VW Atlas Lift Kit
Installation Instructions - Click HERE to Shop

Skill Level
2 - Moderate

Some Experience Recommended











Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

Standard Automotive Tools

- **Protecta-Sockets (for lug nuts)** ..... ES#2221243
- ⅜" Drive Ratchet ..... ES#2765902
- ⅜" Drive Torque Wrench ..... ES#2221245
- ⅜" Drive Deep and Shallow Sockets ..... ES#2763772
- ⅜" Drive Extensions ..... ES#2804822
- **Hydraulic Floor Jack** ..... ES#2834951
- **Torx Drivers and Sockets** ..... ES#11417/8
- **½" Drive Deep and Shallow Sockets** ..... ES#2839106
- **½" Drive Ratchet**
- **½" Drive Extensions**
- **½" Drive Torque Wrench** ..... ES#2221244
- **½" Drive Breaker Bar** ..... ES#2776653
- Bench Mounted Vise
- Crows Foot Wrenches
- Hook and Pick Tool Set ..... ES#2778980

Required For This Install

- ¼" Drive Ratchet ..... ES#2823235
- ¼" Drive Deep and Shallow Sockets ..... ES#2823235
- ¼" Drive Extensions ..... ES#2823235
- Plier and Cutter Set ..... ES#2804496
- **Flat and Phillips Screwdrivers** ..... ES#2225921
- **Jack Stands** ..... ES#2763355
- Ball Pein Hammers
- **Pry Bar Set** ..... ES#1899378
- Electric/Cordless Drill
- Wire Strippers/Crimpers
- Drill Bits
- Punch and Chisel Set
- Hex Bit (Allen) Wrenches and Sockets ..... ES#11420
- Thread Repair Tools ..... ES#1306824
- **Open/Boxed End Wrench Set** ..... ES#2765907

Available On Our Website

Specialty Tools

- **Spindle Housing Spreader** ..... ES#2918793
- **Triple Square Socket Set** ..... ES#1910125

INSTALLATION NOTES

- **RH** refers to the ***passenger side*** of the vehicle.
- **LH** refers to the ***driver side*** of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety, please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- Whether lifting a vehicle using an automotive lift or a hydraulic jack, be sure and utilize the factory specified lift points.
- Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- **ALWAYS** support the vehicle with jack stands.
- **ALWAYS** read and follow all safety information and warnings for the equipment you are using.

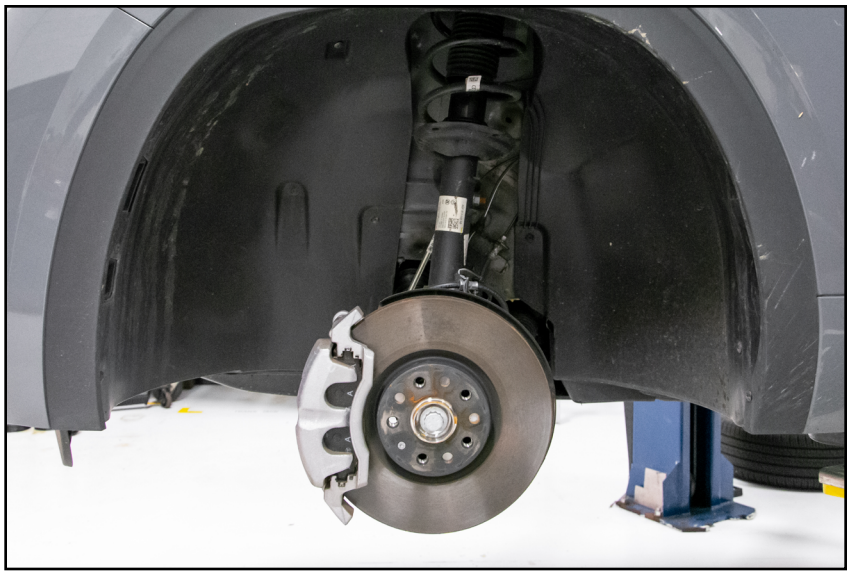


NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.

REMOVING THE STOCK STRUT ASSEMBLY

Step 1: Protecta-Sockets & Breaker Bar

Safely lift and support the vehicle and remove all four wheels.



Step 2: 10mm Wrench

Remove the screw (circled in **RED**) which secures the brake line bracket to the front of the spindle.



REMOVING THE STOCK STRUT ASSEMBLY

Step 3: 18mm Wrench, M6 Triple Square Socket & Ratchet

Disconnect the sway bar end link from each front strut housing. Use an 18mm wrench to loosen and remove the nut (circled in **RED**) while holding the link stud in place with an M6 triple square socket.

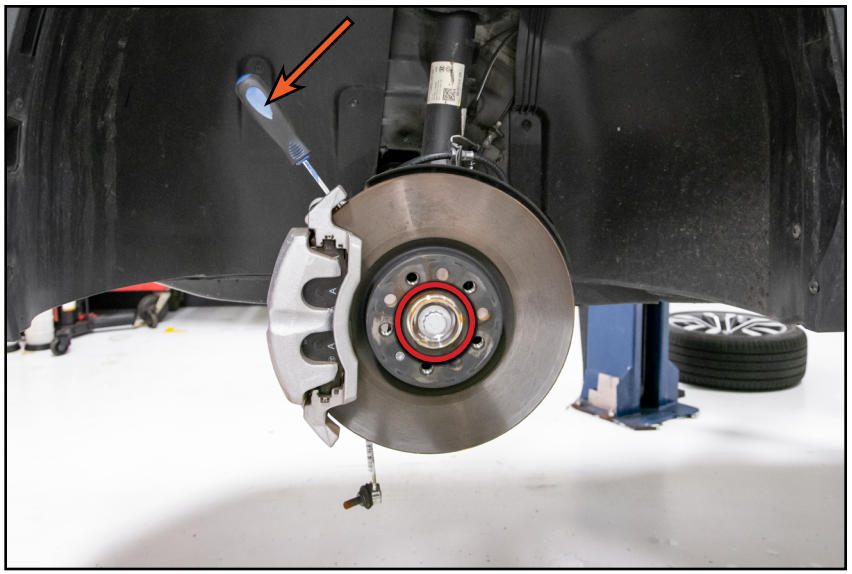


TECH TIP

Spray the nuts with penetrating oil and allow the oil to soak in before attempting to remove them.

Step 4: 24mm 12-Point Socket & Breaker Bar

Loosen and remove each axle bolt (circled in **RED**) as shown.



TECH TIP

Placing a large screwdriver (arrow) into the rotor fins can help break the axle bolt free. As you begin to loosen the bolt the screwdriver will be wedged against the caliper, preventing the hub from rotating.

REMOVING THE STOCK STRUT ASSEMBLY

Step 5: 18mm Wrench, 14mm Triple Square Socket & Ratchet

Counterhold the pinch bolt still while you remove the nut (arrow), then slide the pinch bolt out.



Step 6: 10mm, 16mm Socket & Ratchet

Loosen and remove the three lower ball joint nuts (circled in **RED**), then remove the nut (arrow) which secures the ride height sensor, if equipped.



REMOVING THE STOCK STRUT ASSEMBLY

Step 7: 16mm Socket & Ratchet

Pry the control arm downward and swing the spindle housing outward, carefully sliding the axle free from the spindle housing and out of the way.

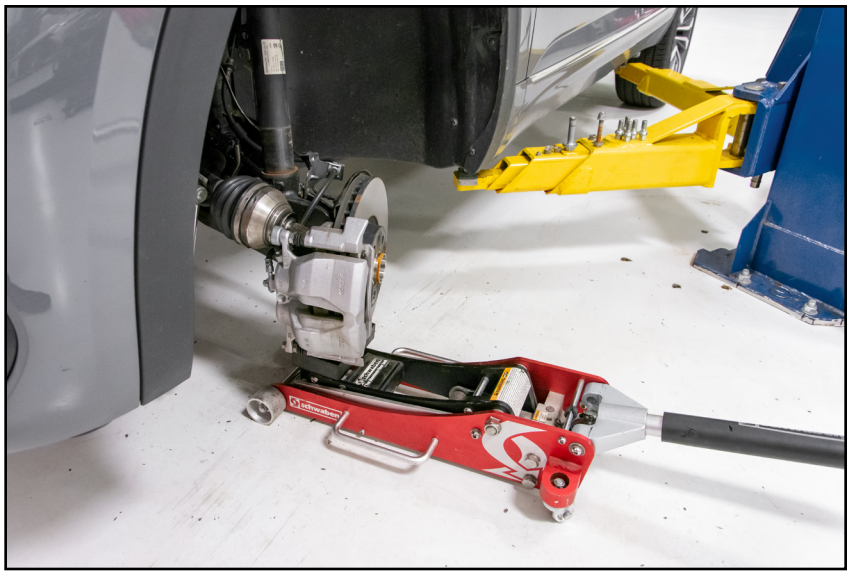


NOTE

The control arm must sit ABOVE the ball joint (as shown) so that we can lower the spindle housing far enough to remove the strut assembly.

Step 8: Floor Jack, Spindle Housing Spreader Tool & Ratchet

Carefully support the spindle housing from below with a floor jack as shown. Insert the spindle housing spreader tool (ES#3894) into the slot in the back of the spindle housing and rotate the tool to spread it apart, freeing the strut body.

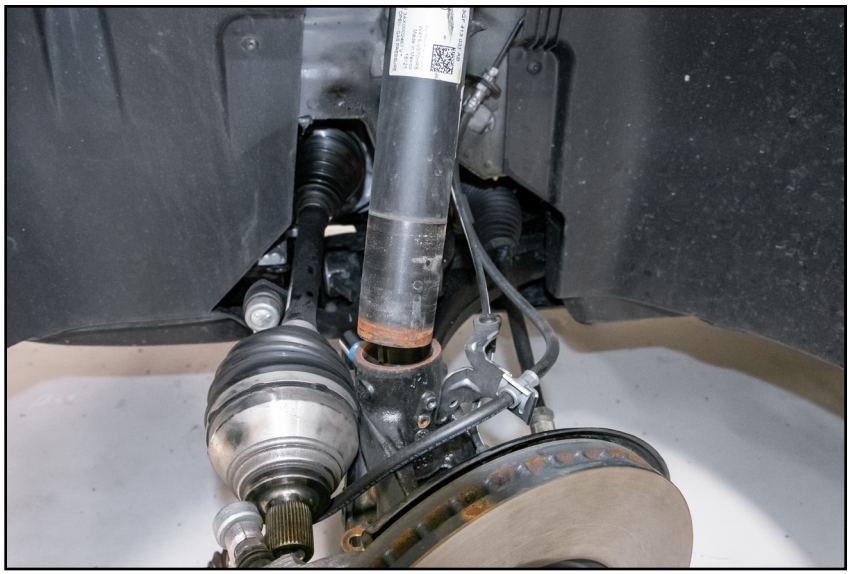


REMOVING THE STOCK STRUT ASSEMBLY

Step 9:

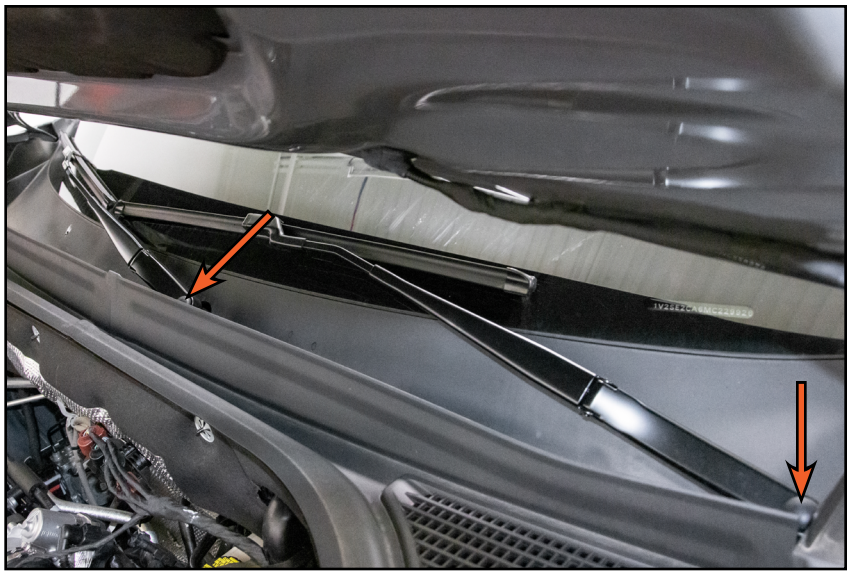
The spindle housing is only being held in place by the strut body and the jack. It MUST be properly supported as you lower the jack, otherwise the spindle housing could fall and sever the brake lines and cause significant damage to the spindle.

Slowly lower the jack until the strut slides free from the spindle housing as shown.



Step 10: 13mm Socket & Ratchet

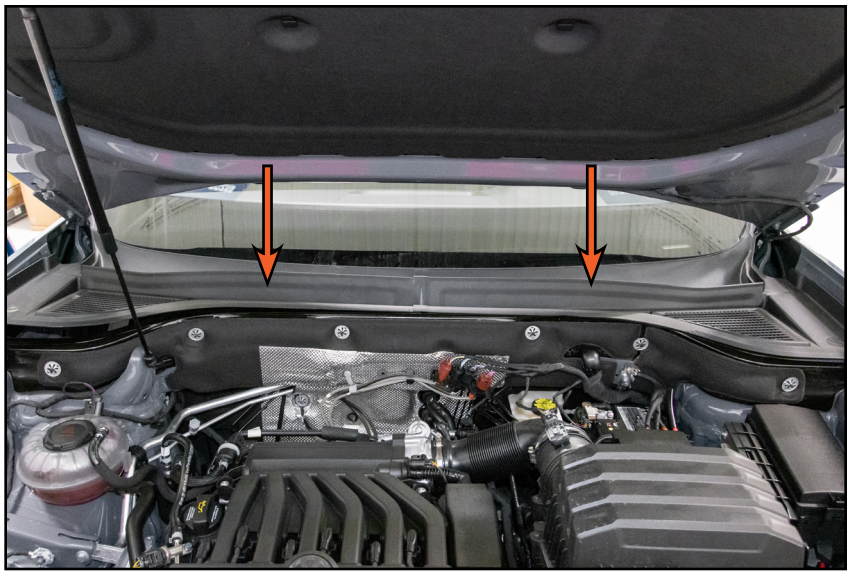
Pry the plastic caps free (arrows) and remove the nuts, then remove the wipers from the vehicle.



REMOVING THE STOCK STRUT ASSEMBLY

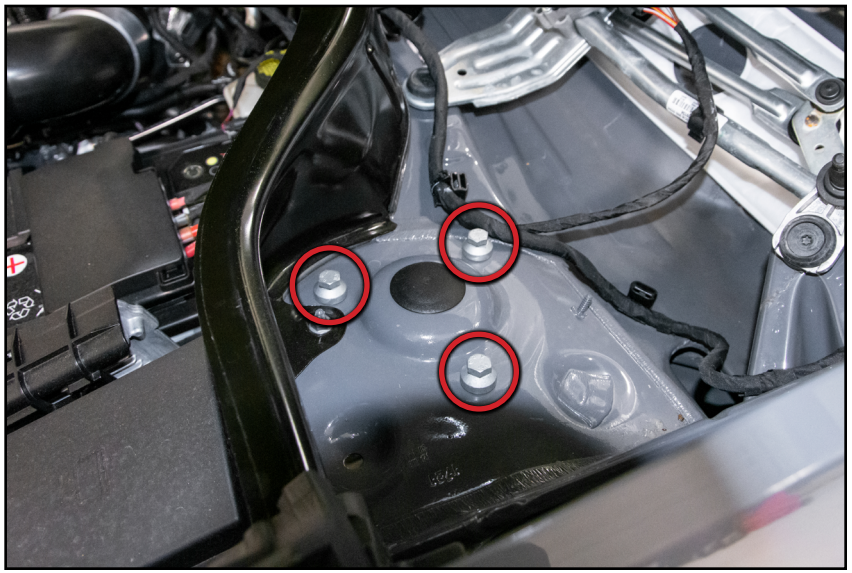
Step 11:

Pull the rubber weather strip free, then carefully remove the rain trays (arrows).



Step 12: 13mm Socket & Ratchet

Support the strut from below and remove the three bolts (circled in **RED**) to free it from the vehicle. Carefully guide the strut assembly out of the fender well.



INSTALLING THE FRONT LIFT KIT

Step 1:

Locate the two arrows (highlighted in **GREEN**) on the upper strut mount, then install the provided alignment dowels into the holes (circled in **YELLOW**) on either side (photo 1). Slide the lift spacer onto the alignment dowels, then slide the rubber isolator on top (photo 2).

NOTE

The holes in the strut mount are not equally spaced, so the lift spacer and rubber isolator can only be installed one way.

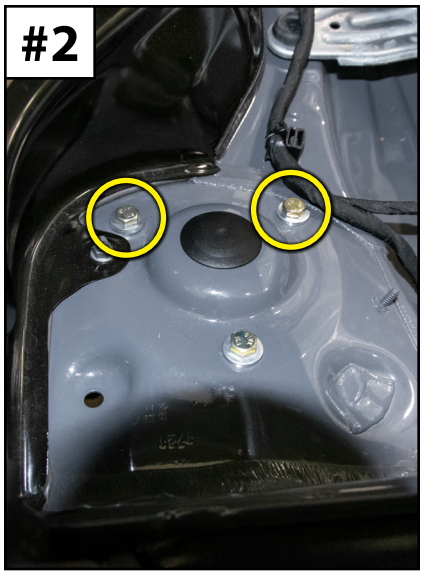




Step 2: 13mm Socket & Torque Wrench

Lift the strut assembly into the vehicle so that the two alignment dowels slide into the two inboard holes in the strut tower, then install one of the provided M8 x 60mm bolts (circled in **YELLOW**) to secure the strut up into place (photo 1). One at a time, remove the alignment dowels and install the provided bolts (circled in **YELLOW**) in their place (photo 2). Torque the bolts to 15 Nm (11 Ft-lbs) + 90 degrees.





INSTALLING THE FRONT LIFT KIT

Step 3:

Slowly jack up the spindle housing and guide the strut body into the spindle.

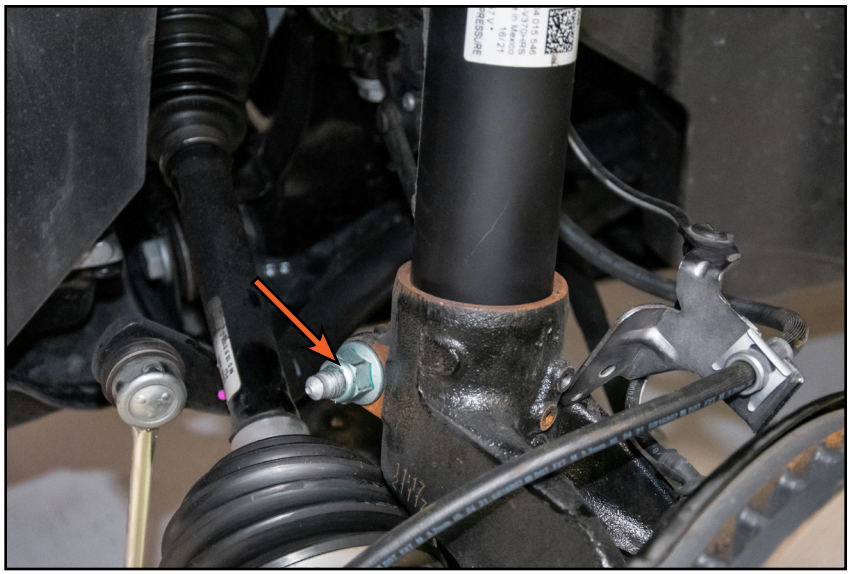


NOTE

There is an alignment tab on the strut body which must align with the slot on the back of the spindle housing for proper installation.

Step 4: 18mm Socket, 14mm Triple Square Socket & Torque Wrench

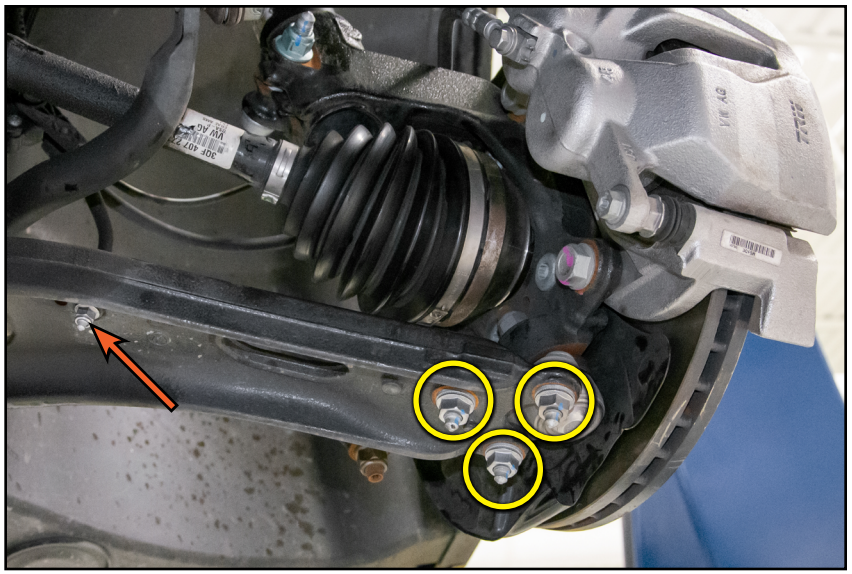
Jack up the strut until it is fully inserted into the spindle housing as shown in the photo on the right, then remove the spindle housing spreader tool and replace the pinch bolt and nut (arrow) and torque it to 70 Nm (52 Ft-lbs) + 180 degrees.



INSTALLING THE FRONT LIFT KIT

Step 5: 10mm Socket, 16mm Socket & Torque Wrench

Slide the axle back into the spindle, then slide the ball joint studs through the control arm. Replace the nuts (circled in **YELLOW**) and torque them to 40 Nm (30 Ft-lbs) + 45 degrees. Reinstall the nut (arrow) which secures the ride height sensor, if equipped.



Step 6: 18mm Wrench, M6 Triple Square Socket & Torque Wrench

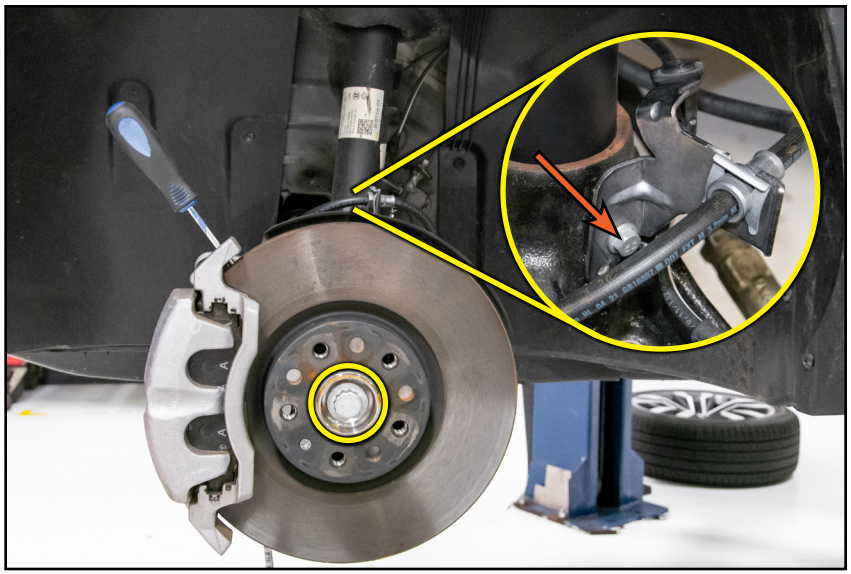
Slide the end link back through the mounting arm on the strut, then torque the nut to 40 Nm (30 Ft-lbs) + 60 degrees.



INSTALLING THE FRONT LIFT KIT

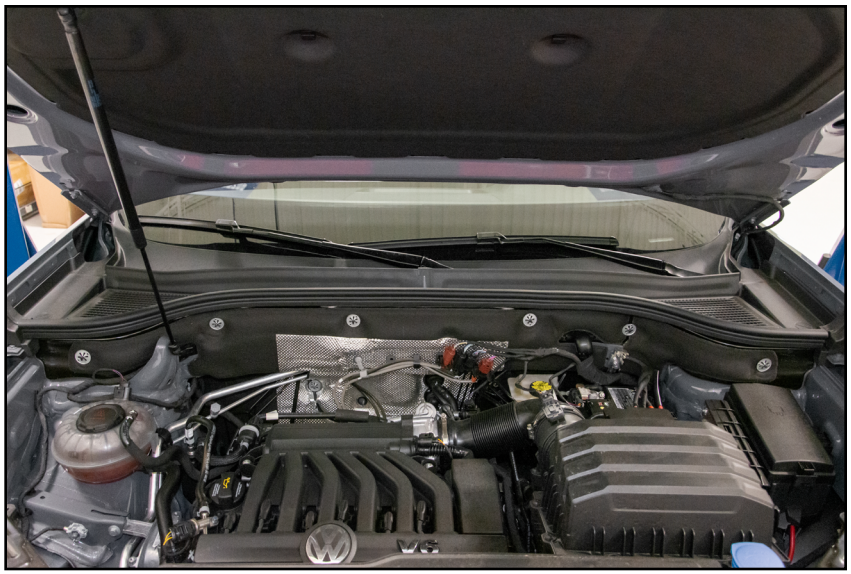
Step 7: 24mm 12-Point Socket & Torque Wrench

Replace the axle bolt and torque it to 200 Nm (148 Ft-lbs) + 180 degrees.



Step 8: 13mm Socket & Ratchet

Reinstall the rain trays, rubber weather seal, and wipers as shown.

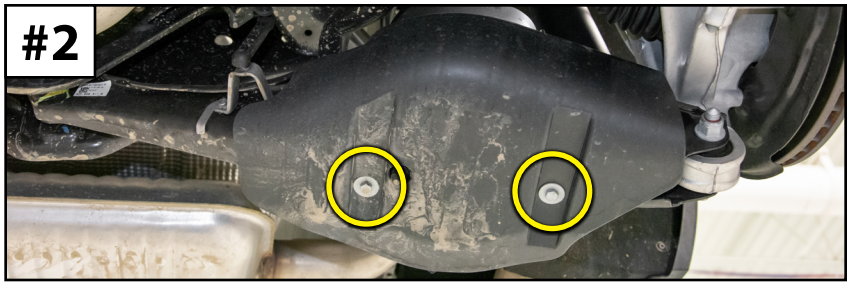


REMOVE THE REAR SPRING

Step 1: 10mm Socket & Ratchet

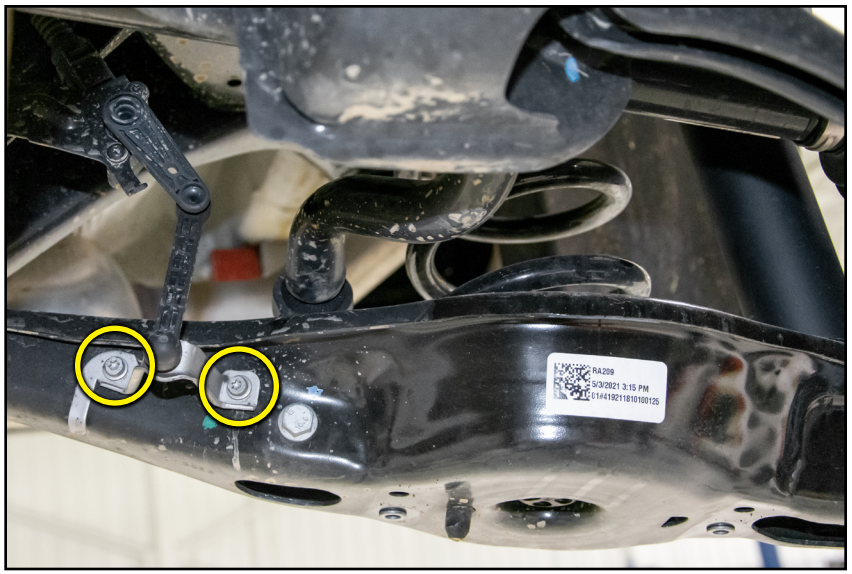
To remove the plastic lower control arm covers, pry up on the two push rivets (arrows) to release it from the top (photo 1), then remove the two bolts (circled in YELLOW) to release it from the bottom (photo 2). Set the covers aside.





Step 2: T25 Torx

If equipped, remove the two screws (circled in YELLOW) which secure the ride height sensor to the lower control arm.



REMOVE THE REAR SPRING

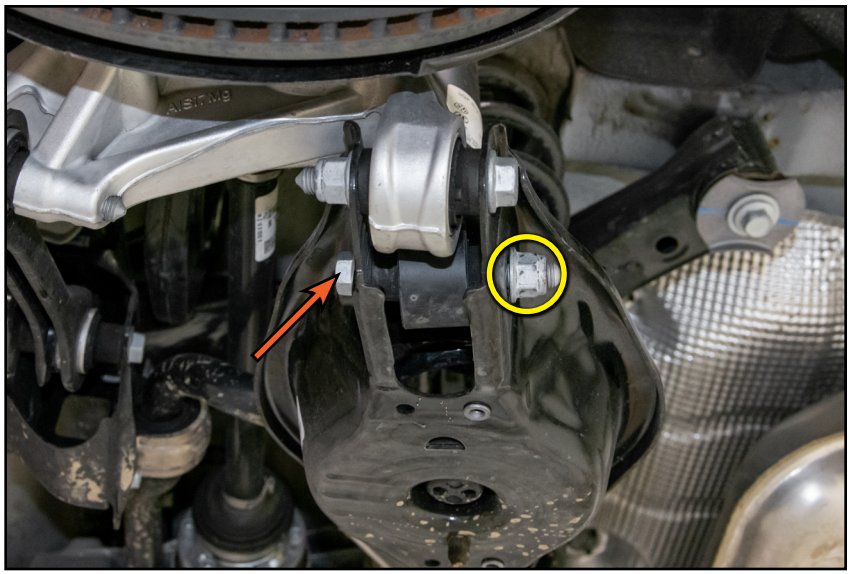
Step 3: 13mm Wrench, 13mm Socket & Ratchet

Remove the nut (circled in **YELLOW**), then remove the sway bar end link bolt (arrow).



Step 4: 18mm Wrench, 18mm Socket & Ratchet

Remove the nut (circled in **YELLOW**), then remove the lower shock bolt (arrow).



REMOVE THE REAR SPRING

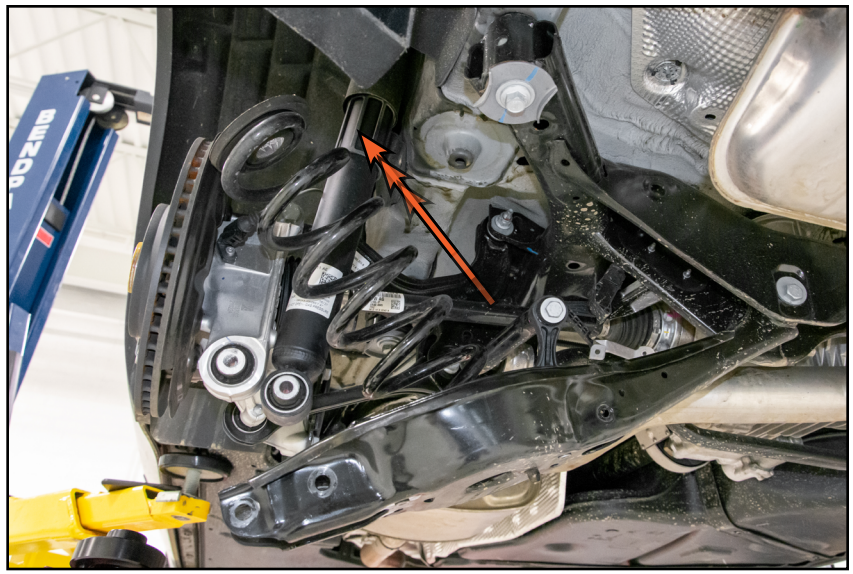
Step 5: 18mm Wrench, 18mm Socket & Ratchet

Install a jack underneath the lower control arm, remove the nut (circled in **YELLOW**), then remove the lower control arm bolt (arrow).



Step 6:

Slowly lower the jack to release the tension in the spring, then slide the spring out from the vehicle as shown.



REMOVE THE REAR SPRING

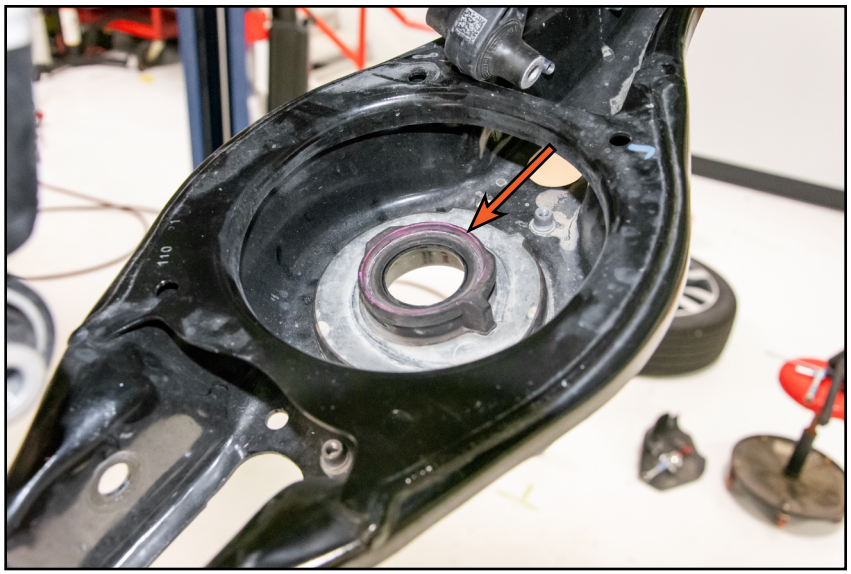
Step 7:

Pop the plastic lower spring isolator (arrow) free from the lower control arm.



Step 8:

Pull the rubber lower spring isolator (arrow) free from the control arm and set it aside.



INSTALLING THE REAR LIFT KIT

Step 1:

Carefully guide the lift spacer and new rubber isolator down into the control arm as shown, ensuring the holes in the two stay aligned.



Step 2: 6mm Hex (Allen) Socket & Torque Wrench

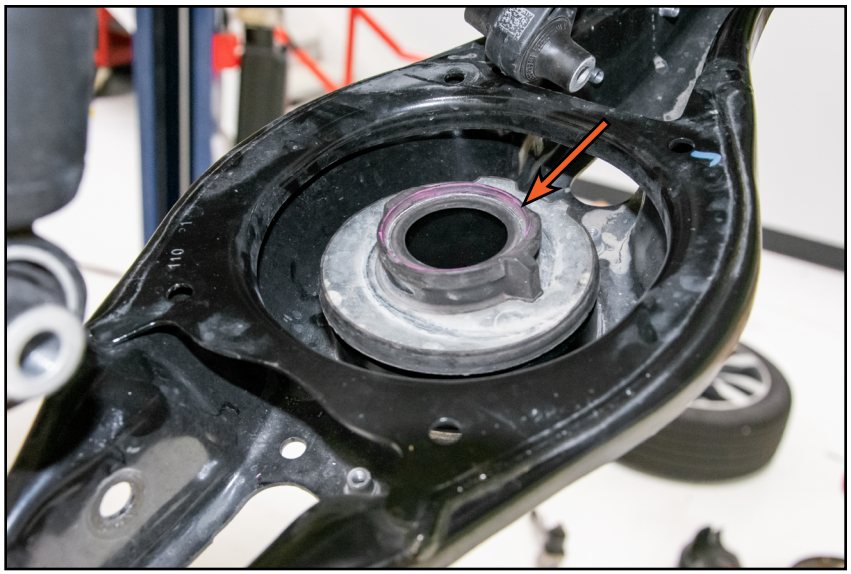
Slide the provided M10 x 16mm bolt with nylon washer up through the hole in the bottom of the control arm and through the holes in the isolator and spacer. Torque the bolt to 30 Nm (22 Ft-lbs).



INSTALLING THE REAR LIFT KIT

Step 3:

Reinstall the OE rubber isolator (arrow) onto the lift spacer, ensuring the alignment “nub” slides into the allotted hole in the spacer.



Step 4:

Raise the jack until you can slide the shock and lower control arm bolts (circled in **YELLOW**) into place.



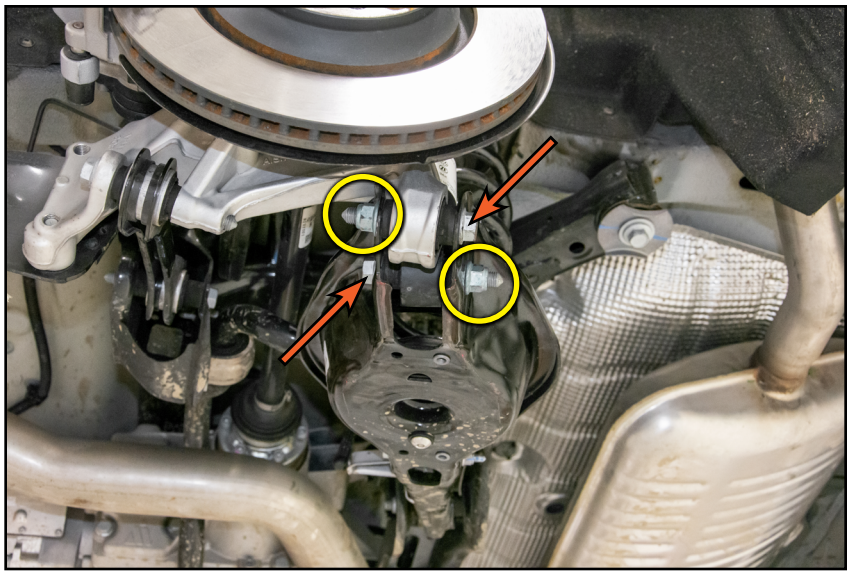
Be careful not to lift the vehicle off of the lift pads or jack stands. The added tension on the spring from the lift spacer may make it difficult to get the holes in the control arm to align with the shock/spindle. A pry bar can be used to pull the spindle downward, or a spring compressor can be used to help relieve some tension.



INSTALLING THE REAR LIFT KIT

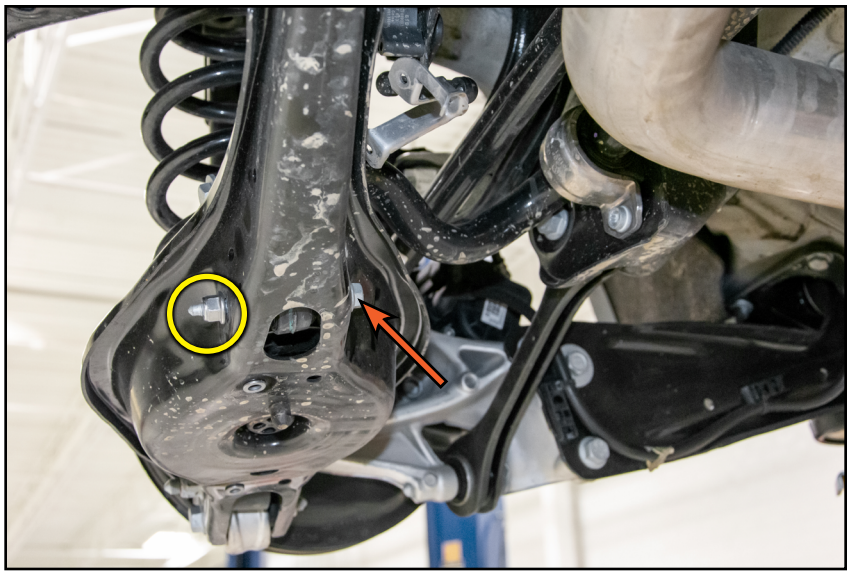
Step 5: 18mm Wrench, 18mm Socket & Torque Wrench

Counterhold the bolt (arrows), then install and torque each nut (circled in **YELLOW**) to 70 Nm (52 Ft-lbs) + 180 degrees at ride height.



Step 6: 13mm Wrench, 13mm Socket & Torque Wrench

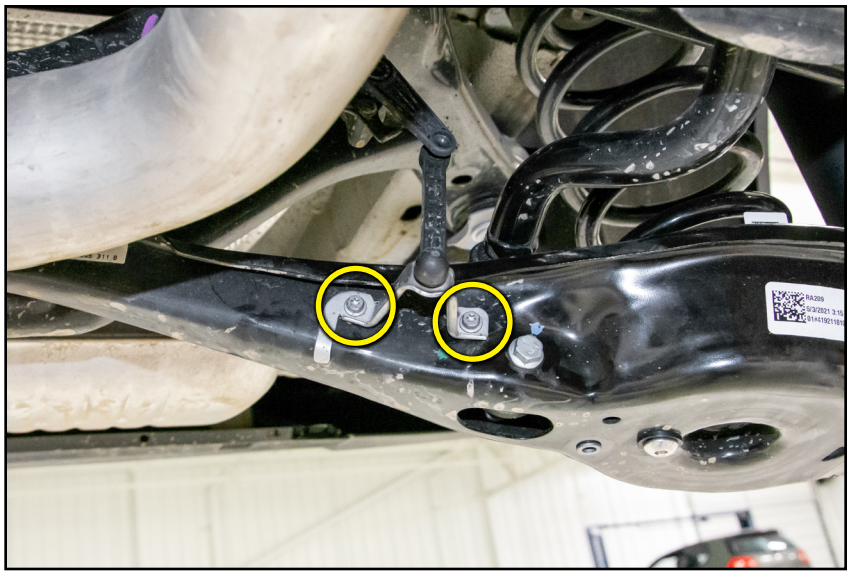
Replace the bolt (arrow) which secures the end link to the lower control arm, then install and torque the nut (circled in **YELLOW**) to 20 Nm (15 Ft-lbs) + 180 degrees.



INSTALLING THE REAR LIFT KIT

Step 7: T25 Torx

If equipped, reinstall screws (circled in **YELLOW**) which secure the ride height sensor bracket to the lower control arm.



Step 8:

Reinstall the lower control arm cover.



Congratulations, your installation is complete!

TORQUING TIPS

Torque to Yield or "Stretch" Bolts

Many bolts will have a torque specification listed in the format - xx Nm (xx Ft-lbs) + xx degrees. These bolts are torque to yield bolts, commonly referred to as "stretch" bolts. The correct procedure for torquing these bolts is:

Stage One - Torque the bolt(s) to the initial Nm or Ft-lb specification. If there is more than one, be sure to torque them in the correct sequence.
Stage Two - Tighten or "stretch" the bolt(s) the additional specified number of degrees. If there is more than one, be sure to follow the correct sequence.

Note - Some bolts may have two or more stages of torquing before the final stage of "stretching" the bolts.

When tightening more than one bolt in a specified sequence, be sure to mark each fastener with paint ***immediately*** after performing the final stage or "stretching" of the bolts. This will ensure that you keep track of which bolts have already been "stretched".

All Torque to Yield bolts should only be used once and should be replaced each time they are removed. If they are reused, they will not be able to achieve the proper clamping force with the specified torque.

Lubrication

Torque specifications are always listed for a dry fastener (***no*** lubrication) unless specified otherwise.

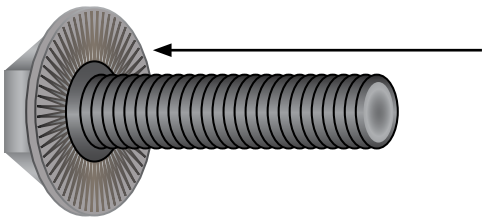
Some fasteners require lubrication on the threads -or- on the contact surface while torquing. These fasteners will be listed with the specific location and type of lubrication required. Always follow manufacturers recommendations exactly.

Lubricating a fastener that is intended to be installed dry and then torquing it to factory specifications will increase the clamping force and stress on the fastener and components, which can result in damage or failure.

Do not lubricate the threads of any fastener unless it is specifically recommended by the manufacturer.

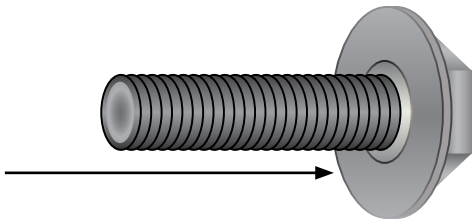
Ribbed vs. Non-Ribbed Bolts

Ribbed and Non-Ribbed bolts in the same location generally require a different torque specification.



A ribbed bolt is identified by the ribs on the contact surface

A non-ribbed bolt is identified by the smooth contact surface



TORQUE SPECIFICATIONS

Front Upper Strut Mount Bolts ..... 15 Nm (11 Ft-lbs) + 90 degrees ..... (Page 11)
Spindle Housing Pinch Bolt ..... 70 nm (52 Ft-lbs) + 180 degrees ..... (Page 12)
Ball Joint Nuts ..... 40 Nm (30 Ft-lbs) + 45 degrees ..... (Page 13)
Front Sway Bar End Link Nuts ..... 40 Nm (30 Ft-lbs) + 60 degrees ..... (Page 13)
Axle Bolt ..... 200 Nm (148 Ft-lbs) + 180 degrees ..... (Page 14)
Rear Lower Control Arm Bolt ..... 70 Nm (52 Ft-lbs) + 180 degrees ..... (Page 21)
Rear Lower Shock Bolt ..... 70 Nm (52 Ft-lbs) + 180 degrees ..... (Page 21)
Rear Sway Bar End Link Bolt ..... 20 Nm (15 Ft-lbs) + 180 degrees ..... (Page 21)

Your Lift Kit installation is complete!



These instructions are provided as a courtesy by ECS Tuning

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