

## [Billet Aluminum Rear Differential Mount Insert Kit, B9 Audi A4/S4 & Allroad](#)

**034 MOTORSPORT**

The 034Motorsport Billet Aluminum Rear Differential Mount Insert Kit for B9 Audi A4/S4 & Allroad is designed to limit movement in the factory rear differential mounts to maintain proper suspension geometry when cornering, and improve the responsiveness of the rear suspension and differential. By filling small voids in the factory mounts, this insert set eliminates the associated slop to ensure that you experience a more refined, connected driving experience.

### Installation Spiciness Rating



(Medium)

Installation of your 034Motorsport Billet Aluminum Rear Differential Insert Kit is a straightforward but time consuming process. We recommend professional installation by an experienced Audi/Volkswagen specialist.

### Supplied Parts:

- B9 Audi Rear Diff Mount Insert – Rear (2)
- B9 Audi Rear Diff Mount Insert – Front (1)

### Optional Factory Replacement Parts (Not Included):

- New Driveshaft Bolts (3) – **PN:** N90846102
- New V-Band Sealing Gasket – **PN:** 5Q0253115B

### Tools Needed:

- **Sockets** - 16mm 6-Point, 18mm 6-Point
- **Bits** - 6mm Allen, 10mm Triple Square
- **Wrenches** – 16mm
- Torque Wrench, Ratchet, Extensions, Pry Bar

## About This Guide

This Install Guide documents the installation process on a 2018 Audi S4. The actual installation process for your vehicle may vary by model, due to factory options, or because of existing aftermarket modifications you have installed.

### Optional Factory Replacement Parts

#### Rear Differential Mount Bolts (2)

Torque to Yield bolts that should be replaced once removed.

**Factory Part Number:** N91114701

#### Rear Differential Pinion Mount Bolt (1)

Torque to Yield bolts that should be replaced once removed.

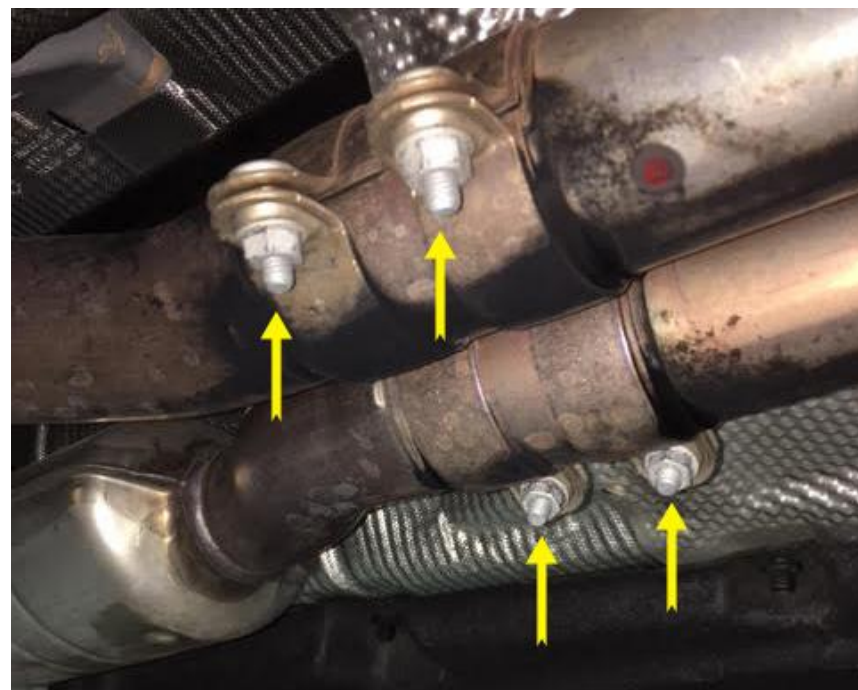
**Factory Part Number:** N10771601

### Getting Started

- Ensure you have all parts and tools required for installation by reading the complete Install Guide.
- Raise your vehicle securely using a lift.

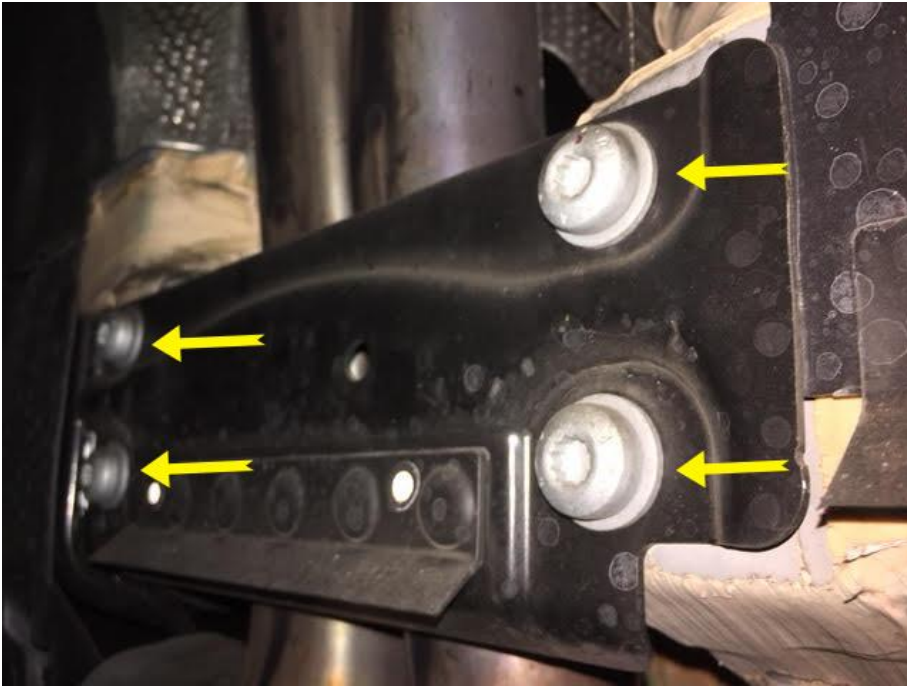
## Step 1

Using a 13mm 6-Point Socket and Ratchet, loosen the 4 exhaust clamp bolts securing the midpipe to the rear portion of the exhaust.



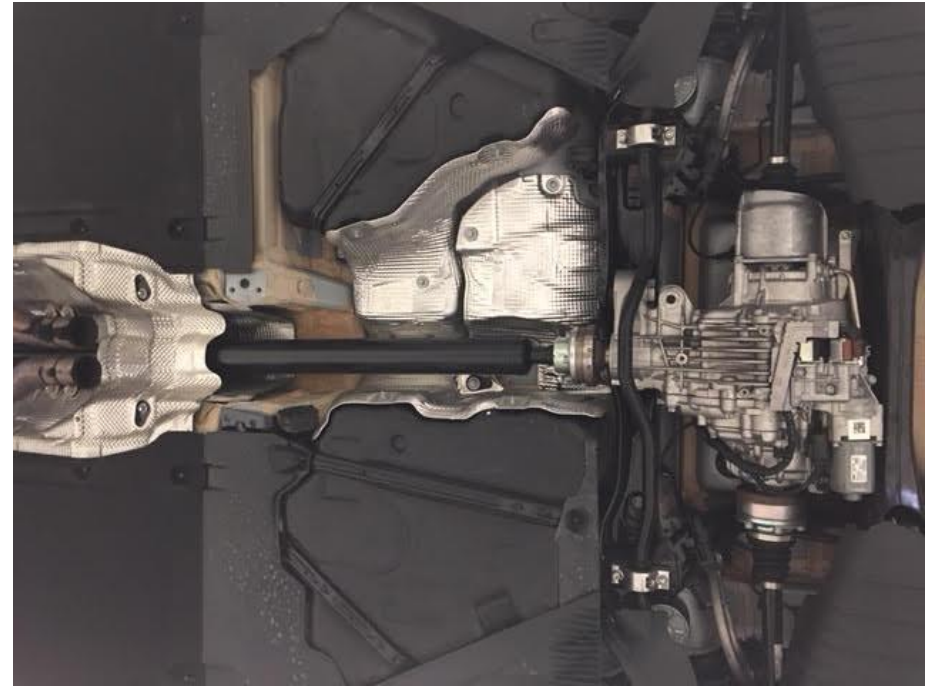
## Step 2

Using an M10 Triple Square, remove the 4 bolts securing the tunnel brace to the chassis and remove brace.



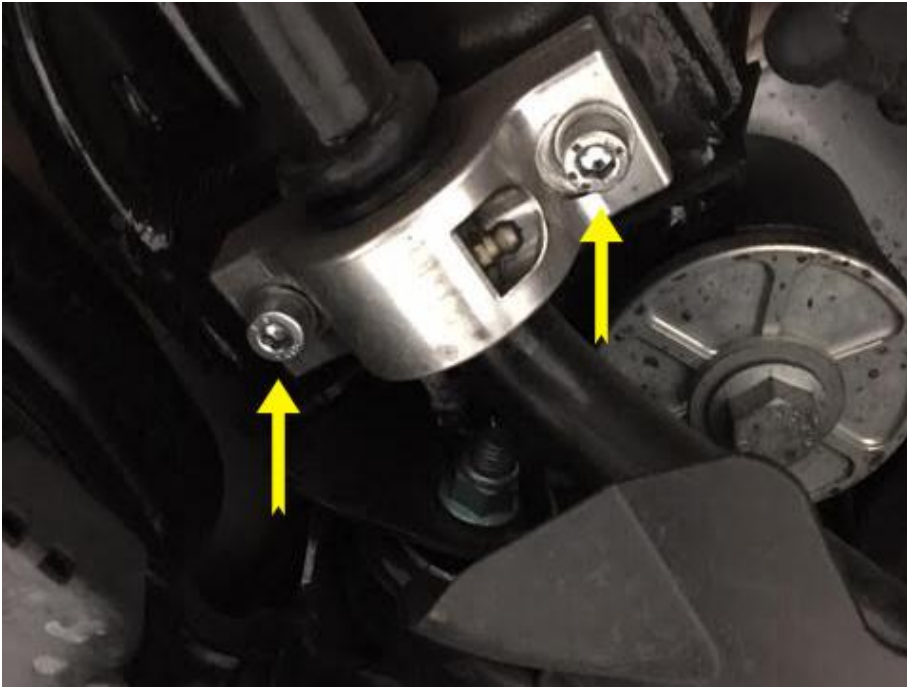
## Step 3

Unhook any remaining exhaust hangers and drop the rear exhaust portion from the vehicle.



## Step 4

Remove the 4 bolts (2 per side) securing the sway bar mounting brackets to the chassis and allow the sway bar to hang freely.



## Step 5

Support the rear subframe with a pole jack or jackstand. Ensure the jack is safe and secure.





## Step 6

Using an 18mm 6-Point Socket & Breaker Bar, loosen the 2 rear subframe mount bolts until roughly 4 to 5 threads are still engaged. Do not completely remove them.



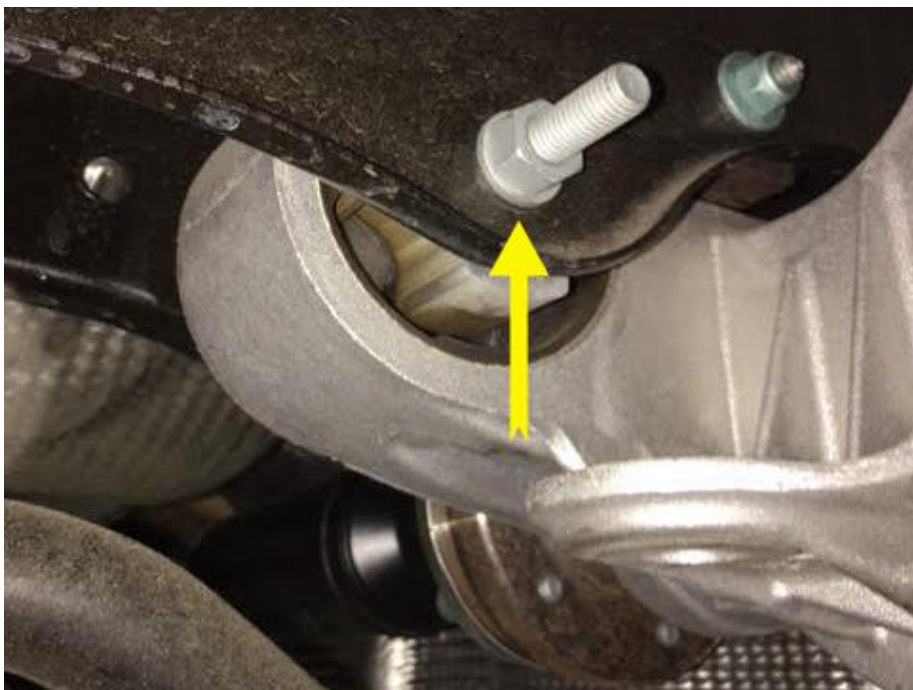
## Step 7

With the rear subframe lowered but safely supported by the 2 rear bolts, move the pole jack to support the rear differential. Use an 18mm 6-Point Socket to loosen & remove both rear diff mount bushing bolts (1 per side).



## Step 8

Using a 16mm Wrench & 16mm Socket with Ratchet, loosen and remove the pinion mount bolt and nut from the rear subframe.



**Please Note:** We recommend replacing this bolt after removing. The part number for factory bolt is N10771601.

## Step 9

With the bolt removed, carefully lower the rear differential until the pinion mount can be accessed.



## Step 10

Apply a coat of grease to the prongs of the front mount insert (505-2022) for the rear differential. Slide the insert into the pinion mount by pressing firmly until it bottoms out.



## Step 11

Lift the front of the rear differential back into position and secure with mounting bolt and nut.





## Step 12

Apply grease to the rear mount insert (505-2021) for the rear differential and firmly press the insert into the front of the rubber bushing on the driver's side, between the subframe and differential.



## Step 13

Repeat Step 12 for the passenger side.





## Step 14

Position the rear differential so that you can thread the rear mount bolts in by hand to engage the threads. Tighten using an 18mm 6-Point Socket.



## Step 15

With all 3 mounting bolts for the rear differential snug, remove the support jack from underneath the vehicle. Torque the 2 rear diff bolts to 70 Nm + 180 Degrees.



## Step 16

Using an 16mm Wrench and 16mm Socket, torque the pinion mount bolt to 50 Nm + 180 Degrees.



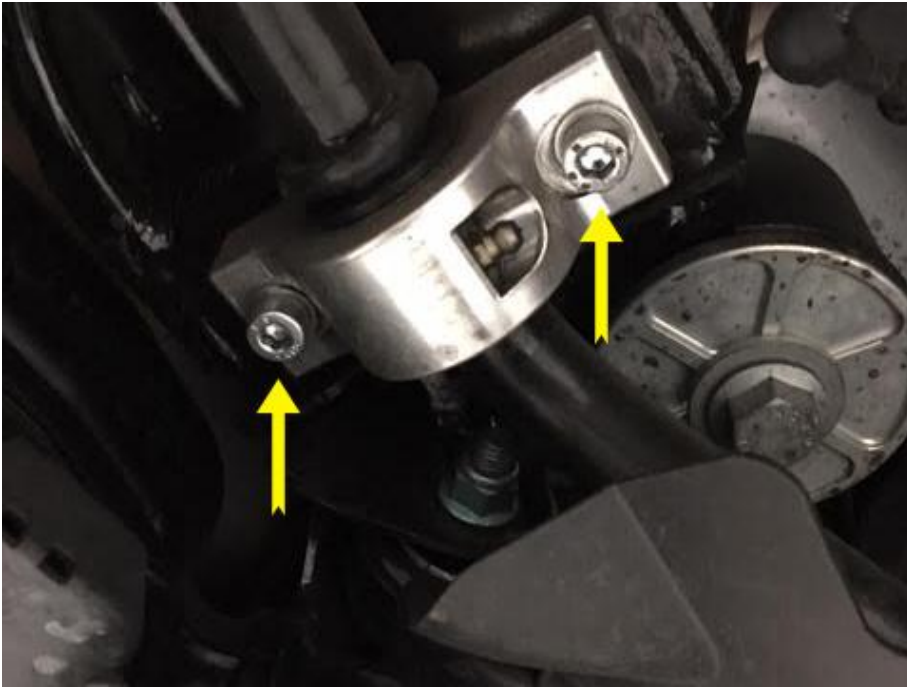
## Step 17

Lift the rear subframe back into position. Using an 18mm 6-Point Socket, torque the 2 rear subframe bolts to 90 Nm + 180 Degrees.



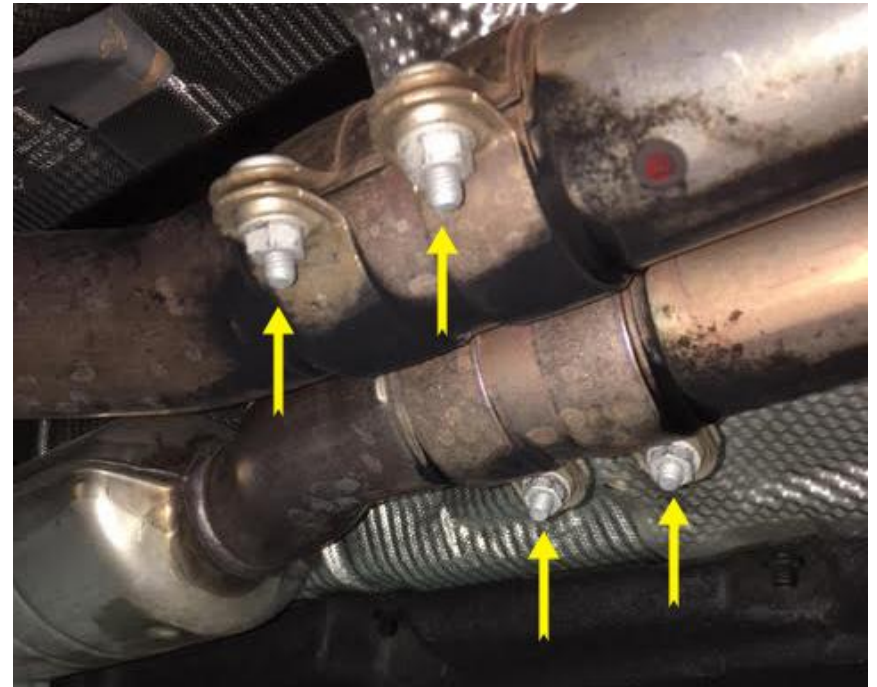
## Step 18

Reinstall the rear sway bar mounting brackets to the chassis.  
Torque the 4 bolts to 25 Nm + 90 Degrees.



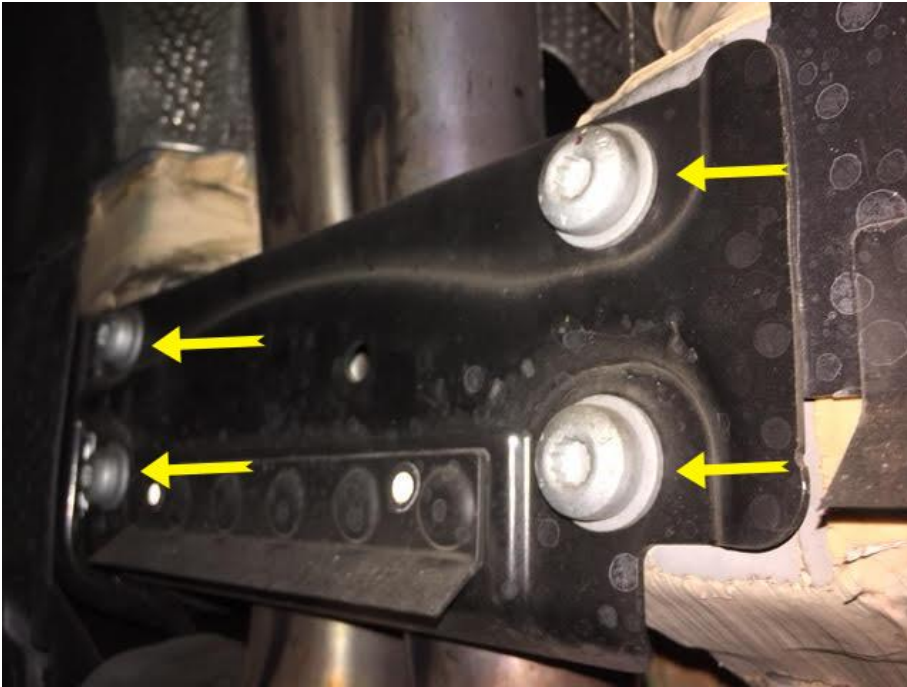
## Step 19

Reinstall the rear exhaust system to the car.



## Step 20

Once the exhaust is secure, reinstall the tunnel brace and snug tight.



## Step 21

Ensure all connections are secure, and lower your vehicle from the lift.

## Step 22

Enjoy the Upgrade!