



## Audi Quattro Rear Differential Power Ring Installation

Congratulations on the purchase of your new Stern Differential Power Ring. This insert will offer a noticeable reduction in differential movement, translating to more power to the wheels. Below are our installation guidelines for this part. Please review them carefully before attempting to install this product.

### Estimated Time

35-45 minutes

### Tools Needed

Floor Jack  
Jack Stands  
T45 Torx Bit  
T47 Torx Bit  
8mm Hex Bit  
5mm Hex Bit  
Ratchet  
Utility Knife



### Step 1

Raise the rear of the car and secure it with jack stands. Never work under a car supported only by a hydraulic floor jack. Check your owner's manual for proper placement of floor jacks and jack stands.

### Step 2

Identify the forward differential mount. It is located on the front end of the differential adjacent to the center exhaust resonator as shown below.



### Step 3

Carefully use a floor jack to support the differential in position and prevent it from shifting positions.



### Step 4

Using the T45 Torx bit, remove the two bolts supporting the exhaust hanger. The exhaust will hang freely and should not need to be supported. The bolts are circled in red in the left photo below. Use the T47 Torx bit and remove the 2 bolts supporting the differential mount support. The bolts are circled in red in the right photo below. You can then remove the differential support from the vehicle and set it aside.



### Step 5

With the support brace removed, use the 8mm hex bit and remove the 4 bolts attaching the mount to the differential case. They are circled in red below. Carefully remove the differential mount from the vehicle. There is a small clip which holds a cable to the mount. Make sure to observe this part when removing the mount.



## Step 6

With the mount out of the car, carefully inspect the rubber bushing. If there are major signs of wear or deteriorating rubber, we suggest replacing the mount before installing the Power Ring insert.

With a sharp utility knife, carefully cut away the small bumps on the inner portions of the rubber mount. This will provide a flat level surface for the new insert to rest. The small bumps are shown circled in the photographs below. There are a total of 4 bumps.



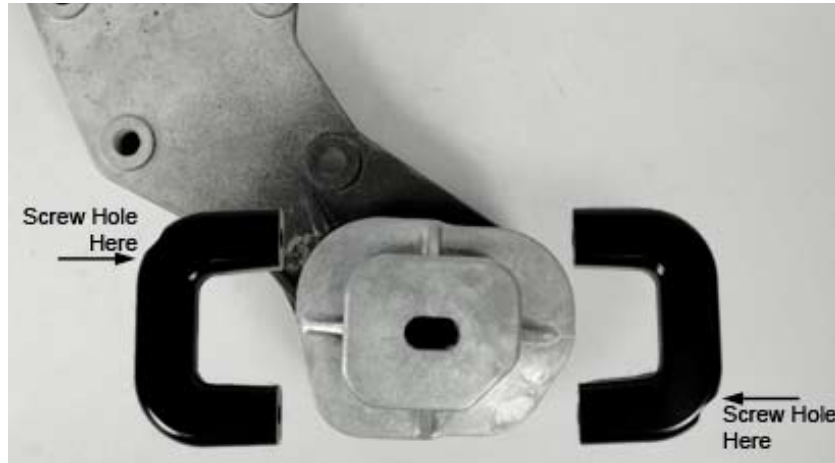
**Before Trimming (bumps to be trimmed shown circled)**



**After Trimming**

### Step 7

Assembly time. Take the two aluminum halves and insert them in the space you just created in Step 6. Be sure that you have a screw hole opening on each side of the mount. Orient the two pieces as shown in the photo below. The halves will slide in with some resistance but do not use any lubricant. Once the two halves are close together, insert the screw and lockwasher through each hole and tighten together with a 5mm hex bit. As you tighten the screws the two halves will be brought together tightly. Torque screws to approximately 10ft-lbs.



### Step 8

Clean the top aluminum plate then carefully peel and apply the Neoprene gasket. Once completely assembled, your new mount should look like this.



### Step 9

From here, reinstallation is the same as removal. Carefully reinstall the differential mount, then attach the support brace.

Retighten 4 8mm hex bolts to 30ft-lbs

Retighten 2 T47 Torx bolts to 30ft-lbs

Retighten 2 T45 Torx bolts to 17ft-lbs

**Congratulations on completing the installation!**