

# **Tesla Model S Adjustable Rear Toe Arm Installation Instructions**





#### **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**

EVANNEX 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 TOE ARM**

Step 1: 21mm Socket & Breaker Bar

Safely lift and support the vehicle, then remove the rear wheels.

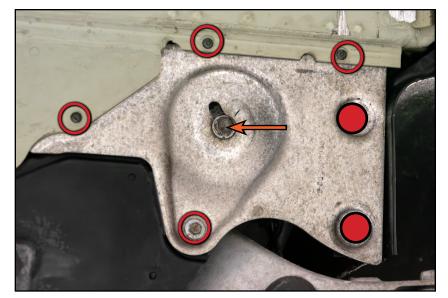


If the vehicle is equipped with air ride suspension, activate jack mode before raising and supporting the vehicle.



T25 Torx Socket, 10mm Socket, 16mm Socket & Ratchet Step 2:

Remove the panel clips (RED circles) that secure the fender liner to the shear plate, then remove the screws (circled in **RED**) that secure the shear plate to the vehicle. Remove and discard the nut (arrow) that secures the shear plate to the subframe.

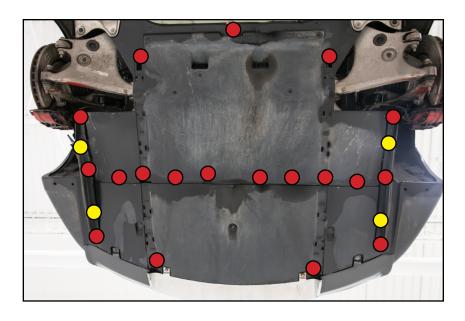




## REMOVING THE STOCK TOE ARM

10mm Socket & Ratchet Step 3:

Remove the panel clips (YELLOW circles) and screws (RED circles) that secure the aero shield to the under side of the vehicle.



Pole Jack, 21mm Socket & Ratchet Step 4:

Slowly loosen the bolts (arrows) until the subframe drops down ~1/2", creating enough clearance to access the inner toe arm hardware.

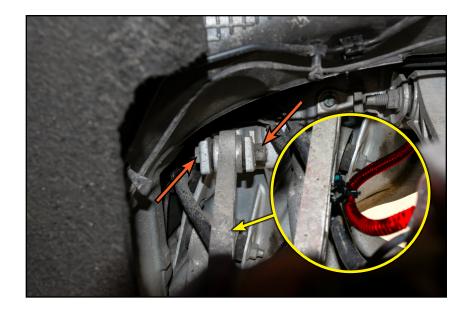




### **REMOVING THE STOCK TOE ARM**

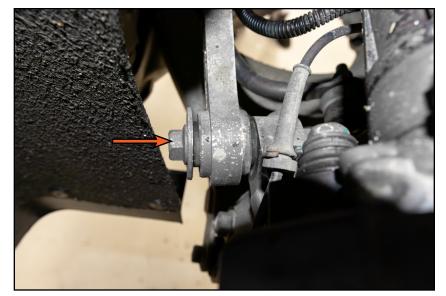
Step 5: 19mm Wrench, 19mm Socket & Ratchet

Disconnect the clip that secures the wiring harness (highlighted in **RED** in the inset photo) to the factory toe arm and relocate the harness to a suitable location. Remove the nut and bolt (arrows) that secure the toe arm to the rear subframe.



18mm Wrench, 18mm Socket & Ratchet Step 6:

Remove the bolt (arrow) and nut that secure the toe arm to the rear knuckle and remove the toe arm from the vehicle.

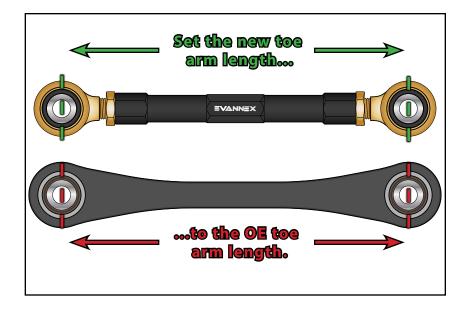




#### **INSTALLING THE NEW ADJUSTABLE TOE ARM**

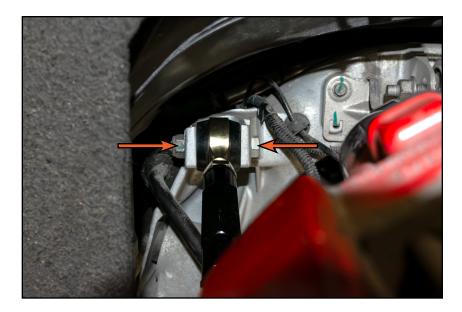
Step 1: 24mm Wrench

Before installing the adjustable toe arm, lay the new toe arm next to the stock arm and adjust the length to match, then tighten the jam nuts until snug.



19mm Wrench, 19mm Socket & Torque Wrench Step 2:

Slide the rod end on the new toe arm into the mounting tab on the rear subframe, then reinstall the bolt and nut (arrows) and torque them to 80 Nm (59 Ft-lbs).

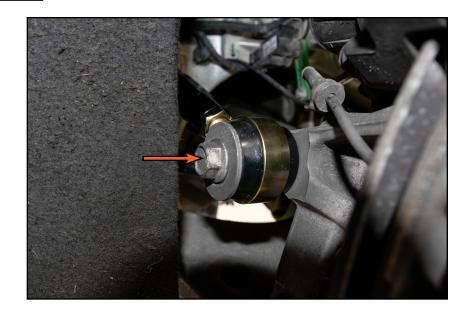




#### **INSTALLING THE NEW ADJUSTABLE TOE ARM**

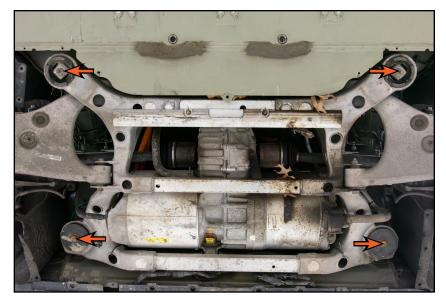
Step 3: 18mm Wrench, 18mm Socket & Torque Wrench

Secure the other end of the new toe arm to the rear knuckle with the bolt (arrow) and nut, torquing them to 130 Nm (96 Ft-lbs).



21mm Socket & Torque Wrench Step 4:

Raise the subframe back into place and torque the bolts (arrows) to 140 Nm (103 Ft-lbs).

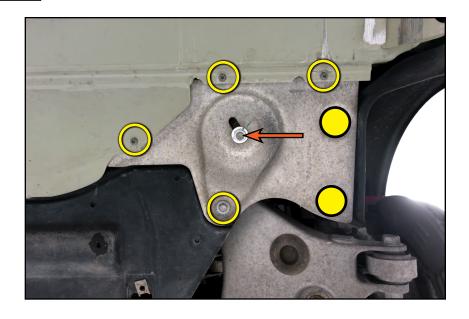




#### **INSTALLING THE NEW ADJUSTABLE TOE ARM**

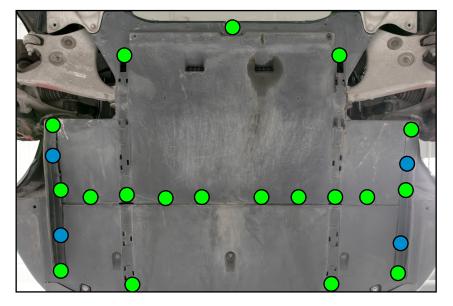
Step 5: T25 Torx, 16mm Socket & Torque Wrench

Replace and torque the nut (arrow) to 35 Nm (26 Ft-lbs), then reinstall the screws (circled in YELLOW) and the panel clips (YELLOW circles) that secure the shear plate to the vehicle.



10mm Socket, 21m Socket, Ratchet & Breaker Bar Step 6:

Reinstall the screws (GREEN circles) and panel clips (BLUE circles) to secure the aero shield to the underside of the vehicle. Reinstall the rear wheels and torque the lug nuts to 175 Nm (129 Ft-lbs).



#1a:



#### **INSTALLING THE NEW ADJUSTABLE TOE ARM**

Step 7:

24mm wrench

Immediately perform a four-wheel alignment on your vehicle. When making adjustments to the toe arm, rotating the turnbuckle will adjust the rear tire toe either in or out.

Adjusting the toe outward (photo #1a) will angle the rear tire outward as shown in (photo #2a).

Adjusting the toe inward (**photo #1b**) will angle the rear tire inward as shown in (photo #2b).

The new adjustable toe arms can allow up to 4 degrees of adjustment from -2 degrees to +2 degrees of toe adjustability.



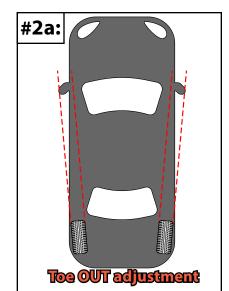
Toe OUT adjustment

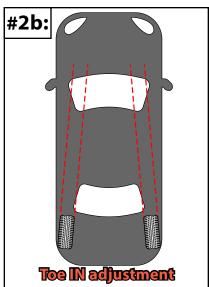
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Removing the rear aero shield makes accessing and adjusting the toe arms much easier.







### Your adjustable rear toe arm installation is complete!





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.