

VW 2006+ Multi-Link Poly Rear Control Arm Bushing Kit Installation Instructions













INTRODUCTION

The Project:

Today we are going to show install of our ECS Tuning Poly Rear Control Arm Bushing Kit for VW 2006+ independent rear suspensions. Our polyurethane bushings are finished in an enticing red color and feature a 90a durometer making them an attractive and durable replacement for your worn rubber bushings. The added rigidity of the poly helps keep your wheels in line and firmly planted on the asphalt, even in the most demanding circumstances. Our bushings are available pre-installed into high-quality replacement arms for your convenience, with each arm boasting our logo. These control arm bushings sets are sold individually, or as a complete kit. Our bushings are also available separately if you wish to press them in yourself.

ECS Difficulty Gauge



The installation difficulty will vary depending on which combination of control arms you plan on installing. Installation of these arms is fairly straight forward, however, because of the tight spaces lining things up and properly torquing everything down can be a little tricky. Don't worry, we will guide you through it. Installation of the poly spindle bushings can prove to be a challenge so before you begin, ensure you have the right tools on hand to finish the job. Make sure you read these instructions completely before you begin, and once you've gathered your supplies you're ready to jump into it! Thank you for choosing ECS Tuning, we appreciate your business!



TABLE OF CONTENTS

Kit Contents	<u>pg.4</u>
Required Tools and Equipment	<u>pg.6</u>
Shop Supplies and Materials	<u>pg.7</u>
nstallation and Safety Information	<u>pg.8</u>
nitial Removal Steps	pg.9
Project Overview	pg.10
Removing the Original Trailing Arms	pg.11
nstalling the New Trailing Arms	pg.14
Removing the Original Upper Control Arms	pg.18
nstalling the New Upper Control Arms	pg.20
Removing the Original Toe Arms	pg.24
nstalling the New Toe Arms	pg.27
Removing the Original Lower Control Arms	pg.30
nstalling the New Outboard Bushings	pg.32
nstalling the New Lower Control Arms	<u>pg.36</u>
Final Installation Steps	pg.38
Torquing Tips	pg.39
Torque Specifications	pg.40
Schwaben Tools	pg.41



AVAILABLE KITS



Adjustable Toe Arm Set - ES#3047793



MK5/MK6 Trailing Arm Set - ES#3545409



Lower Control Arm Set - ES#3545407



Upper Control Arm Set - ES#3545408



Tiguan/B6 Passat Trailing Arm Set - ES#3617502



Complete Kit - ES#3621861/ES#3624306



HARDWARE KIT CONTENTS

Control Arm Hardware Installation Kit - Available On Our Site | Toe Arm Hardware Kit - Available In Our Site







REQUIRED TOOLS

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

Standard Automotive Tools

Required For This Install

Available On Our Website

Protecta-Sockets (for lug nuts) ES#2221243	• 1/4" Drive Ratchet <u>ES#2823235</u>
• 3/8" Drive Ratchet ES#2765902	• 1/4" Drive Deep and Shallow Sockets ES#2823235
• 3/8" Drive Torque Wrench ES#2221245	• ¼" Drive Extensions <u>ES#2823235</u>
• 3/8" Drive Deep and Shallow Sockets ES#2763772	Plier and Cutter Set <u>ES#2804496</u>
• 3/8" Drive Extensions <u>ES#2804822</u>	• Flat and Phillips Screwdrivers <u>ES#2225921</u>
Hydraulic Floor Jack ES#240941	• Jack Stands <u>ES#2763355</u>
• Torx Drivers and Sockets <u>ES#11417/8</u>	Ball Pein Hammers
• ½" Drive Deep and Shallow Sockets ES#2839106	• Pry Bar Set <u>ES#1899378</u>
• ½" Drive Ratchet	 Electric/Cordless Drill
• ½" Drive Extensions	 Wire Strippers/Crimpers
• ½" Drive Torque Wrench ES#2221244	• Drill Bits
• ½" Drive Breaker Bar <u>ES#2776653</u>	 Punch and Chisel Set
Bench Mounted Vise	 Hex Bit (Allen) Wrenches and Sockets
Crows Foot Wrenches	• Thread Repair Tools <u>ES#1306824</u>
Hook and Pick Tool Set <u>ES#2778980</u>	Open/Boxed End Wrench Set <u>ES#2765907</u>

Specialty Tools

- **Spring Compressor**.....<u>ES#2918793</u> or <u>ES#2951935</u>
- Die Grinder



SHOP SUPPLIES AND MATERIALS

Standard Shop Supply Recommendations: We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser Click Here
- Pig Mats for protecting your garage floor and work area from spills and stains Click Here
- Spray detailer for rapid cleaning of anything that comes into contact with your paint such as brake fluid Click Here
- Micro Fiber Towels for cleaning the paint on your car Click Here
- Latex Gloves for the extra oily and dirty jobs Click Here
- Medium and High Strength Loctite Thread lock compound to prevent bolts from backing out Click Here
- Anti-Seize Compound to prevent seizing, galling, and corrosion of fasteners Click Here
- Aerosol Brake/Parts Cleaner for cleaning and degreasing parts
- Shop Rags used for wiping hands, tools, and parts
- Penetrating oil for helping to free rusted or stuck bolts and nuts
- Mechanics wire for securing components out of the way
- Silicone spray lube for rubber components such as exhaust hangers
- Paint Marker for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties for routing and securing wiring harnesses or vacuum hoses
- Electrical tape for wrapping wiring harnesses or temporary securing of small components



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.



INITIAL REMOVAL STEPS

Spring Compressor Step 1:

Safely raise and support the vehicle and remove the rear wheels, then compress and remove the rear coil springs.





Locking Pliers, 17mm Socket & Ratchet Step 2:

Unbolt the sway bar link ends from the sway bar and swing them out of the way.





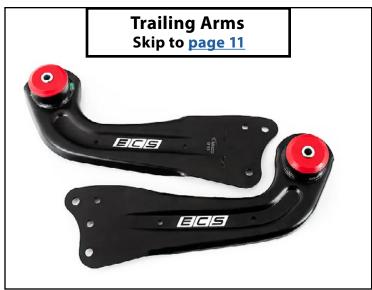
PROJECT OVERVIEW

Once you've completed steps on the previous page, it's time to jump into the actual installation procedure.

The actual installation of these process varies control arms slightly depending on the combination components you have purchased. Don't worry, we will cover each of these combinations in these instructions.

If you purchased any of these components individually refer to the table on the right to jump ahead to the corresponding section.

If you purchased our complete kit, continue to the next page to begin your installation.













REMOVING THE ORIGINAL TRAILING ARMS

Die Grinder Step 1:

Grind off the aluminum push-rivet (arrow) which secures the parking brake cable bracket to the stock trailing arm.



Step 2:

Pop the rivet out of the hole and pull the parking brake cable bracket free from the trailing arm, hanging it out of the way.





REMOVING THE ORIGINAL TRAILING ARMS

Step 3: Locking Pliers, 17mm Socket & Ratchet

Hold the sway bar end link in place while you remove the nut, then pull the end link out of the trailing arm and set it aside.



18mm Socket & Ratchet Step 4:

Remove the two bolts (arrows) which secure the trailing arm to the spindle.



Soak the bolts in penetrating fluid beforehand to help make removal easier.





REMOVING THE ORIGINAL TRAILING ARMS

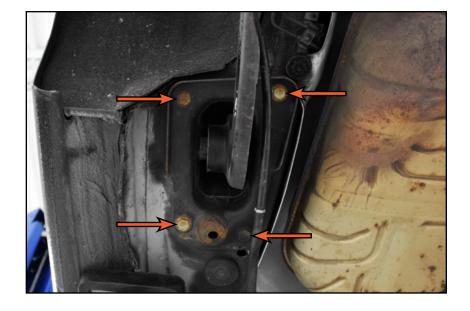
Step 5:

16mm Socket & Ratchet

Remove the four bolts (arrows) securing the trailing arm bracket to the body.



Soak the bolts in penetrating fluid beforehand to help make removal easier.



Step 6:

18mm Socket & Ratchet

Loosen and remove the bolt (arrow) which secures the trailing arm into the bracket.



An impact gun can come in handy for this, but you can clamp the trailing arm into a vise to hold it still while you break the bolt loose.





Step 1:

18mm Socket & Torque Wrench

The ECS trailing arms ARE side-specific, so be sure to install the correct arm into the bracket. Install and tighten the bolt to 90 Nm $(66 \text{ Ft-lbs}) + 90^{\circ}$.



You can clamp the trailing arm into a vise if needed to achieve proper torque on the bolt.



Step 2:

16mm Socket & Ratchet

Lift the trailing arm and bracket back into the body of the vehicle and loosely thread the four bolts.





Step 3:

18mm Socket & Ratchet

Install the two bolts which secure the trailing arm to the spindle. You may have to move the spindle up and down to align the holes in the spindle with the holes in the trailing arm.



Step 4:

16mm Socket & Torque Wrench

Go back and torque the four bracket bolts to 50 Nm (37 Ft-lbs) + 45°.





Step 5:

18mm Socket & Ratchet

Torque the two spindle bolts to 90 Nm (66 Ft-lbs) + 45°.



Step 6:

Reinstall the sway bar end link through the trailing arm and the spindle.





Step 7: 17mm Socket & Torque Wrench

Reinstall the nut onto the end link and tighten it to 45 Nm (33 Ft-lbs).



4mm Hex (allen), 10mm Socket & Ratchet Step 8:

Install the provided push-rivet (arrow) by sliding it through the cable bracket and trailing arm, then drive the core inward to expand the rivet, securing the bracket to the trailing arm.



If you have only purchased our ECS trailing arms, please skip to page 38 for final installation steps. If you purchased the entire upgrade kit, please proceed to the next page to continue with your installation.





REMOVING THE ORIGINAL UPPER CONTROL ARMS

Step 1:

Pull the wheel speed sensor wire (arrow) out of the plastic bracket on the top of the upper control arm.



21mm Wrench, 21mm Socket & Ratchet Step 2:

Hold the bolt which secures the control arm to the spindle in place while you remove the nut.



Soak the bolts in penetrating fluid beforehand to help make removal easier.





REMOVING THE ORIGINAL UPPER CONTROL ARMS

Step 3: 21mm Socket & Ratchet

Remove the spindle bolt by threading it out or tapping it out with a hammer.

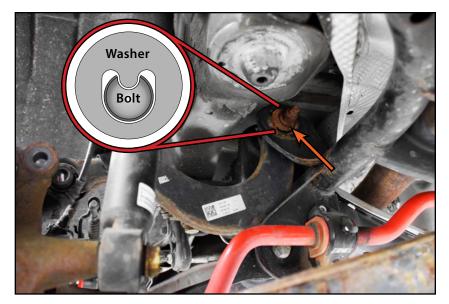


18mm Wrench, 18mm Socket & Ratchet Step 4:

The other end of the control arm is bolted to the subframe (arrow). This bolt has an eccentric washer which aligns with a slot inside the bolt, this is used to adjust alignment angles. Be sure to hold the BOLT still while you loosen and remove the NUT, then slide the eccentric washer off and pull the bolt out.



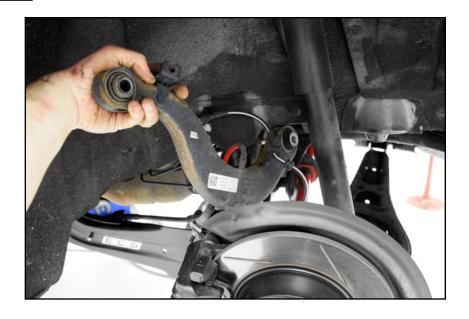
Soak the bolts in penetrating fluid beforehand to help make removal easier.





Step 1:

Wiggle the upper control arm free and carefully guide it out from the vehicle.



Step 2:

Slide the new upper control arm into place.

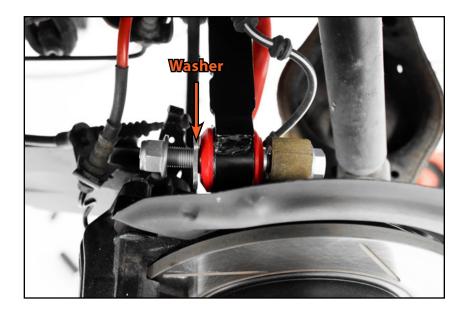




Step 3:

21mm Socket & Ratchet

Install the bolt, washer and nut through the spindle and control arm as shown in the photo on the right.



Step 4:

Slide the eccentric bolt through the subframe and upper bushing so that the threads protrude towards the rear of the vehicle as shown in the photo on the right. You may need to move the control arm up and down to align the holes in order to install this bolt.





Step 5:

18mm wrench 18mm Socket & Torque Wrench

Slide the eccentric washer and nut onto the bolt, then tighten the nut.



These bolts are used for alignment purposes and thus should not be torqued until after a fourwheel alignment has been performed. After proper alignment has been achieved the nuts should be torqued to 95 Nm (70 Ft-lbs).



Step 6:

21mm Wrench, 21mm Socket & Torque Wrench.

Hold the nut still while you tighten the outer bolt to 130 Nm (96 Ftlbs) $+ 180^{\circ}$.





Step 7:

Install the provided wheel speed sensor wire bracket (GREEN) around the control arm as shown.

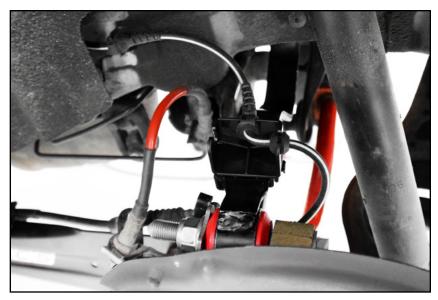


Step 8:

Install the wheel speed sensor wire into the bracket.



If you have only purchased our ECS upper control arms, please skip to page 38 for final installation steps. If you purchased the entire upgrade kit, please proceed to the next page to continue with your installation.





REMOVING THE ORIGINAL TOE ARMS

Step 1: 6mm Hex (Allen) -or- M8 Triple Square

Loosen and remove the bolts (arrows) which secure the sway bar brackets to the subframe.



Step 2:

Carefully lower the sway bar from the vehicle.





REMOVING THE ORIGINAL TOE ARMS

Step 3: 21mm Wrench, 21mm Socket & Ratchet

Loosen and remove the nut and bolt securing the toe arm to the spindle.



Soak the bolts in penetrating fluid beforehand to help make removal easier.

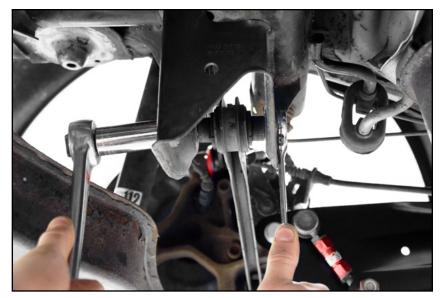


18mm Wrench, 18mm Socket & Ratchet Step 4:

Loosen and remove the nut from the bolt which secures the toe arm to the subframe.



Soak the bolts in penetrating fluid beforehand to help make removal easier.



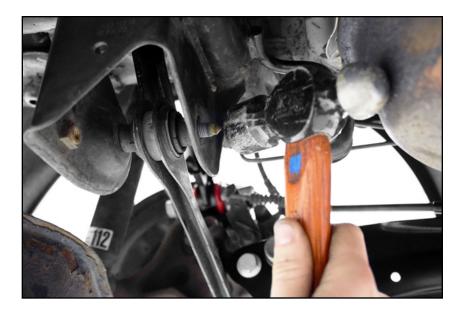


REMOVING THE ORIGINAL TOE ARMS

Step 5:

Hammer

Remove the bolt from the subframe, using a hammer to help dislodge it if needed. Remove the toe arm from the vehicle and set it aside.

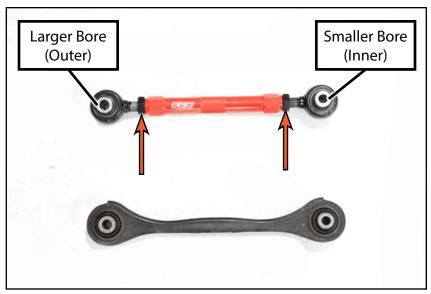


Step 6:

Adjust the new toe arm until the length approximately matches the length of the stock toe arm we removed, then hand tighten the jam nuts (arrows) to ensure the toe arm stays at this length.



These toe arms are directional. The outer bushing, where the toe arm mounts to the spindle, has a 14mm bore whereas than the inner bushing, where the toe arm meets the subframe, has a 12mm bore.





INSTALLING THE NEW TOE ARMS

Step 1:

18mm Socket & Ratchet

Install the nut and bolt through the inner bushing on the toe arm as shown in the photo on the right.

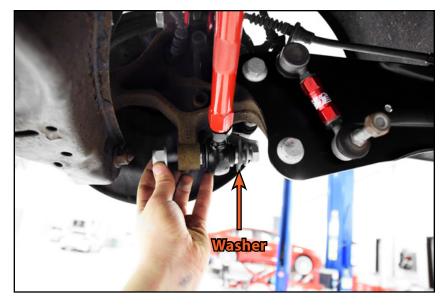


Step 2:

Install the bolt, washer, and nut through the outer bushing on the toe arm as shown in the photo on the right.



If you are having trouble getting the bolt through the opening, you can adjust the length of the toe arm as needed to help make installation of the new bolt easier.





INSTALLING THE NEW TOE ARMS

Step 3: 18mm Wrench, 18mm Socket & Ratchet

Hold the bolt still while you torque the inner toe arm nut to 70 Nm (52 Ft-lbs) + 180°.



Step 4:

21mm Wrench, 21mm Socket & Ratchet



If you have purchased the ECS poly outboard lower control arm bushing set, do not tighten the bolt yet. We will come back to torque them later.

Hold the nut still and torque the outer toe arm bolt to 130 Nm (96 $Ft-lbs) + 180^{\circ}$.





INSTALLING THE NEW TOE ARMS

Step 5:

Tighten down the jam nuts into the body of the toe arm to ensure that they don't move around before a four wheel alignment can be performed.



Step 6:

6mm Hex (Allen) -or- M8 Triple Square

Lift the sway bar back into place and torque the bracket bolts to 25 Nm (18 Ft-lbs) $+ 45^{\circ}$.



If you have only purchased our ECS adjustable toe arms, please skip to page 38 for final installation steps. If you purchased the entire upgrade kit, please proceed to the next page to continue with your installation.





REMOVING THE ORIGINAL LOWER CONTROL ARMS

Step 1: 18mm Wrench, 18mm Socket & Ratchet

Loosen and remove the nut and bolt which secures the lower control arm to the spindle.



Soak the bolts in penetrating fluid beforehand to help make removal easier.



18mm Wrench, 18mm Socket & Ratchet Step 2:

Loosen and remove the nut which secures the control arm to the subframe.



Soak the bolts in penetrating fluid beforehand to help make removal easier.





REMOVING THE ORIGINAL LOWER CONTROL ARMS

Step 3: Hammer

You may find that you will need to use a hammer to dislodge this bolt if it is stuck in place.



Step 4:

On certain vehicles there is not enough clearance to remove the bolt before it contacts the body of the vehicle. If this happens you can swing the bottom of the control arm towards the front of the vehicle (curved arrow in the photo on the right), this should angle the bolt downward far enough to slide it out.



If you have not purchased the ECS poly outboard lower control arm bushing set, skip ahead to page 35.





INSTALLING THE NEW OUTBOARD BUSHINGS

Step 1:

Removing this bushing can be difficult because of the spacial constraints of this spindle. There is only 80mm of total space between the bushing bore and the toe arm mounting point, so before you begin attempting this process, ensure you have the proper tools on hand to fit in this tight space and press out the stock bushing.



21mm Wrench, 21mm Socket & Ratchet Step 2:

In order to gain enough clearance to press out the bushing, remove the nut and bolt securing the toe arm to the spindle.

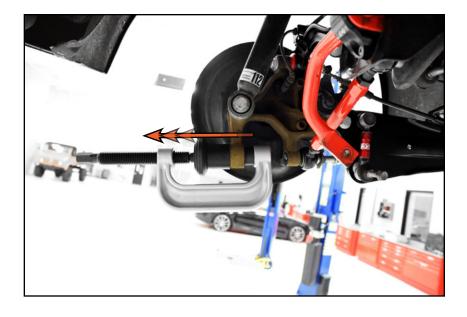




INSTALLING THE NEW OUTBOARD BUSHINGS

Step 3: **Press Tool**

Install your press tool and press out the old bushing. We used a combination of ball joint press tools to achieve this. We used a pusher on the inside of the spindle which was small enough to press the bushing out of the spindle without getting stuck inside the bore. We used a press cup which was large enough to sit flush against the spindle while still allowing the old bushing to be pressed into it without getting stuck.



Press Tool Step 4:

Remove the center sleeve from the new poly bushing and set it aside. Line up the new poly bushing with the spindle bore, then use the press tool to push it into place until the bushing is fully seated on both ends.

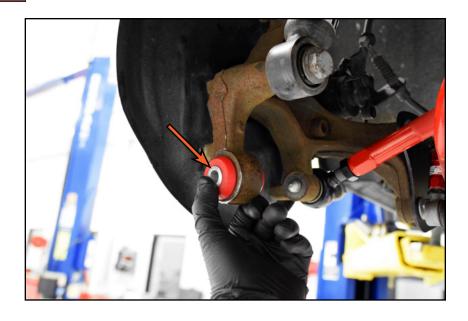




INSTALLING THE NEW OUTBOARD BUSHINGS

Step 5:

Slide the center sleeve back into the poly until it is centered between the two sides.



21mm Wrench, 21mm Socket & Ratchet Step 6:

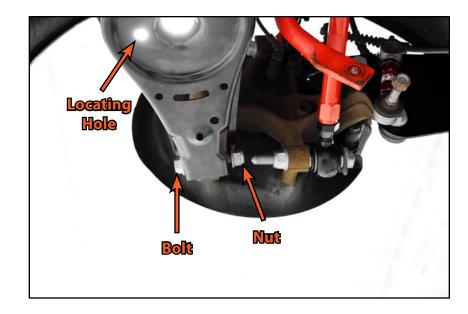
Reinstall the bolt which secures the toe arm, then hold the nut still while you torque the bolt to 130 Nm (96 Ft-lbs) + 180°.





Step 1: 18mm Wrench, 18mm Socket & Ratchet

The ECS lower control arms ARE side-specific due to the spring perch locating features, these locating holes (arrow) should be facing toward the rear of the vehicle once installed. Be sure to install the correct arm on each side of the vehicle (with the ECS stickers facing toward the rear of the vehicle). Install and tighten the outer bolt and nut as shown on the photo on the right.



Step 2: 18mm Wrench, 18mm Socket & Ratchet

The eccentric bolt is designed to be inserted with the threads facing towards the front of the vehicle, however because of the added rigidity of the poly and the limited clearance it may not be possible for the bolt to be installed in this way on certain applications without lowering the subframe. On these applications, you *can* reverse the direction of the bolts as shown on the photo on the right, however, it is not recommended as it makes it impossible to torque the nuts. Proceed to the next page for detailed instructions on how to install the bolts properly on these applications.





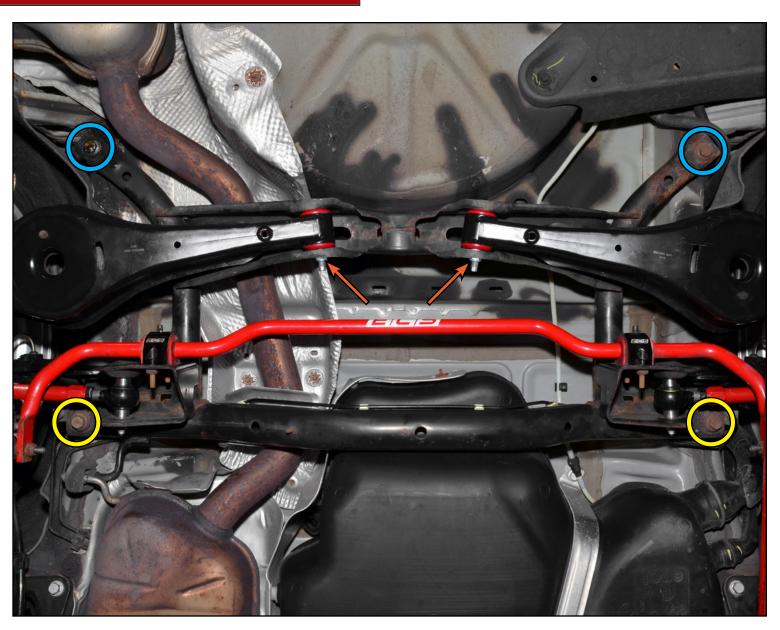
Step 3:

In order to install the last two control arm bolts it may be necessary to lower the subframe slightly to provide adequate clearance.

This can be achieved by loosening the front subframe bolts (YELLOW) 3-5 turns and the rear subframe bolts (BLUE) 7-9 turns. Continue to lower the subframe as needed until you can slide the bolts (arrows) into the control arms as shown in the photo on the right. These bolts are torque-to-yield and should be replaced. Replacements are available on our website.

Slide the eccentric washer onto the control arm bolt, then tighten the nut until it is snug.

To reinstall the subframe. tighten the bolts to 70Nm $(52Ft-lbs) + 180^{\circ}$.





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

Hold the outer nut still while you tighten the bolt to 70 Nm (52 Ftlbs) + 180° .



You do have the option at this point to place the coil springs into the control arms, then lift them upward into place with a jack to compress the springs. If you do it this way, you will also need to install the *outer* bolts BEFORE removing the jack. Use caution if using this alternative method, if the jack slips out from under the control arm there is a serious risk of injury.



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

Hold the inner bolt still while you hand tighten the nut.



These bolts are used for alignment purposes and thus should not be torqued until after a fourwheel alignment has been performed. After proper alignment has been achieved the nuts should be torqued to 95Nm (70Ft-lbs).





FINAL INSTALLATION STEPS

Install the sway bar end links into the sway bar and tighten the nut to 45Nm (33Ft-lbs).

Install the rear coil springs.

Install the wheels.

Immediately perform a four wheel alignment.

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° . 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.

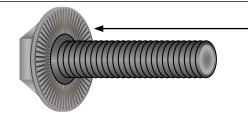
Some fasteners require lubrication on the threads -or- on the contact surface while torquing. These fasteners will be listed with the specific location and type of lubrication required. Always follow manufacturers recommendations exactly.

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.

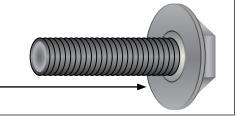
Ribbed vs. Non-Ribbed Bolts

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

Trailing arm to bracket bolt	90 Nm (66 Ft-lbs) + 90 degrees	(Page 14)
Trailing arm bracket to body bolts	50 Nm (37 Ft-lbs) + 45 degrees	(Page 15)
Trailing arm to spindle bolts	90 Nm (66 Ft-lbs) + 45 degrees	(Page 16)
Sway bar end link to spindle nut	45 Nm (33 Ft-lbs)	(Page 17)
Upper control arm to subframe		(Page 22)
Upper control arm to spindle	130 Nm (96 Ft-lbs) + 180 degrees	(Page 22)
Toe arm to subframe bolt	70 Nm (52 Ft-lbs) + 180 degrees	(Page 28)
Toe arm to spindle bolt	130 Nm (96 Ft-lbs) + 180 degrees	(Page 28)
Sway bar bracket to subframe bolts	25 Nm (18 Ft-lbs) + 45 degrees	(Page 29)
Subframe to body bolts		(Page 36)
Lower control arm to spindle bolt	70 Nm (52 Ft-lbs) + 180 degrees	(Page 37)
Lower control arm to subframe nut		(Page 37)
Sway bar end link to sway bar nut	45 Nm (33 Ft-lbs)	(Page 38)



SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

At ECS Tuning, we carry a line of high quality Schwaben Tools and Equipment to help you build your ultimate tool collection. Never before has affordability and quality been so closely related. Our entire Schwaben line is subjected to strict in house testing for strength and durability. See what we have to offer and equip your garage without breaking the bank.

Your Poly Rear Control Arm Bushing Kit installation is complete!



These instructions are provided as a courtesy by ECS Tuning

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.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.