Coilovers

Installation Instructions for the CorkSport Performance Coilovers for the 2019+ Mazda 3

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INTRODUCTION

In this installation guide we have provided step by step instructions to remove the OEM springs & dampers and install the CorkSport Performance Coilovers

Advisory:

- Working under the vehicle requires a safe and sturdy location for the vehicle to sit on jackstands.
- Coilover suspension will add NVH (noise, vibration, and harshness) and ride rougher than the OEM suspension. Slight added suspension noise is normal.
- Installation is identical regardless of if your kit has CorkSport or Swift Springs.
- Turning the adjustment knob for the front and rear dampers requires little force. Forcing to turn the knob further once softest or firmest setting is reached will damage the damper and may cause the adjustment knob to free spin.

 **TOOLS:**

- Hydraulic Jack (1)
- Jack Stand (2)
- 3/8" Drive Ratchet (1)
- 1/2" Drive Breaker Bar (1)
- 1/2" Torque Wrench (1)
- 1/2" Impact Gun (if available) (1)
- 3/8" Drive Electric Impact Gun (1)
- 10mm Socket - Deep (1)
- 12mm Socket - Deep (1)
- 14mm Socket - Deep (1)
- 17mm Socket - Deep (1)
- 21mm Socket - Deep (1)
- 5mm Allen Key Socket (1)
- 6mm Allen Key Socket (1)
- Wrench, 14mm (1)
- Wrench, 17mm (1)
- Wrench, 19mm (1)
- Small Needle Nose Pliers (1)
- Flathead Screwdriver (1)
- WD-40 Lubricant Spray (1)
- Shop Towels/Rags (1)
- Small Sledge Hammer (1)
- Safety Glasses (1)
- Gloves (1)

 **PARTS:**

- AXO-3-306 Front Left Coilover (1)
- AXO-3-306 Front Right Coilover (1)
- AXO-3-306 Rear Damper (2)
- AXO-3-306 Rear Spring (2)
- AXO-3-306 Adjustable Rear Spring Perch (2)
- CorkSport Spanner Wrench Kit (1)
- 3M Tape (1)

Step 1 — Getting Started



- First and foremost; **THANK YOU** for becoming a part of the CorkSport Family. We hope to bring you the highest level of Parts, Customer Service, & Support
- ⓘ How To Use These Instructions
 - The instruction format will relate colored marking in the image to the color dot in the text to the right of the image
- ⓘ These instructions were written using early prototype coilovers and as a result have some minor appearance differences. Installation is identical unless noted
- ⓘ CorkSport Coilovers are set to approximately lowering spring height before shipping. Height and other adjustments are covered later in these instructions.

Step 2 — Lifting the Car & Removing the Front Wheel



⚠ Ensure the vehicle is parked on a level surface before proceeding.

- Start by lifting up the front of the car using the hydraulic jack and jack stands.

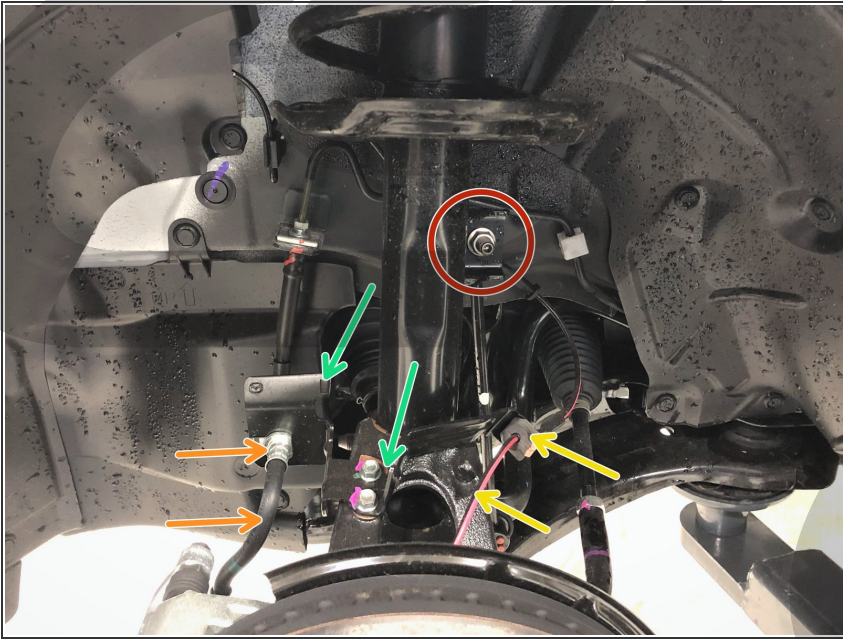
⚠ Be sure to reference your owners manual for jack points and the jack manufacturer's instructions for proper practices.

- Remove the left side front wheel from the vehicle using the 1/2" drive breaker bar or impact gun and 17mm or 21mm socket.

i 17mm or 21mm lug nuts present depending on year and trim level of your 3.

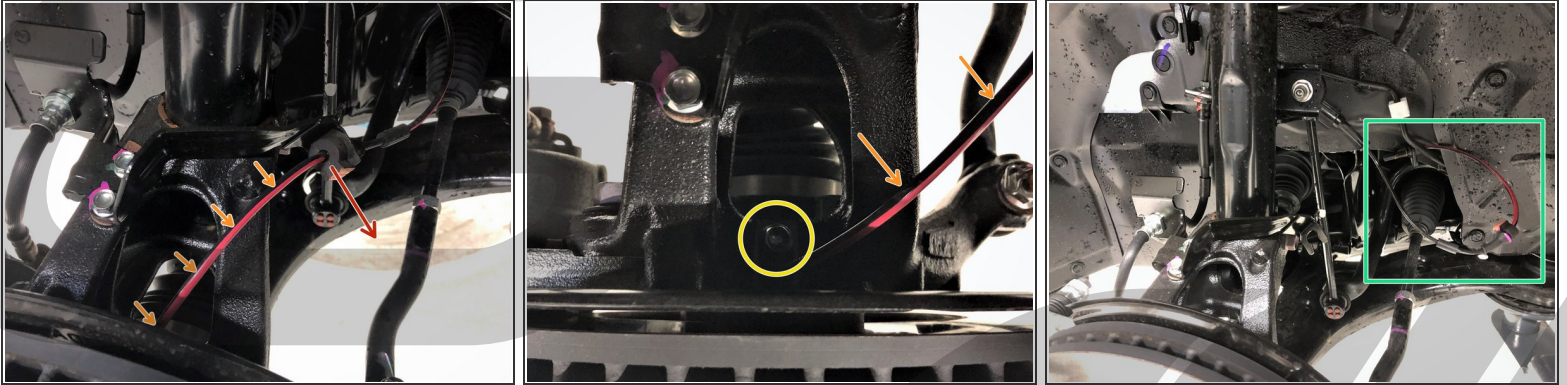
i A different socket may be required if you have aftermarket or locking lug nuts.

Step 3 — Front Suspension Component Identification



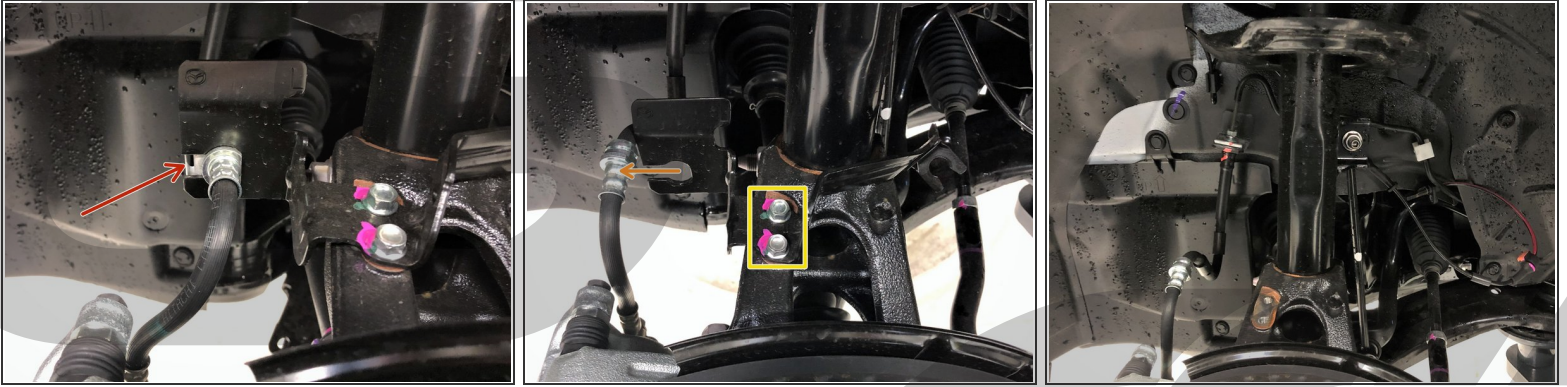
- This image serves as a location reference for components referenced in the following steps.
- Front swaybar endlink.
- Front brake line.
- ABS wiring.
- Front brake line and ABS wiring bracket.

Step 4 — Front Suspension Disassembly Part 1



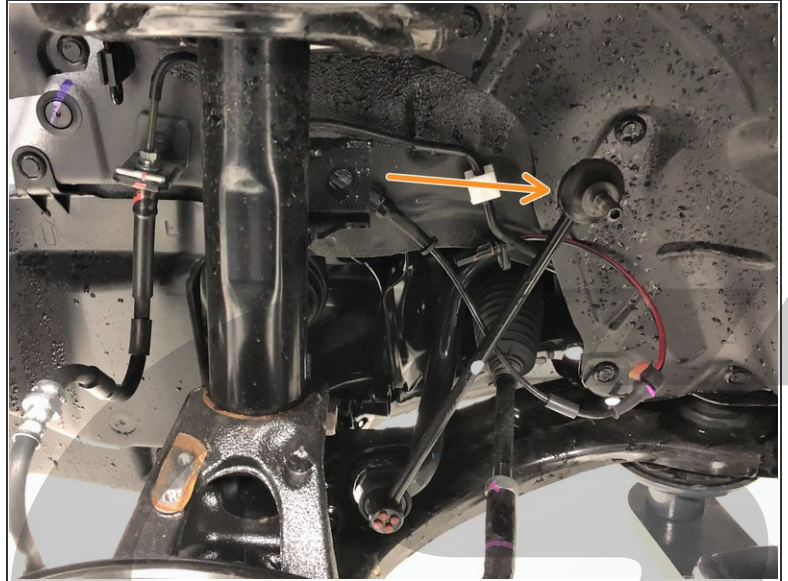
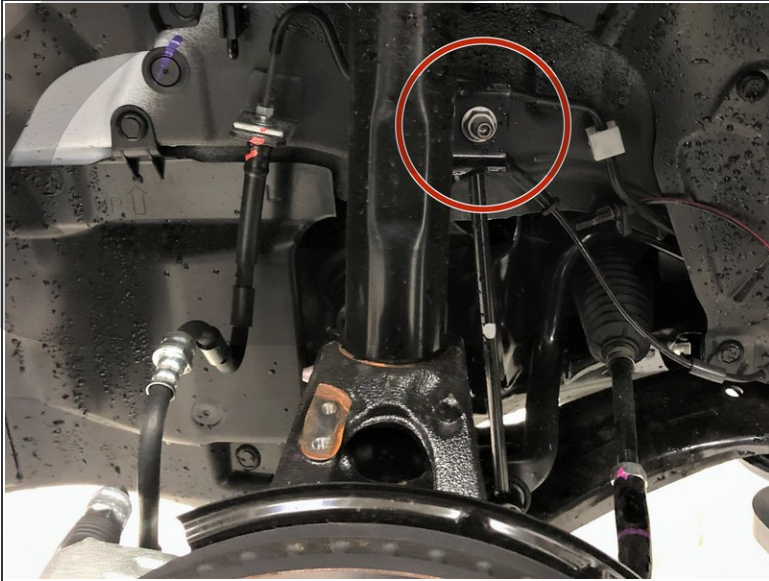
- Locate the ABS wiring.
- Pull the ABS wiring free from the mounting bracket by pulling the rubber grommet in the direction shown.
- Trace the ABS wiring to where the sensor is attached to the knuckle near the back of the brake rotor.
- Using a 10mm socket and ratchet, remove the ABS sensor. Pull it free from the knuckle.
- Move the ABS wiring out of the way as shown.

Step 5 — Front Suspension Disassembly Part 2



- Locate the front brake line.
- Using needle nose pliers or flathead screwdriver, remove the silver brake line retainer clip.
- Then free the front brake line from the mounting bracket.
- Locate the front brake line and ABS wiring bracket.
- Remove the front brake line & ABS wiring bracket by removing the two 10mm bolts.

Step 6 — Front Suspension Disassembly Part 3



- Locate the front sway bar end link.
- Using a 14mm socket and ratchet, remove the front swaybar end link nut
- ⓘ If the nut is spinning without loosening, use a 5mm Allen key in the center to keep it secure and a 14mm wrench to loosen.
- Push the front swaybar endlink out of the mounting point on the strut and out of the way.

Step 7 — Front Suspension Disassembly Part 4



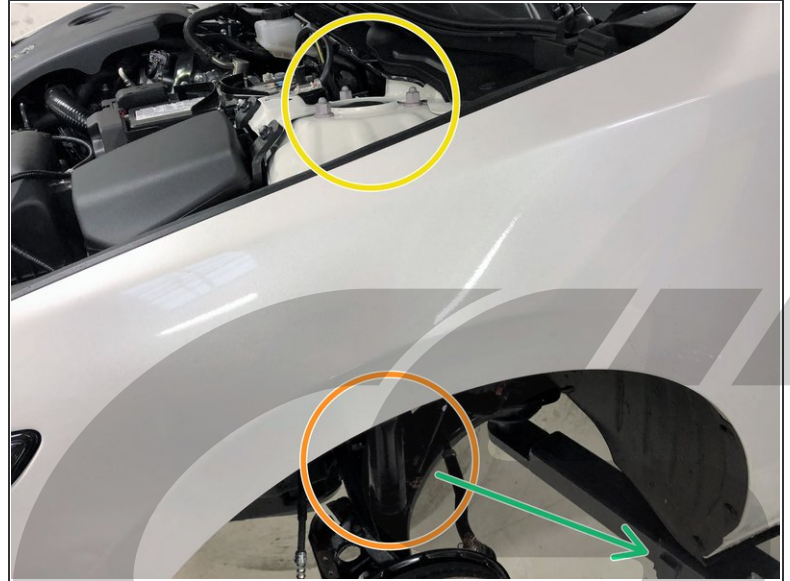
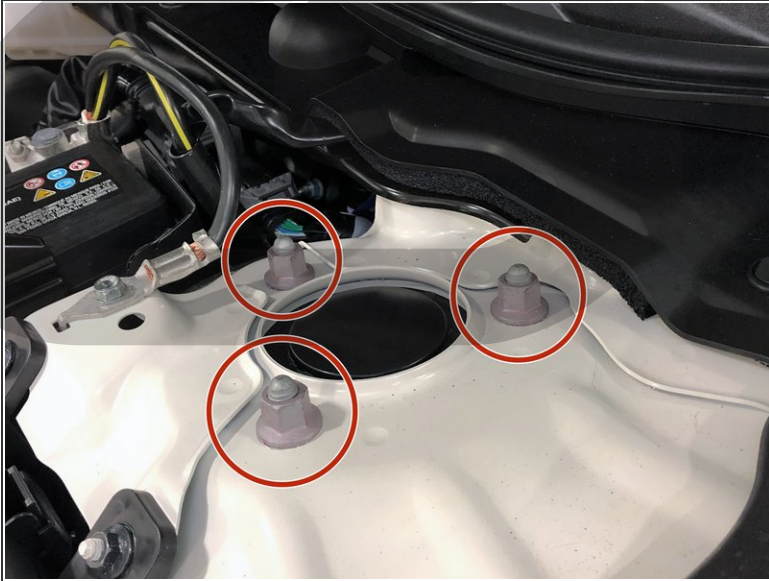
- Locate the strut pinch bolt near the bottom of the front strut.
- Using a 17mm socket and ratchet on the head of the bolt and 19mm wrench on the nut, remove the strut pinch bolt.
- Using WD-40 or a penetrating fluid, lubricate where the strut meets the knuckle.
 - ⓘ Letting the WD-40 sit for a few minutes can help the knuckle release the strut.

Step 8 — Front Suspension Disassembly Part 5



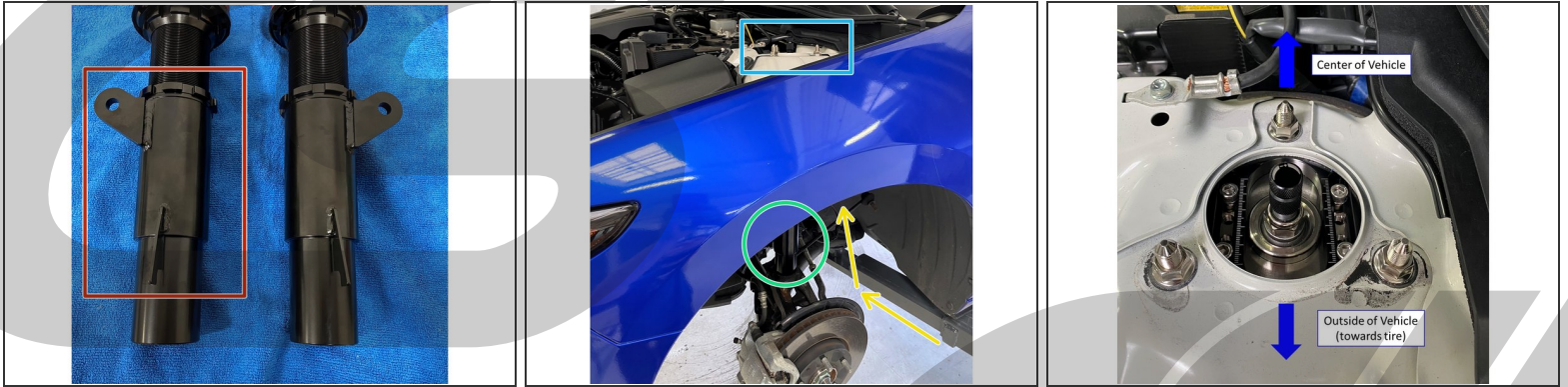
- Push the knuckle downwards to free the bottom portion of the strut.
- If the knuckle is not moving, use a hammer to hit the knuckle in the location shown.
⚠ If using a hammer use extreme caution to not hit anywhere except where shown or damage may occur.
- The knuckle will need to travel downwards about 3 inches. The second image shows the strut nearly free.
- When the strut is free from the knuckle, the knuckle will likely rotate forward as shown in the third image.

Step 9 — Front Suspension Disassembly Part 6



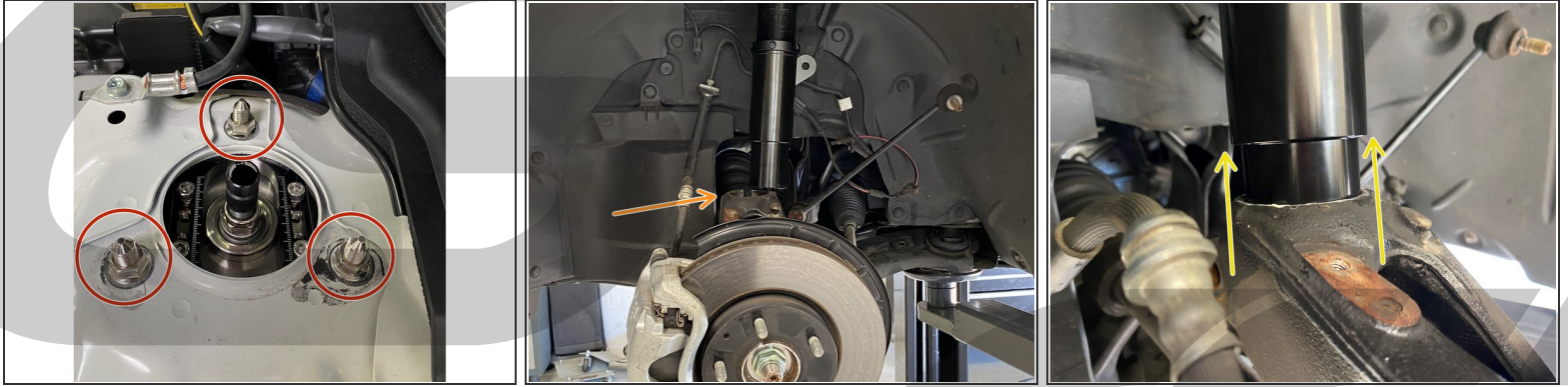
- Open the hood of your vehicle.
- Locate the three nuts holding the front strut to your vehicle. They will be near the back corner of the engine bay.
- Loosen these three nuts with a 14mm socket and ratchet.
- Hold the bottom of the strut with one hand so it does not fall during the next step.
- Completely remove the nuts with the other hand.
- Remove the front strut from the vehicle

Step 10 — CorkSport Front Coilover Install Part 1



- Locate the front left-hand side coilover. It will appear as shown. The coilovers may be labeled "FL" for front left and/or "FR" for front right (labels not shown).
- Remove the three 14mm nuts that came loosely installed on the camber plate
- Lift the assembled front LH coilover into position .
- ⓘ Look in the fender to align the three top coilover mounting studs to the three holes in the shock tower.
 - Hold the bottom of the strut with one hand.
 - Lightly push the strut through the three holes in the strut tower.
 - Ensure the camber plate is positioned as shown, with the adjustment slots perpendicular to the vehicle.

Step 11 — CorkSport Front Coilover Install Part 2



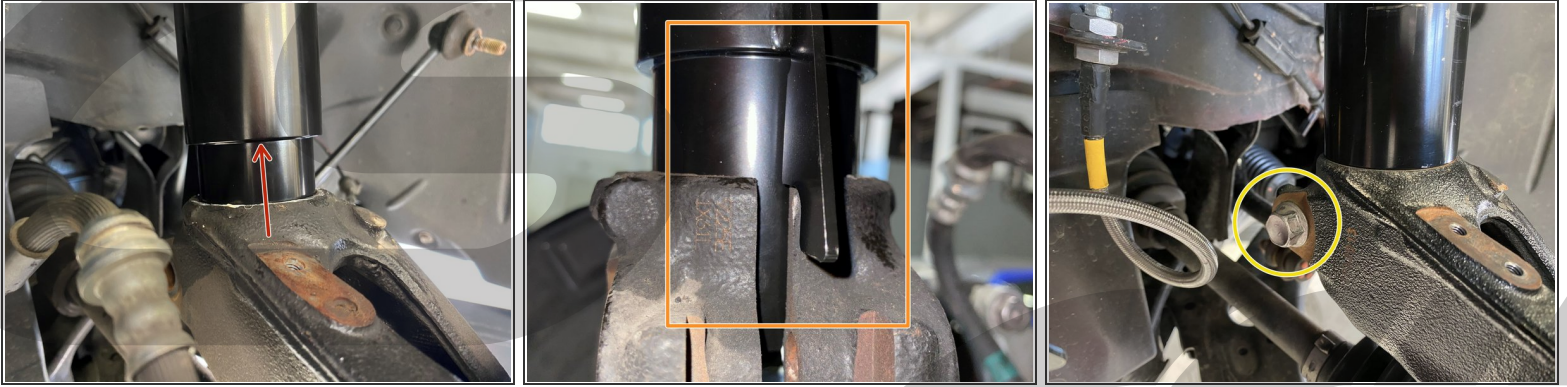
- Loosely tighten the three supplied 14mm nuts that were just removed from the camber plate.
- Tighten the three upper strut nuts to **37-43 ft-lbs** using a 14mm socket.
- Rotate the knuckle until the bottom of the strut aligns with the hole in the knuckle.
- Lift the knuckle upwards and insert the bottom of the strut into the knuckle.

Step 12 — CorkSport Front Coilover Install Part 3



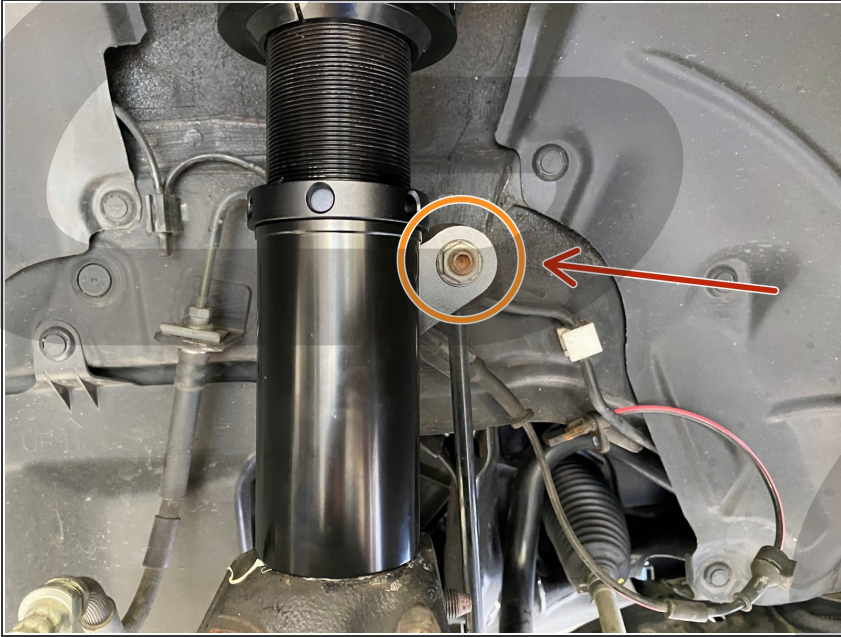
- Using a hydraulic jack, lift the knuckle upwards from the lower control arm as shown.
- ⚠ Ensure you are lifting from the area shown in the second image and not from the brake rotor or brake dust shield.

Step 13 — CorkSport Front Coilover Install Part 4



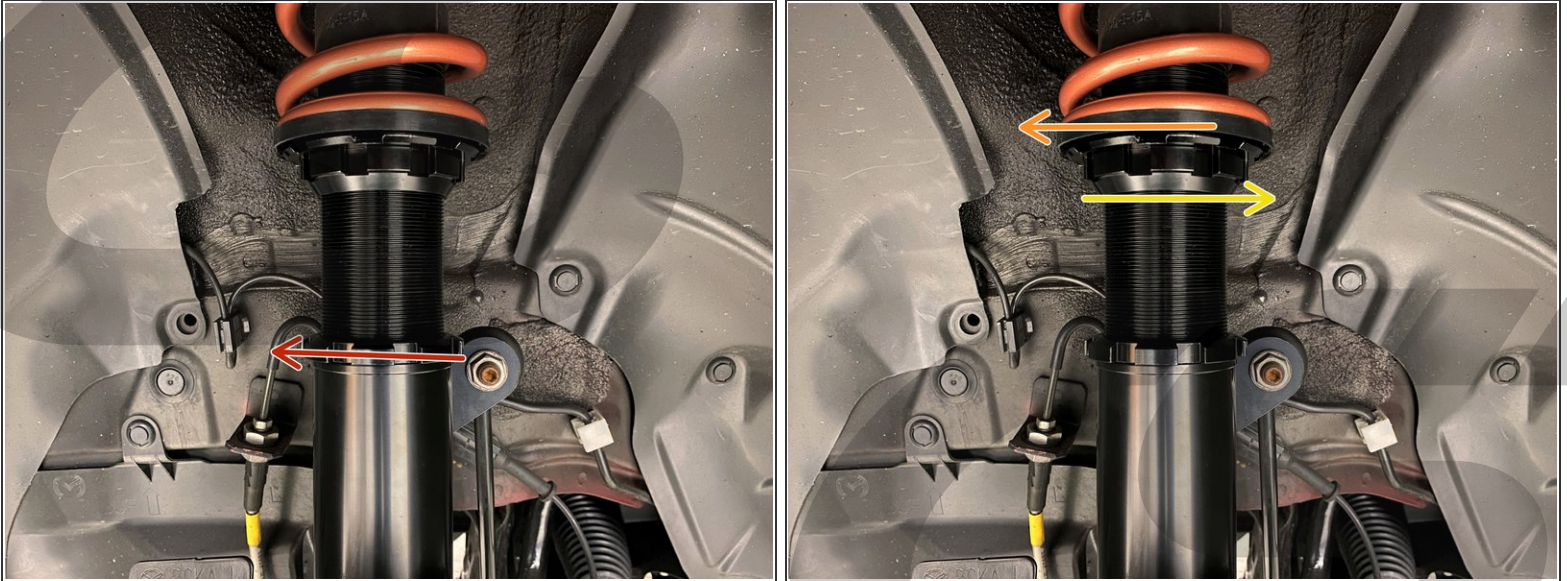
- Lift the suspension upwards until the knuckle contacts the wider portion of the coilover and stops as shown. Lift the jack a small amount more to compress the suspension slightly to ensure proper tightening.
- You may need to rotate the coilover to fit the alignment tab in between the two sides of the knuckle. Alignment tab shown in the second image.
- Once the hub stop is reached, install the 17mm strut pinch bolt and 19mm nut that were removed in Step 7.
- Tighten the strut pinch bolt to **48-54ft-lbs.**
- Lower the hydraulic jack once tightening is complete.

Step 14 — CorkSport Front Coilover Install Part 5



- Install the front sway bar end link through the mounting bracket on the coilover
- Secure the front sway bar end link by installing the nut removed in Step 6 and tightening to **34-40 ft-lbs** with a 14mm socket and ratchet.
- ⓘ If the nut is spinning without tightening, use a 5mm Allen key in the center to keep it secure and a 14mm wrench to tighten.

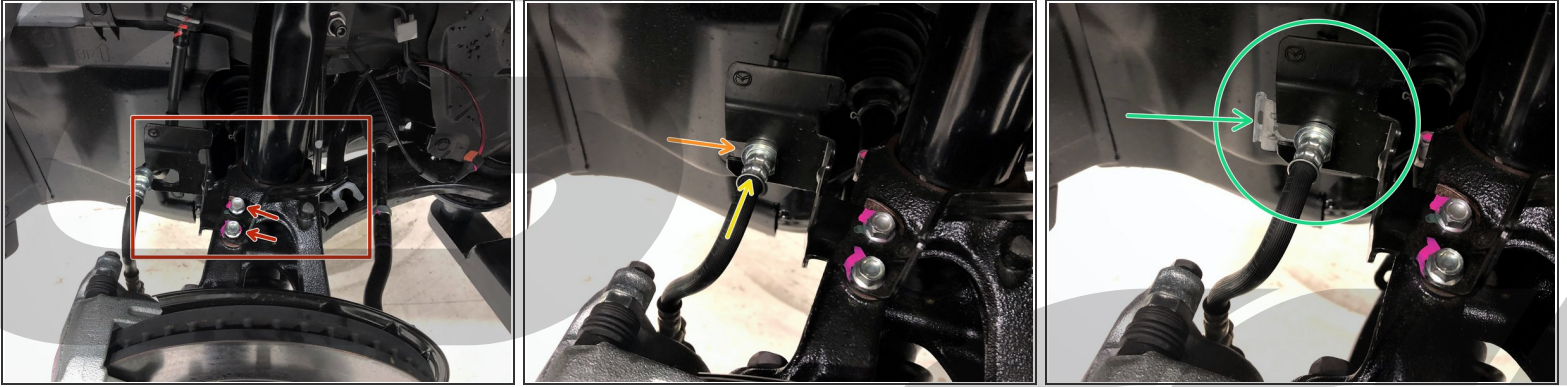
Step 15 — Verify Locking Collar Tightness



- i** The CorkSport Coilovers are set to an approximate lowering spring ride height during packaging. If you would like to adjust your coilovers to a different ride height, you do not need to snug up your height locking ring yet. Height adjustments are covered starting on Step 37.
- Using your small spanner wrench, turn the height locking ring clockwise to verify it is tight.
- i** The locking rings only need a solid snug up. Over torquing them will make it very difficult to adjust your height later
- Hold your large spanner wrench on the spring perch in a clockwise direction
- Simultaneously, turn your small spanner wrench on the locking ring in a counter-clockwise direction as shown

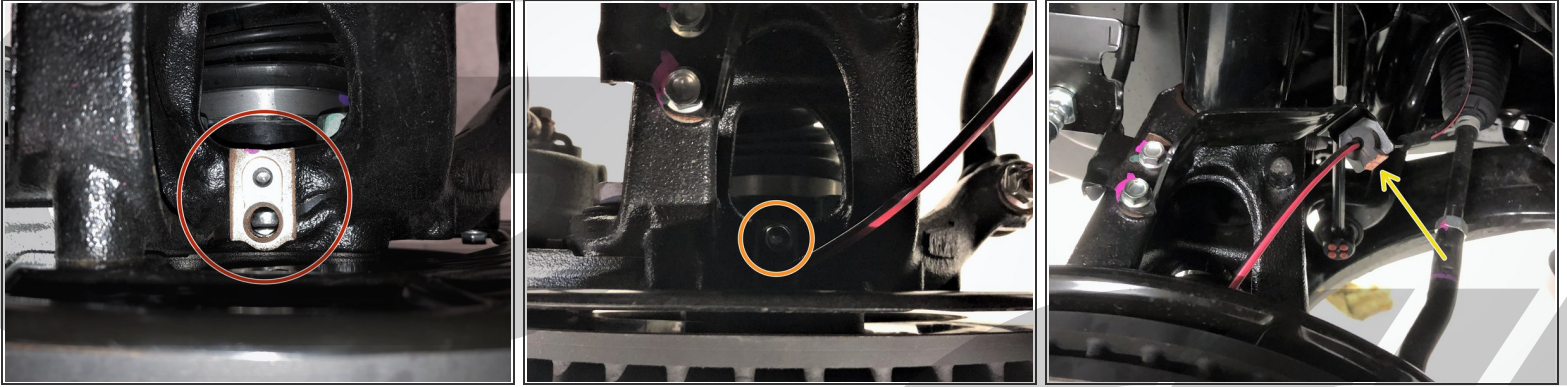
 - This will lock your spring perch into position
- i** Both of these rings are tightened before shipping, however, we want you to verify tightness to make sure nothing moved around during shipping

Step 16 — Front Suspension Reassembly Part 1



- Install the brake line and ABS wiring mounting bracket onto the knuckle. Tighten the two 10mm bolts until snug using a 10mm socket and ratchet.
 - Insert the brake line into the mounting bracket you removed it from earlier.
 - Push forward on the line slightly to ensure it is fully seated, then secure the brake line with the retaining clip.
 - Ensure the retaining clip is in the orientation shown.
- ⓘ You may need to tap the retainer clip gently with a hammer in order to get it fully installed.

Step 17 — Front Suspension Reassembly Part 2



- Reinstall the ABS sensor into the knuckle near the brake rotor. Press it down gently to ensure it is fully seated.
- Secure the ABS sensor with the 10mm bolt removed earlier. Tighten until snug with a 10mm socket and ratchet.
- Secure the ABS wiring in the mounting bracket. Push the rubber portion of the wiring onto the bracket until the wiring is snug.

Step 18 — Front Suspension Wrap Up



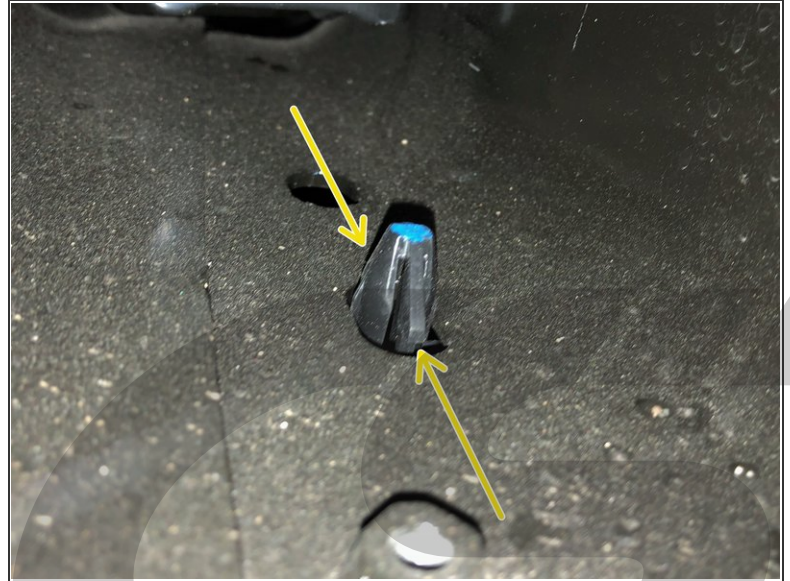
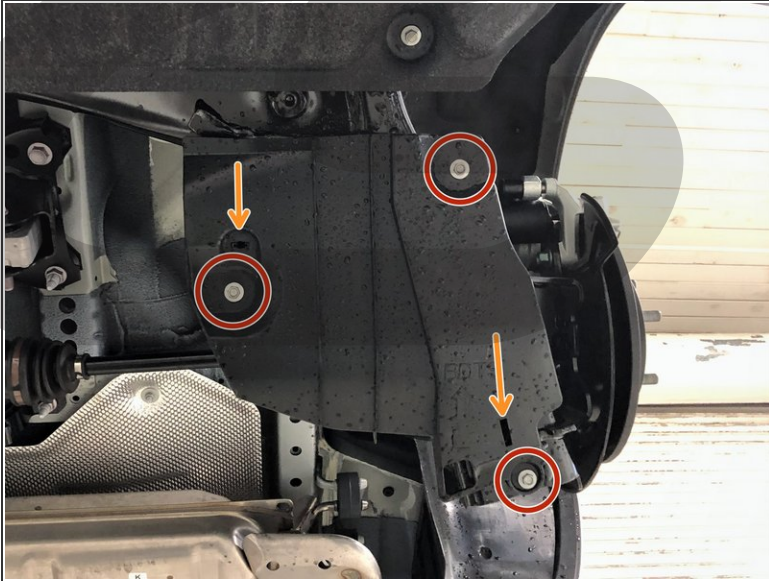
- Repeat steps 2-17 for the right side of the vehicle.
- Reinstall both front wheels. Using a 17mm or 21mm socket on each of the 5 lug nuts.
- Lower the front of the car down off the jack stands.
- Torque the lug nuts in a star pattern to **80-90ft-lbs.**
- ⓘ **Front coilover adjustments will be covered starting on Step 37**

Step 19 — Lifting the Car & Removing the Rear Wheel



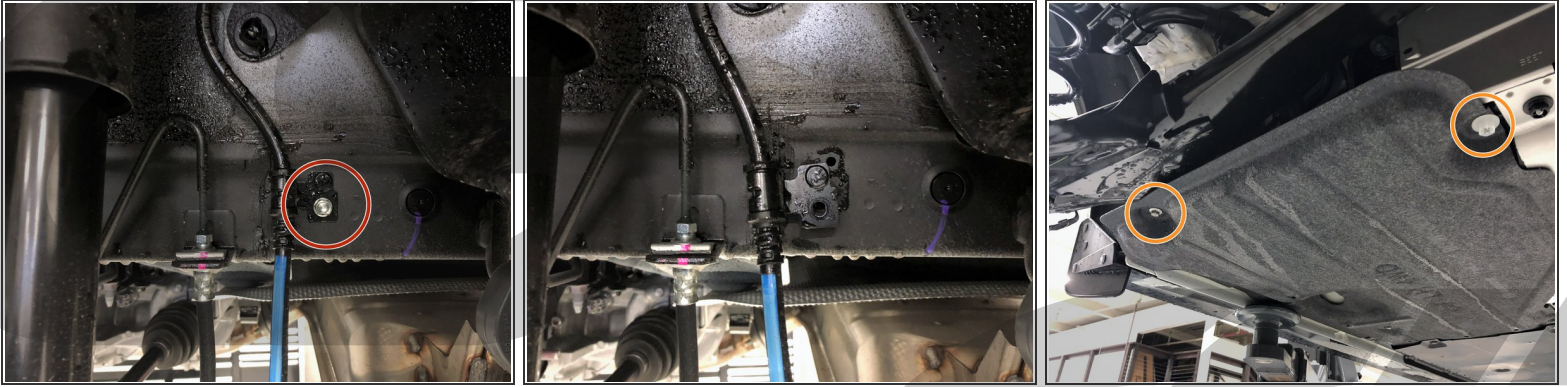
- Lift up the rear of the car using a hydraulic jack and jack stands.
- ⚠ **Be sure to reference your owners manual for jack points and the jack manufacturer's instructions for proper practices.**
- Remove the rear wheels from the vehicle using the 1/2" drive breaker bar or impact gun and 17mm or 21mm socket.
- ⓘ A different socket may be required if you have aftermarket or locking lug nuts.
- ⓘ **Both sides of the rear suspension are worked on simultaneously unless noted.**

Step 20 — Rear Suspension Disassembly Part 1



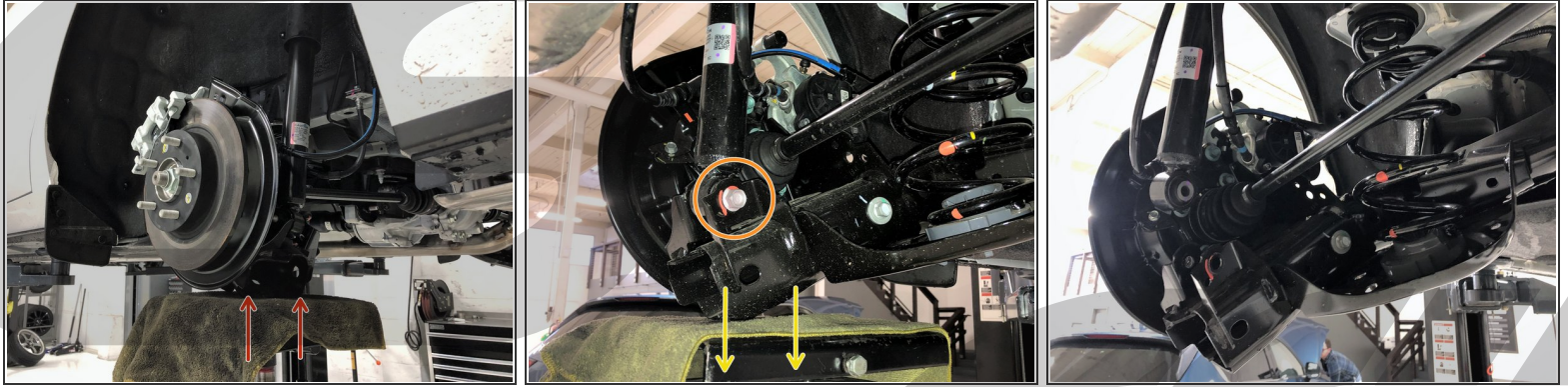
- Locate the plastic covers on the bottom of the torsion beam.
- Using a 10mm socket and ratchet, remove three 10mm bolts from the left and right side plastic covers. (Left side cover shown)
- There are two tabs for each plastic cover that must be released before the plastic covers can be removed. Their locations are shown with the orange arrows in the first image.
- Push in the sides of the tabs as shown to release the tabs.
- Once the tabs are released, remove the plastic torsion beam covers from the vehicle.

Step 21 — Rear Suspension Disassembly Part 2



- Inside the wheel well, locate the parking brake wiring. It is just to the rear of the shock.
- Remove the 10mm bolt that secures the brake wiring to the chassis using a 10mm socket and ratchet. Left side shown.
- Repeat this step for the opposite side of the vehicle.
- Locate the under body shielding in front of the torsion beam.
- Remove one 10mm bolt and one plastic nut from each side of the under body shielding.
- ⓘ Removing these two fasteners will allow the under body shield to bend slightly to allow for easier rear spring removal.

Step 22 — Rear Suspension Disassembly Part 3



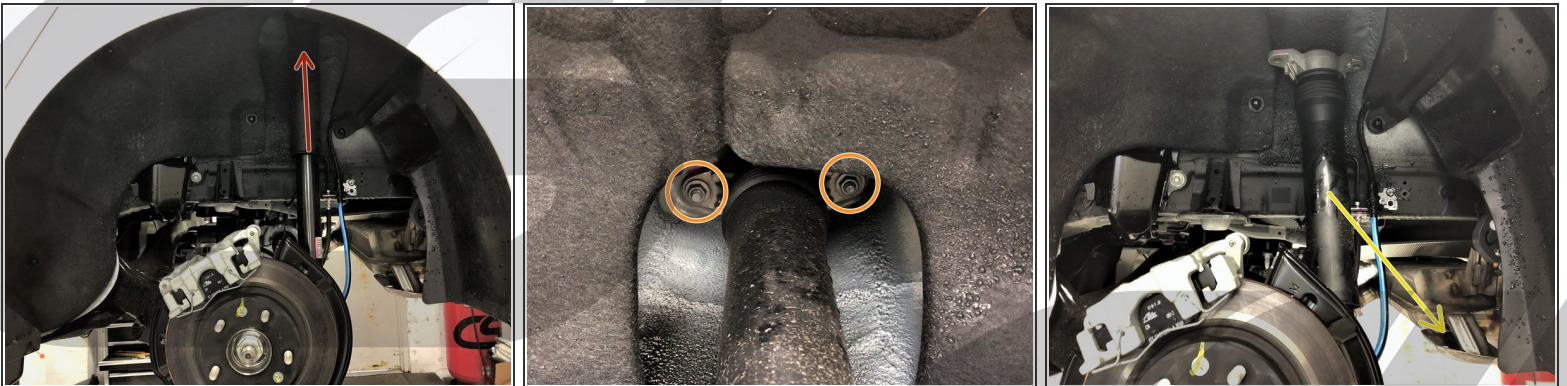
- Place the hydraulic jack directly below the driver's side end of the torsion beam and apply a small amount of upward pressure.
- ⚠ **Ensure your jack is secure and is not contacting the brake rotor or other brake components.**
- Using a 17mm socket and ratchet, remove the lower shock mounting bolt.
- Carefully lower the hydraulic jack.
- Once completed, the suspension will look like the third image.
- **Repeat the red, orange, and yellow steps for the passenger side of the vehicle.**

Step 23 — Rear Suspension Disassembly Part 4

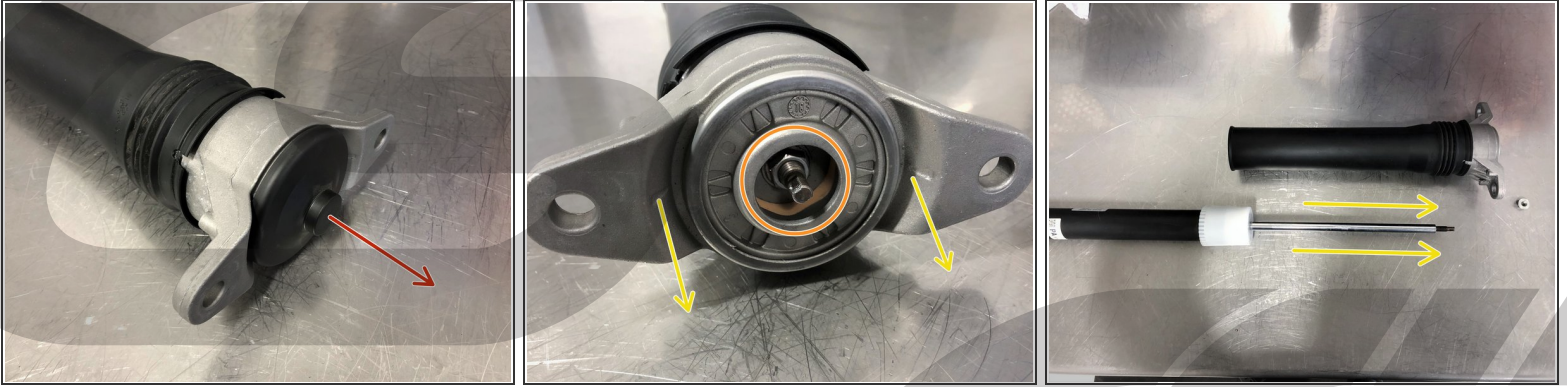


- Pull downward on the left side of the torsion beam.
- Pull the spring downward and toward the center of the vehicle to remove it.
- ⓘ It will take some force to remove the spring as you must compress it slightly to free the rubber top from the chassis.
- Repeat the red and orange steps for the other side of the vehicle.

Step 24 — Rear Suspension Disassembly Part 5

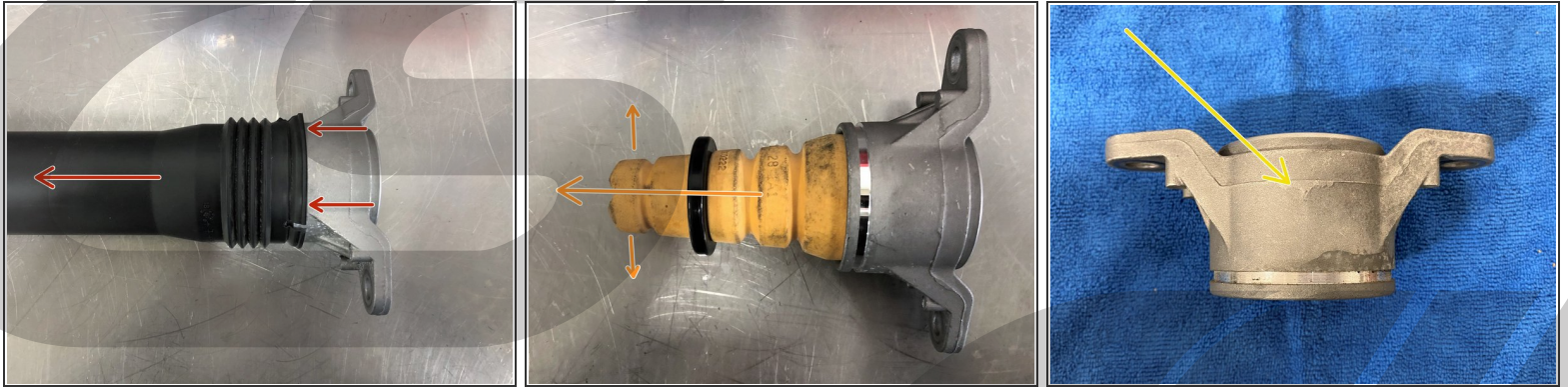


- Starting on the rear left side, trace the shock upwards to locate the upper shock mount.
- Remove the two upper shock mounting nuts using a 14mm socket and ratchet.
- ⚠ Hold the shock while removing the mounting bolts to prevent it from falling.
- Remove the shock from the vehicle.

Step 25 — Rear Coilover Shock Install Prep Part 1

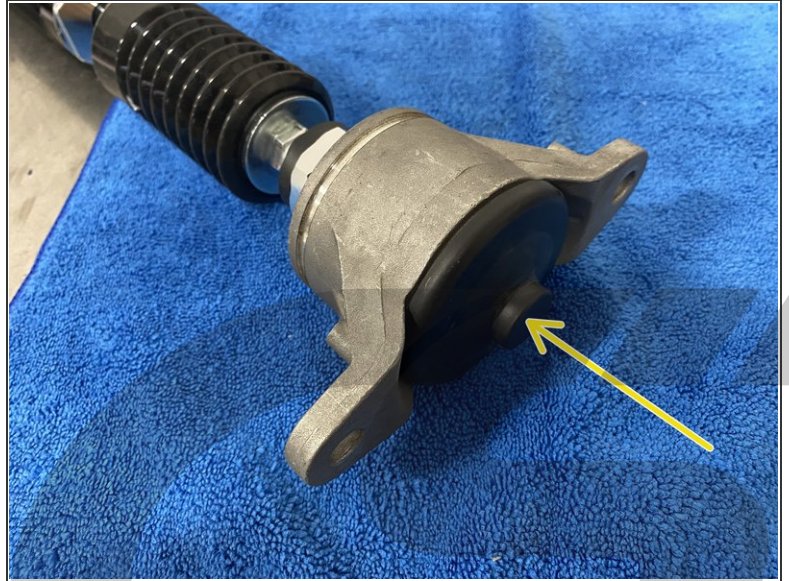
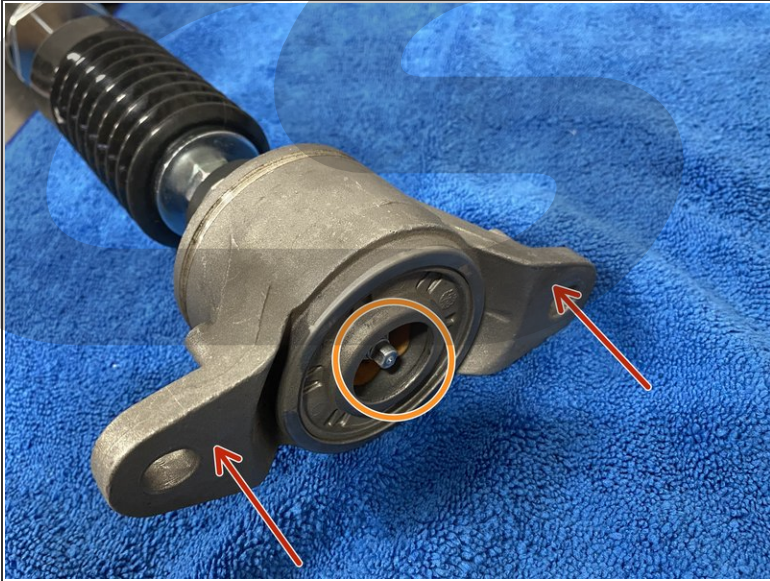
⚠ The next step can be very difficult without an electric impact gun.

- Pull off the plastic cover from the top of the shock.
- Using an electric impact gun and a 12mm socket, remove the shock top hat nut.
- Remove the shock top hat from the shock by pulling it off the end of the shock shaft. The plastic dust cover will be removed with the top hat as shown.

Step 26 — Rear Coilover Shock Install Prep Part 2

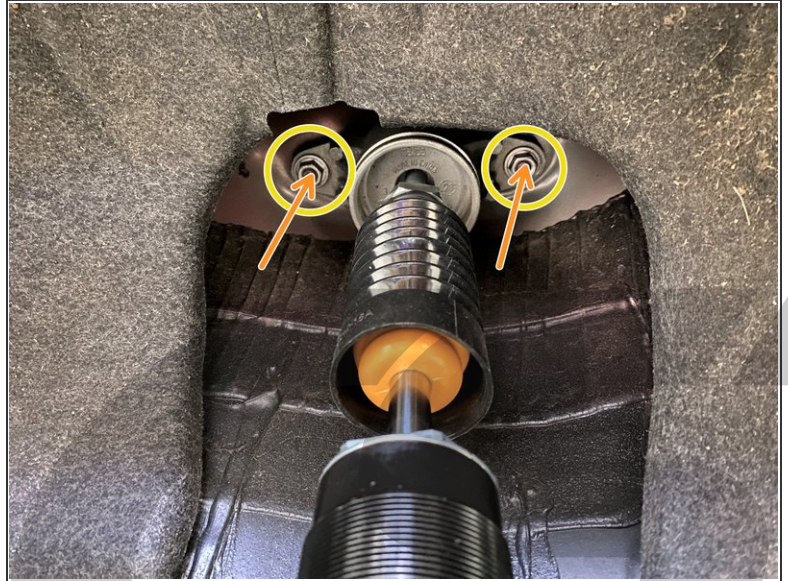
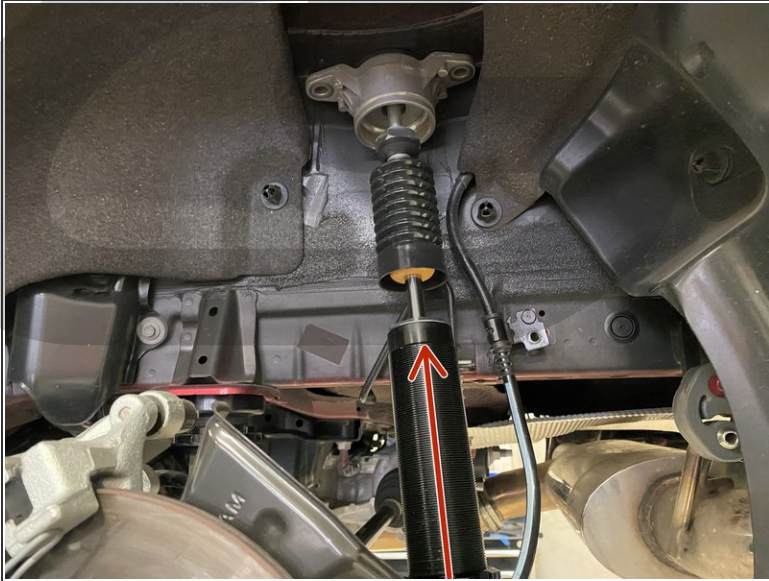
- Using a flathead screwdriver, gently pry around the top edge of the plastic dust cover. Pull downward while doing so and separate the dust cover from the shock top hat.
 - You will be left with the bump stop attached to the shock top hat as shown.
 - Grab the bump stop and wiggle it back and forth while pulling to remove it from the shock top hat.
 - The top hat will be left as shown and will be installed on the CS rear coilover shock
- ⓘ The dust boot and bump stop will not be used

Step 27 — Rear Coilover Shock Install Prep Part 3



- Remove the supplied 12mm nut that was loosely installed on top of the CS rear coilover shock
 - Install the OEM top hat onto the CS rear coilover shock
 - Tighten the coilover shock top nut using your electric impact gun and a 12mm socket. You only need **15-20ft-lbs**, do not over-tighten.
- ⚠ If using a 1/2" drive electric impact gun or air impact, do not over tighten as you can easily break the shock shaft.**
- Reinstall the shock top hat plastic cover by pushing it on until it clicks into place.

Step 28 — CorkSport Rear Coilover Shock Installation



- Insert the CorkSport rear coilover shock into position on the rear left side.
- Align the top hat holes with the studs on the chassis.
- Secure the shock with the two 14mm nuts removed earlier. Tighten to **26-30ft-lbs** using a 14mm socket and ratchet.

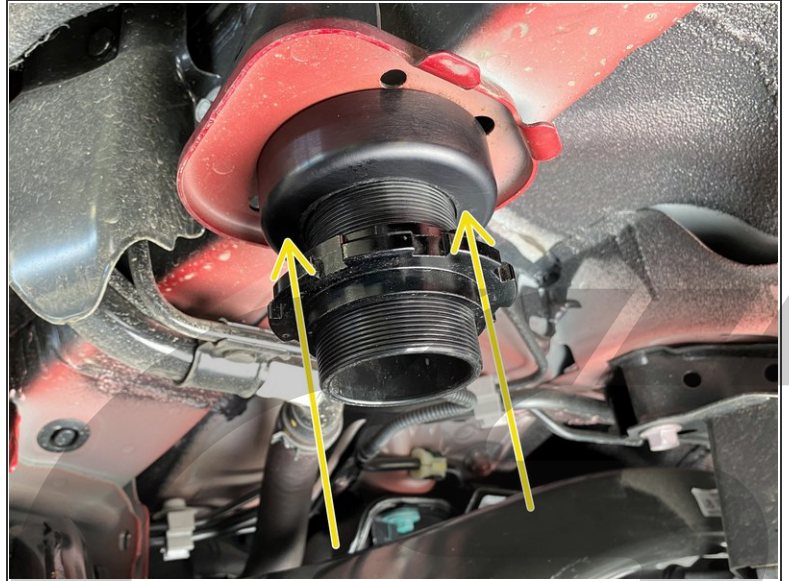
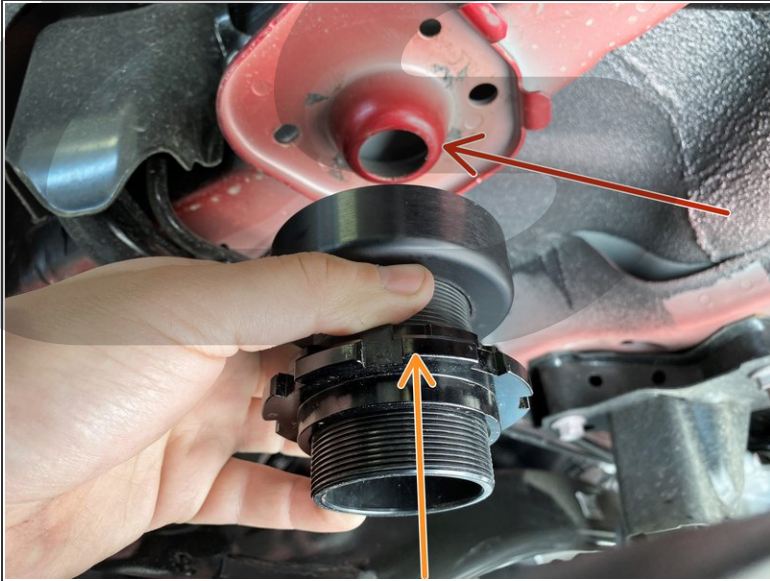
Step 29 — Right Side Rear Coilover Shock Install



- Repeat steps 24-28 on the rear right side of the vehicle.

Step 30 — Rear Coilover Spring Perch Install Part 1

- Locate the rear spring perches that came with your CS coilover kit
- Using the supplied 3M tape, place a circle of tape on the bottom of each of the CS spring perches as shown
- ⓘ The 3M tape is used to hold the perches in position during assembly. Once install is complete, the springs will keep the perches in position

Step 31 — Rear Coilover Spring Perch Install Part 2

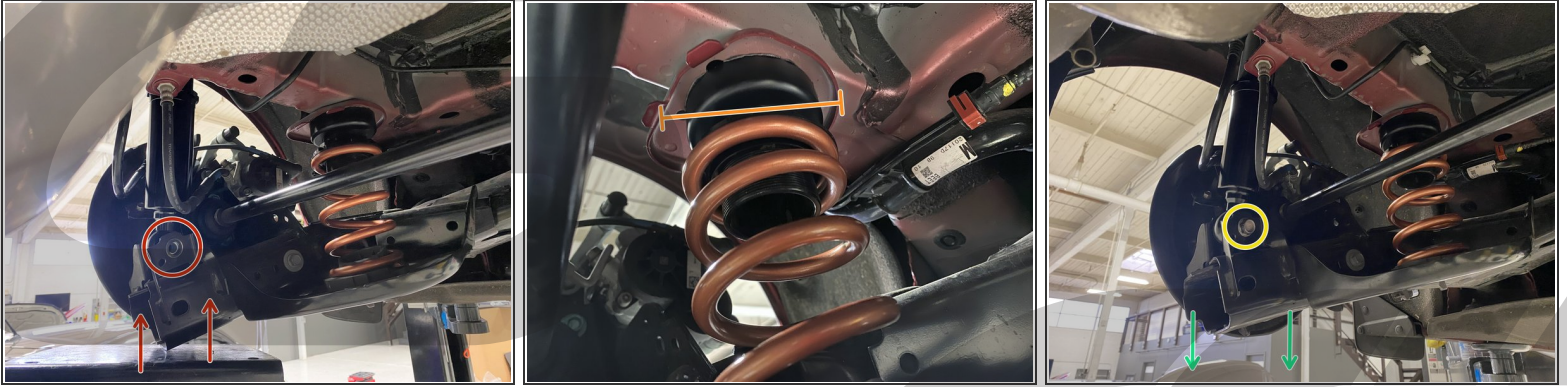
- Remove the backing from the 3M tape.
- Locate the OEM upper spring perch location.
- Install the CS spring perch over the OEM spring perch centering bulb.
- Press upwards firmly to ensure the 3M tape securely attaches the spring perch.
- Repeat on the other side of the vehicle.

Step 32 — Rear Coilover Spring Install Part 1



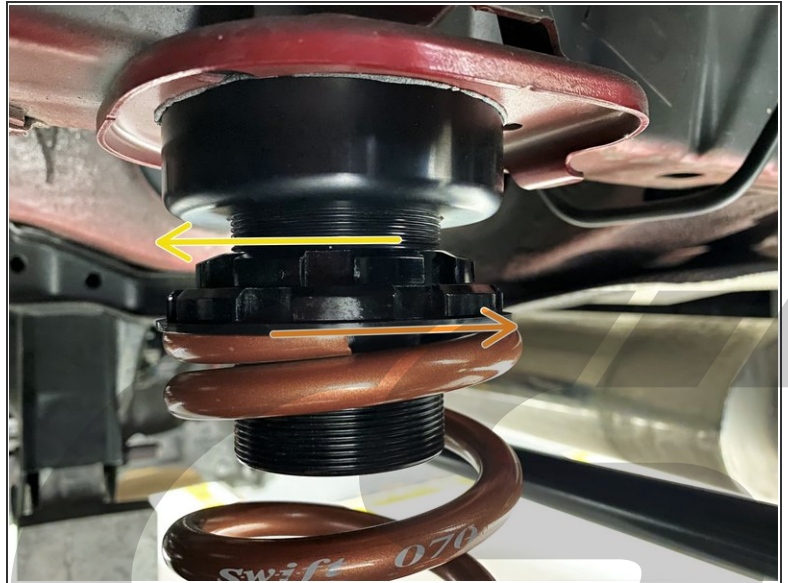
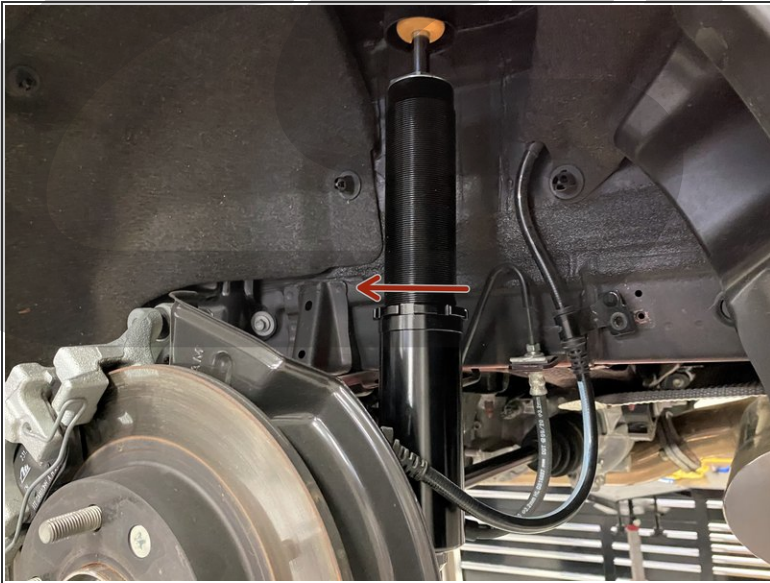
- Place the supplied coilover spring onto the OEM perch as shown. Ensure the end of the spring sits against the stop of the OEM perch as shown.
- ⓘ The vehicle shown in the images had the optional Swift Spring upgrade.
- Repeat these steps on the other side of the vehicle.
- Place the hydraulic jack underneath the end of the torsion beam like in Step 22.

Step 33 — Rear Coilover Spring Install Part 2



- Raise the hydraulic jack until the hole in the torsion beam lines up with the lower shock mounting hole.
- As you raise the jack, ensure both springs are aligned with the upper spring perches as it can be difficult to realign them later
- Install the lower shock mounting bolt removed earlier. Tighten to **62-73 ft-lbs** using a 17mm socket and ratchet.
- Once tight, lower the hydraulic jack.
- Repeat these steps for the other side of the vehicle.

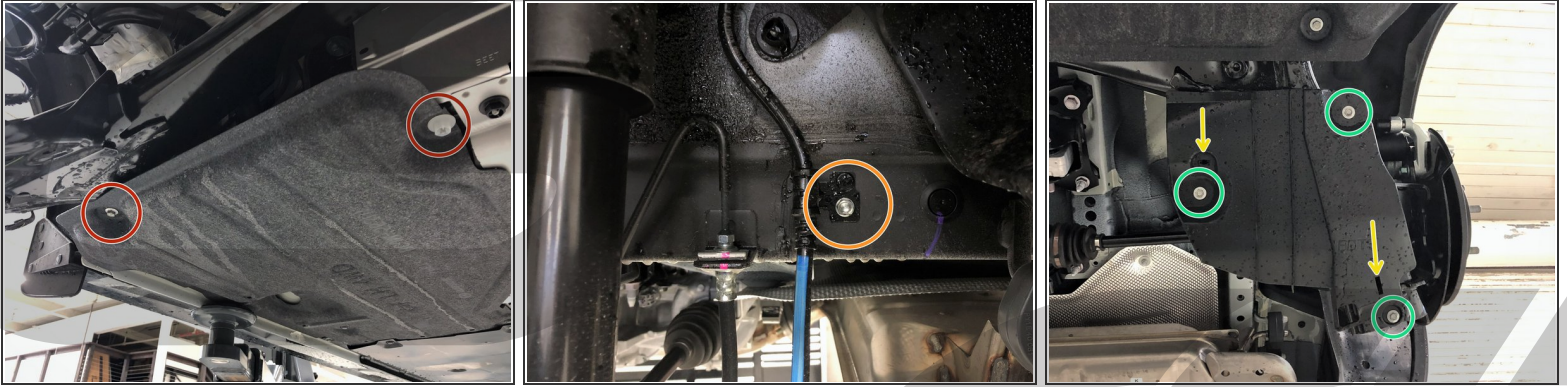
Step 34 — Verify Locking Collar Tightness



- i** The CorkSport Coilovers are set to an approximate lowering spring ride height during packaging. If you would like to adjust your coilovers to a different ride height, you do not need to snug up your locking rings yet. Height adjustments are covered starting on Step 37.
- Using your small spanner wrench, turn the shock length locking ring clockwise to verify it is tight.
- i** The locking rings only need a solid snug up. Over torquing them will make it very difficult to adjust your height later
- Hold your large spanner wrench on the spring perch in a counter-clockwise direction
- Simultaneously, turn your small spanner wrench on the locking ring in a clockwise direction as shown

 - This will lock your spring perch into position
- i** Both of these rings are tightened before shipping, however, we want you to verify tightness to make sure nothing moved around during shipping

Step 35 — Rear Suspension Reassembly



- Reposition underbody shielding that was loosened in Step 21.
- Reinstall the one 10mm bolt and one plastic nut removed from each side of the under body shielding. Tighten 10mm bolts until snug, tighten plastic nut hand tight.
- Reposition the emergency brake wiring into the alignment hole on the frame.
- Secure the emergency brake wiring using the 10mm removed earlier. Tighten until snug.
- Repeat for the other side emergency brake wiring.
- Reinstall the plastic torsion beam covers. They snap into position with the two push clips.
- Secure the plastic torsion beam covers with the three 10mm bolts removed from each side. Tighten all 10mm bolts until snug.

Step 36 — Rear Suspension Wrap Up



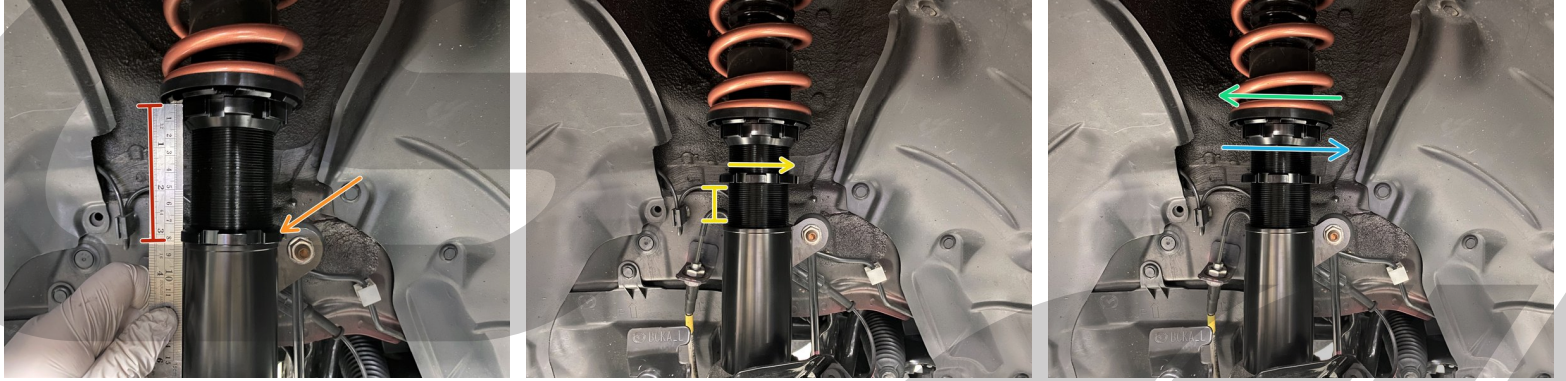
- Reinstall both rear wheels. Using a 17mm or 21mm socket on each of the 5 lug nuts.
- Lower the rear of the car down off the jack stands.
- Torque the lug nuts in a star pattern to **80-90ft-lbs.**

Step 37 — Front Coilover Ride Height Adjustment Notes



- ⓘ The CorkSport Coilovers are set to an approximate lowering spring ride height during packaging. If you would like to adjust your coilovers to a different ride height, carefully follow the following steps.
- ⓘ It will typically take 50+ miles of driving before the coilover settle to their final ride height.
 - The spring perches are set to ~10mm of spring pre-load during packaging. This typically will never need to be adjusted, unless swapping springs or doing extremely fine tuning for track handling.
 - ⓘ As a result, we recommend leaving the front spring perches alone for the majority of customers.
- ⚠ It is the customer's responsibility to make sure no damage will occur to their vehicle when driving at extremely low ride heights.
- ⓘ We recommend a suspension alignment after any ride height changes.
- ⚠ There is a obvious gap in the threads of the coilover. This gap in the threads is the mark for **maximum ride height**. The lower mounting body of the coilover **MUST** cover this mark to ensure safe operation
 - Gap in the coilover threads shown in the second image.

Step 38 — Front Coilover Ride Height Adjustment Part 1



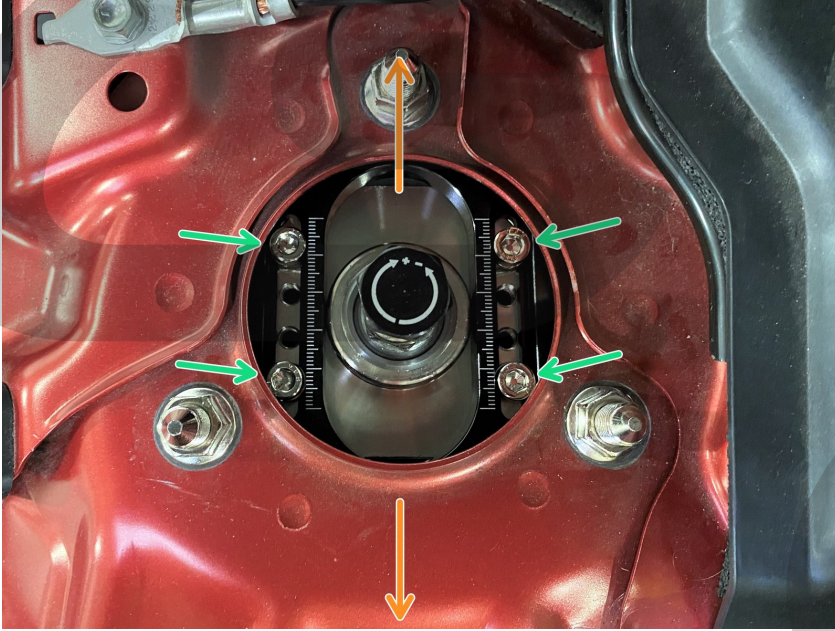
- Jack up the front of your vehicle and remove the front wheels as shown early in these instructions
- Measure the distance between the lower spring seat and the bottom of the ride height locking ring as shown
 - ⓘ This comes from CorkSport set to ~80mm as shown
- Locate the ride height locking ring as shown.
- Using the small spanner wrench in your kit, loosen the ride height locking ring by rotating it counter-clockwise. Spin it up a few turns to give you room for adjustments.
- Turning the coilover clockwise will decrease ride height.
- Turning the coilover counter-clockwise will increase ride height

Step 39 — Front Coilover Ride Height Adjustment Part 2



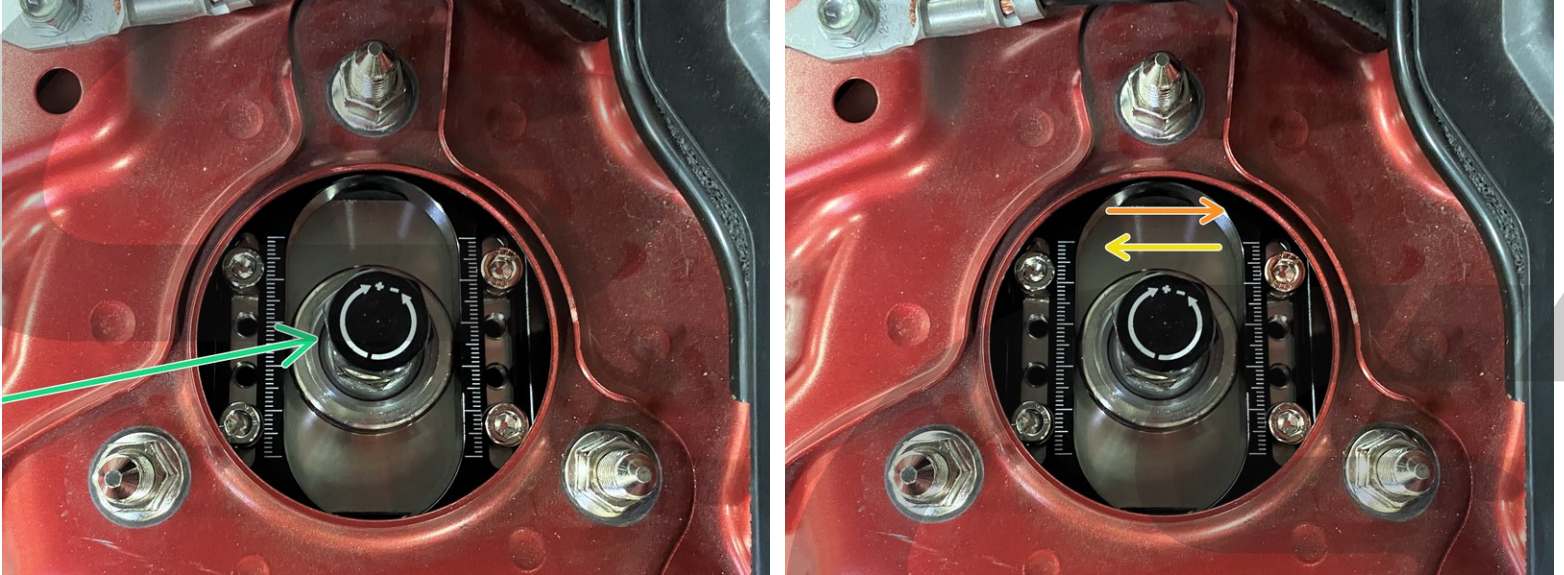
- Once you think you are happy with your adjustment, bring the ride height locking ring back flush to the lower coilover body
- Re-measure the distance between the spring seat and the bottom of the ride height locking ring.
 - ⓘ The ride height adjustment in the front is approximately 1 to 1. So 10mm shorter in this distance will be approximately 10mm lower ride height.
- Once happy with height change, secure the ride height locking ring to the lower coilover body by turning the locking ring clockwise. It just needs to be hand tight plus a slight turn with the spanner wrench.
 - ⓘ Over-tightening the locking collar will make it much more difficult to adjust the coilovers later.
- Repeat Steps 37 and 38 on the other front coilover before reinstalling the wheels and checking your ride height.
- Repeat as necessary until desired ride height is achieved.

Step 40 — Front Coilover Camber Adjustment



- ❗ For easier camber adjustment, we recommend jacking up the front of your vehicle.
- Locate the four Allen head bolts at the top of your coilovers.
- Loosen with a 5mm Allen wrench/socket. **Do not fully remove these bolts**
- Push the top of your tire inwards for more negative camber and pull it outwards for more positive camber.
- ❗ The camber plate bolts will need to be repositioned to different holes for maximum adjustment and easy access. **Only move one bolt at a time.**
- ❗ At maximum adjustment, a ball end Allen wrench and/or slight notches in the shock tower may be needed for proper bolt access.
- Once happy with camber adjustment, tighten the four Allen head bolts to **12-15ft-lbs.**
- ❗ We recommend a suspension alignment after any camber change.

Step 41 — Front Coilover Damping Adjustment



- Locate the damping adjustment knob at the top of your front coilovers. This can be turned to fine tune your ride quality & handling.
- ⓘ CorkSport coilovers come shipped 8 clicks from full soft. We recommend driving first and adjusting from there
- Turn the knob clockwise for a stiffer more sporty ride
- Turn the knob counter-clockwise for a softer more comfortable ride
- ⚠ Do not force the knob to turn past its softest or firmest setting. Doing so may damage the internal valving and cause the adjustment needle to get stuck. The result will be a free spinning adjustment knob.

Step 42 — Rear Coilover Ride Height Adjustment Notes



- i The CorkSport Coilovers are set to an approximate lowering spring ride height during packaging. If you would like to adjust your coilovers to a different ride height, carefully follow the following steps.
- i It will typically take 50+ miles of driving before the coilover settle to their final ride height.
- ! With the shocks separate from the spring, the shock length must be adjusted whenever ride height is changed to ensure correct ~10-15mm spring preload. Failure to do so may result in noises, poor ride, and/or damage.
- ! It is the customer's responsibility to make sure no damage will occur to their vehicle when driving at extremely low ride heights.
 - We recommend a suspension alignment after any ride height changes.
- ! There is a obvious gap in the threads of the coilover. This gap in the threads is the mark for **maximum length** of the shock. The lower mounting body of the shock **MUST** cover this mark to ensure safe operation
 - Gap in the threads shown in the second image.

Step 43 — Rear Coilover Ride Height Adjustment Part 1



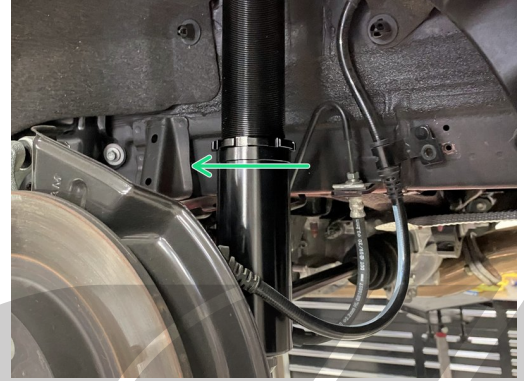
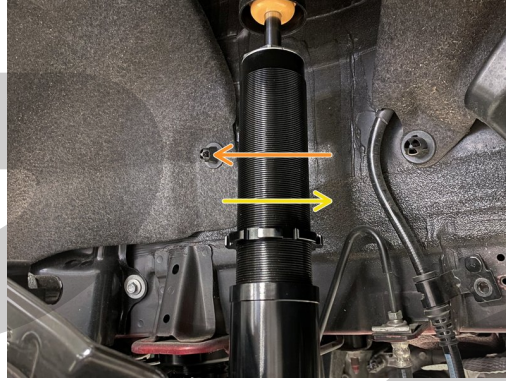
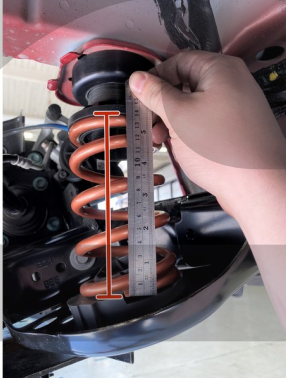
- Jack up the rear of your vehicle and remove the rear wheels as shown in Step 19 of these instructions
- Measure the distance between the spring seat and the chassis of the vehicle as shown (where the height adjuster is mounted). This comes from CorkSport set to ~50mm as shown
- Using the spanner wrenches in your kit, loosen the ride height locking ring from the spring perch.
 - Hold the spring perch in a clockwise direction with the larger spanner wrench.
 - Turn the locking ring in a counter-clockwise direction with the smaller spanner wrench.
- Locate the shock length locking ring.
- Loosen the shock length locking ring using the smaller spanner wrench that comes in your kit. Turn the spanner wrench counter-clockwise to loosen the ring. Spin it up a few turns to allow for adjustment.
- **i** Optionally, you can remove the shock completely from the torsion beam as shown in **Step 22**. It is easiest to adjust ride height when the shock is removed as this takes the tension off the spring

Step 44 — Rear Coilover Ride Height Adjustment Part 2



- Turning the spring seat counter-clockwise will decrease ride height.
- Turning the spring seat clockwise will increase ride height
- Once you think you are happy with your adjustment, bring the ride height locking ring back flush to the spring seat.
- Re-measure the distance between the spring seat and the spring seat mount as shown
 - ⓘ The ride height adjustment in the rear is approximately 1 to 1.2. So 10mm shorter in this distance will be approximately 12mm lower ride height.
- Once happy with height change, secure the ride height locking ring to the spring seat. Hold the spring seat in a counter-clockwise direction and tighten the locking ring against it in a clockwise direction. It just needs to be hand tight plus a slight turn with the spanner wrench.
 - ⓘ Over-tightening the locking collar will make it much more difficult to adjust the coilovers later.

Step 45 — Rear Coilover Ride Height Adjustment Part 3

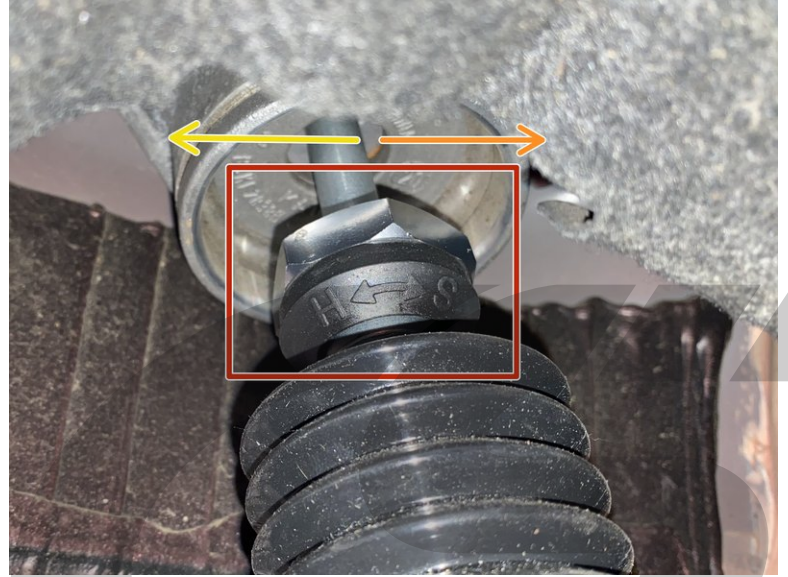


- Repeat Steps 43 and 44 on the other rear spring seat coilover before continuing.
- If removed, reconnect the shock to the torsion beam. This is shown in Step 33.
- With the suspension hanging (no jack holding anything up), measure the length of the spring as shown. For proper spring pre-load, spring length should measure ~140mm (5.5").
- To correct spring pre-load, you will need to adjust shock length.
 - If your measurement was larger than 140mm, you will need to shorten the shock by turning it clockwise.
 - If your measurement was smaller than 140mm, you will need to lengthen the shock by turning it counter-clockwise.
- Adjust the shock length as needed until the spring measures ~140mm (5.5").
- Once happy with spring length, secure the shock length locking ring. It just needs to be hand tight plus a slight turn clockwise with the spanner wrench.

Step 46 — Rear Coilover Ride Height Adjustment Part 4

- Repeat Step 45 on the other rear coilover shock before reinstalling the wheels and checking your ride height.
- Repeat the ride height adjustment procedure shown in Steps 42-45 as necessary until desired ride height is achieved.

Step 47 — Rear Coilover Damping Adjustment



- i CorkSport coilovers come shipped 8 clicks from full soft. We recommend driving first and adjusting from there
- Locate the damping adjuster near the top of your rear coilover shock. It looks like a large hex nut. You will likely need to jack up your vehicle to access this adjustment. This can be turned to fine tune your ride quality & handling.
- Turn the knob counter-clockwise for a softer more comfortable ride (in the "S" direction)
- Turn the knob clockwise for a stiffer more sporty ride (in the "H" direction)
- ⚠ Do not force the knob to turn past its softest or firmest setting. Doing so may damage the internal valving and cause the adjustment needle to get stuck. The result will be a free spinning adjustment knob.

Step 48 — Installation Complete



- This completes your installation of the CorkSport Performance Coilovers!
- ⓘ Listen for any loud noises upon first drive. If any are present, inspect the suspension.
- ⓘ Added NVH (noise, vibration, & harshness) including suspension noise at low speeds and rougher ride is normal.
- Contact us with any questions or concerns at sales@corksport.com or (360) 260-2675.
- Please leave a review here: <https://corksport.com>
- Share your experience using #CorkSport on Instagram, Facebook, and Twitter.