



# RizPiz Designs

Innovative Component Design

---

## Dual Rear Caliper (011488R32) Installation Guide



This installation guide is for your reference only and has been written to support you through the installation process of your newly acquired RizPiz Designs dual rear caliper bracket system. Please take safety precautions seriously and use the correct tools for disassembly/assembly of the components on your vehicle.

**BEFORE**



**AFTER**



→ Images are not inversely proportional, however, the upgrade is easily noticeable ←

### **Required Tools**

- Screw driver set
- Torx bit set
- Metric wrench set (8mm → 19mm)
- Metric socket set
- Torque wrench
- 30mm ½" drive 12point axle nut socket
- ⅜" or ½" drive hex bit set
- Universal bearing press/pull kit
- 3-jaw gear/hub puller set
- Adjustable ratchet
- Heavy Duty rubber mallet
- Large internal/external snap ring pliers

### **Recommended (optional) new parts**

- 2x wheel rear wheel hubs, [Durago p/n: 29595071](#)
- 2x wheel bearings, [SKF WKH3455 Bearing kit](#)

## **Compatibility**

This adapter system is designed to mount on the following independent suspension trailing arms which were offered on a few MK1 Audi and MK4 Volkswagen Haldex AWD cars,

### **MK1 Audi TT P/N:**

Left - 1J0 505 227F

Right - 1J0 505 228F

### **8L Audi S3 P/N:**

Left - 1J0 505 227F

Right - 1J0 505 228F

### **Mk4 Volkswagen Golf R32 P/N:**

Left - 1J0 505 223M

Right - 1J0 505 224M

## **Required Parts**

The 4-pot Brembo calipers that the bracket system was designed for were offered on the 1st generation Audi Q7 / Porsche Cayenne / Volkswagen Touareg. The OEM 256mm sized rotors will be upgraded to 312x25mm vented front rotors from the Mk4 Volkswagen GLI / 20TH / 337 or MK1 Audi TT 225.

### **Brembo Caliper P/N:**

Left - 20.7673.03

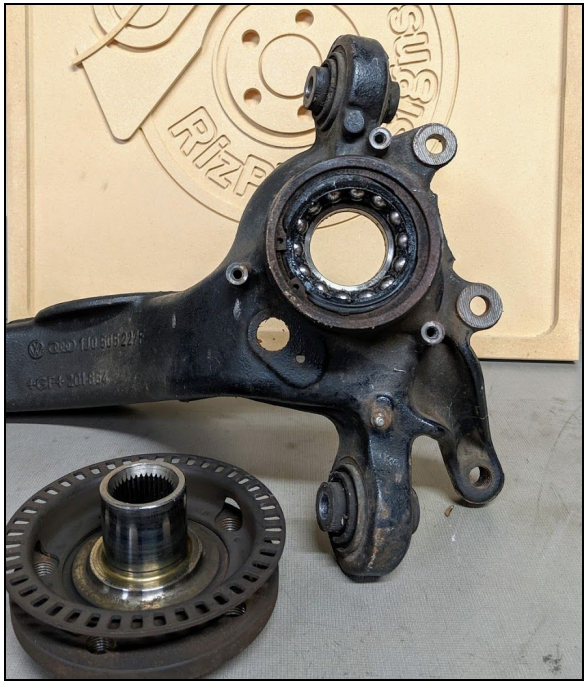
Right - 20.7673.04


### **VW / Audi P/N:**


Left / Right - 8N0 615 301 A

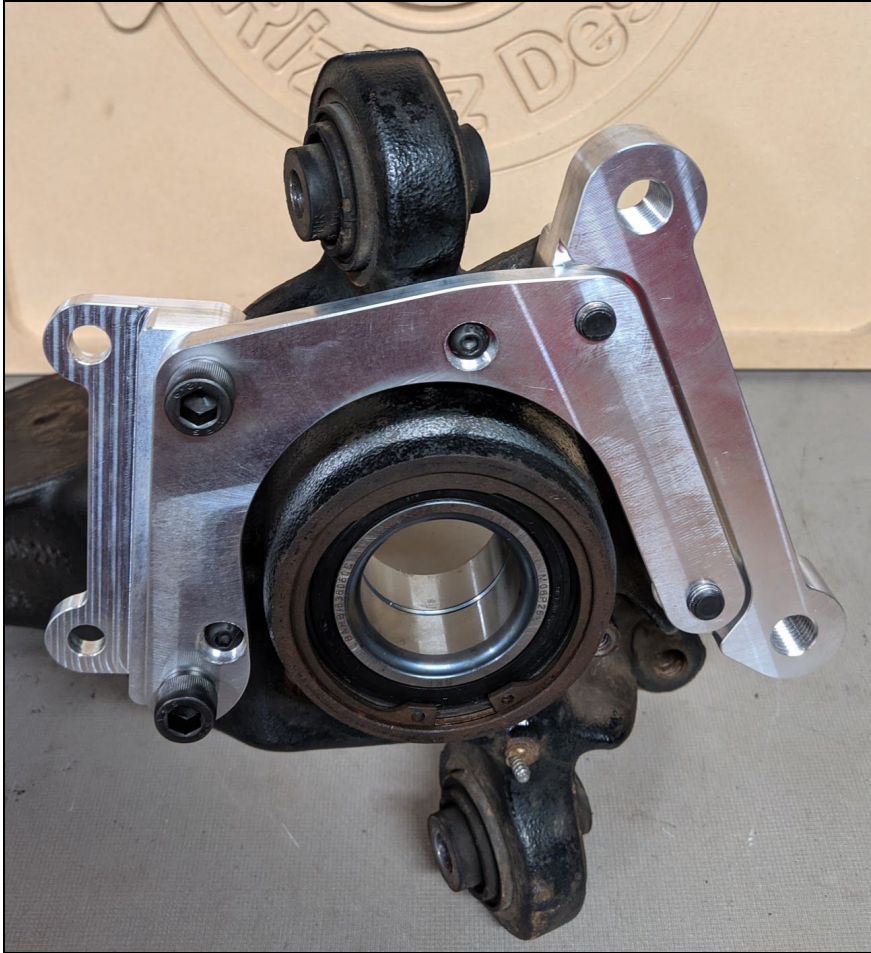
or

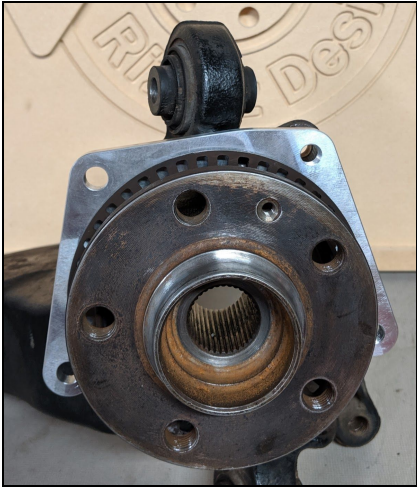
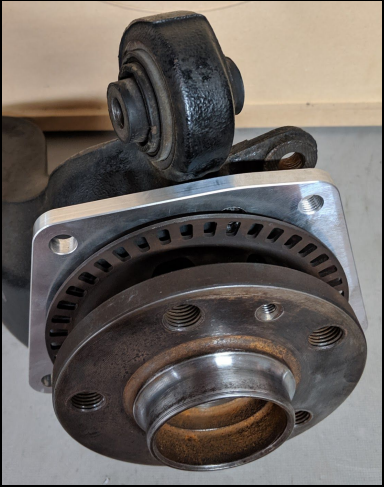
Left / Right - 8L0 698 301 A KT4

Hub/bearing <u>REMOVAL</u> Process		
Step	Required Tool	Procedure
1		Loosen 5 wheel lug bolts/nuts.
2		<b>***VERY IMPORTANT - Loosen 30mm 12point axle nut</b>
3		<b>Safely lift and support the vehicle from all corners</b>
4		Remove lug bolts/nuts and then remove rear wheels
5		Loosen and remove rear calipers and carriers
6		Remove rear rotor
7		Remove the brake dust shield as it will no longer be needed. 2 out of the 3 dustshield threaded mounting holes will be used to install the "swingarm" component from the adapter system.
8		Using a 3-jaw gear/hub puller, slowly back out and remove hub from trailing arm. 
9		Once the hub is out, remove the bearing circlip C-clip


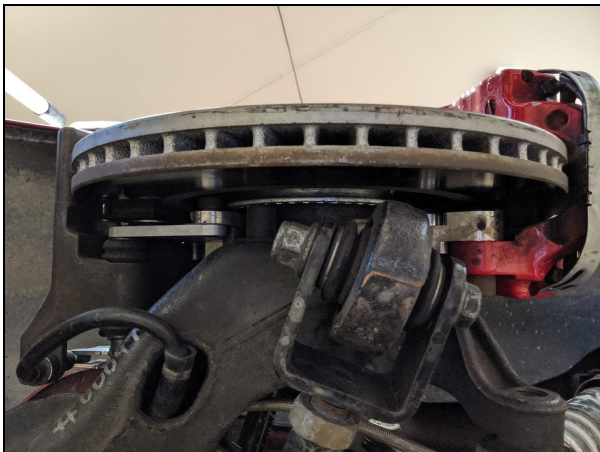
10		<p>Now, remove the bearing using the universal bearing puller set or any other capable tool you have in your garage or shop. Note: the bearing is supposed to be pulled out of the trailing arm towards you</p> 
11		<p>Once the old bearing is out of the trailing arm, clean/sand off any debris and rust buildup to ensure the new bearing slides in with ease.</p>
12		<p><b>This completes the hub/bearing removal process</b></p>

Rear Adapter Bracket <u>INSTALL</u>		
13		Install new wheel bearing using the universal bearing press/pull kit
14		<p>Ensure the bearing is pressed in all the way, then install new c-clip and verify that it is fully seated in the cavity</p> 
15		<b>***DO NOT INSTALL HUB at this time!!!</b>

16		<p>The next step is to assemble the adapters' three components and ensure everything lines up and mounts successfully onto the trailing arm.</p>  <p>* The <b>countersunk holes</b> on the “swingarm” bracket are to be facing outward. The countersunk cavities are for the button head socket screws to be housed in while constraining the swingarm to the trailing arm as an extra fixing point. Feel free to put some threadlock on the 2 small button head screws upon installation.</p>
17		<p>Once everything is lined up and the “swingarm” bracket is constrained to the trailing arm, <b><u>remove only the two side brackets</u></b> which are for the calipers/carriers. Removal of the side brackets is not necessary but suggested so that they don't get damaged during hub install. The two side brackets can be bolted up later but the center “swingarm” bracket can not be mounted when the hub is installed, therefore, it <b>MUST</b> stay.</p>

18		<p>Press in the old/new hub while supporting the back of the bearing, otherwise, you will damage the newly installed bearing by splitting it. Once the hub is re-installed with the “swingarm” bracket in place, your trailing arm should look like this,</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
19		<p>At this time, remount the side brackets by using the <u>correct length</u> black oxide class 10.9 bolts supplied with your kit.</p>
20		<p>The 17mm zinc plated class 8.8 bolts are supplied for mounting the OEM caliper carrier to the bracket system.</p>
21		<p><b>This completes the “Swing-arm” bracket + hub/bearing installation</b></p>

### **Required steps to follow**

22	<ul style="list-style-type: none"> <li>The OEM Left and Right rear calipers will have to be swapped. The passenger side will go to the drivers side and vise-versa in order for the e-brake cable to be routed and mounted on the caliper for e-brake (parking). Hydraulic fluid must be drained from OEM calipers and the hydraulic line connects on calipers need to be capped.</li> </ul>
23	<ul style="list-style-type: none"> <li>The OEM caliper carrier inner walls MUST be grinded down for clearance.</li> </ul> 
24	<ul style="list-style-type: none"> <li>Handbrake cable is required to be pushed back towards the front of the vehicle to exit the hole that it is currently coming out from. It is then required to be rerouted through a hole in the bottom of the trailing arm. The cable is flexible enough to bend upwards and mount onto OEM caliper.</li> </ul> 
25	<ul style="list-style-type: none"> <li>The OEM hydraulic line will easily connect to the Brembo caliper with some soft careful bending. DO NOT bend line in only one spot or you may crack it.</li> </ul>

**Final images for reference**

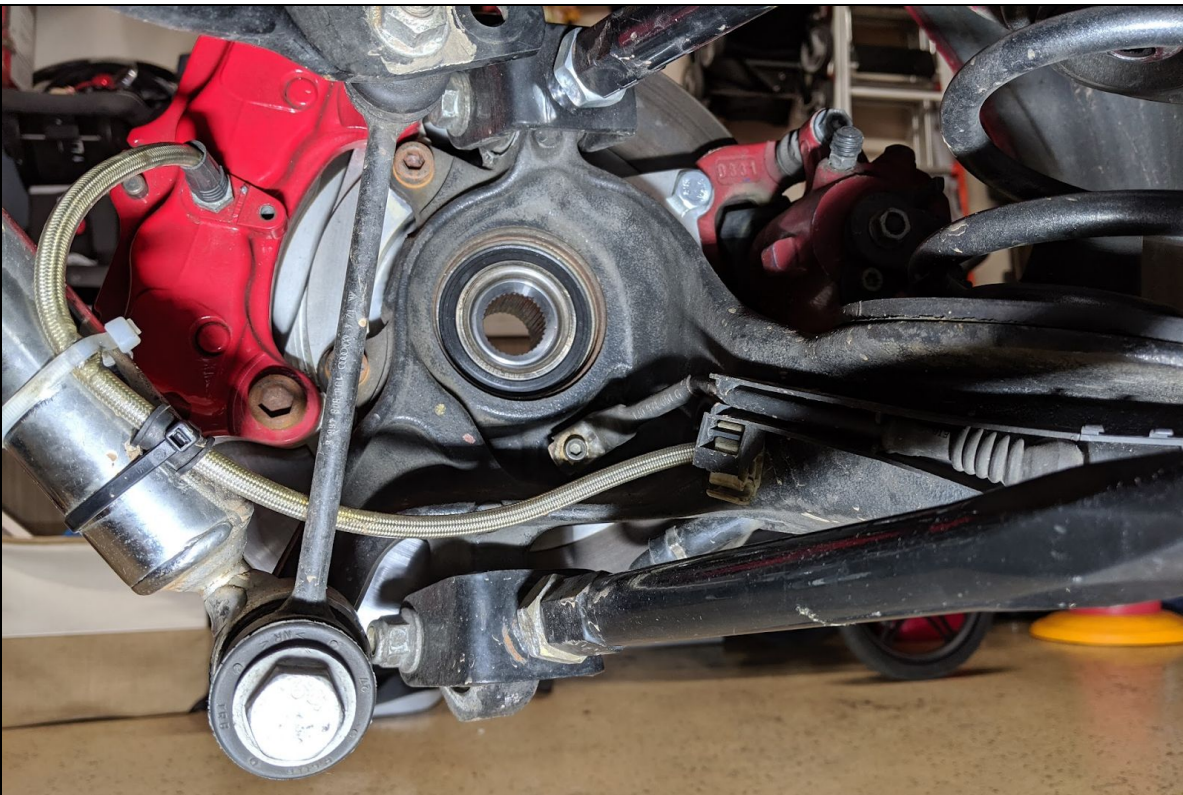
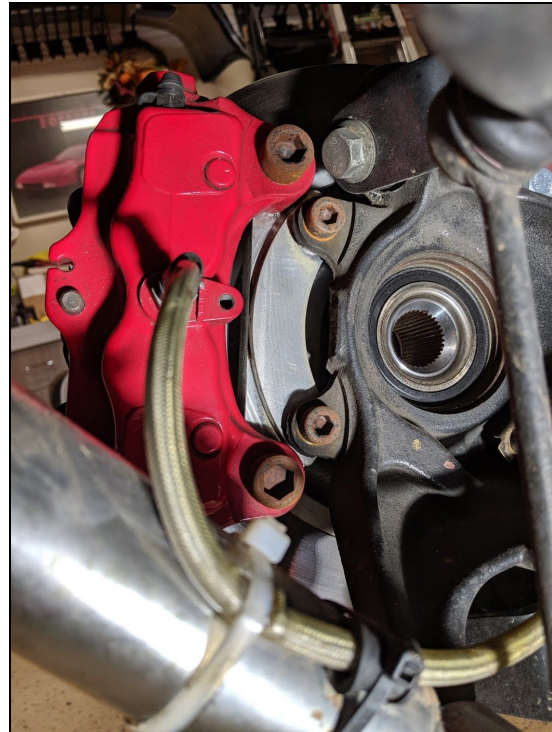


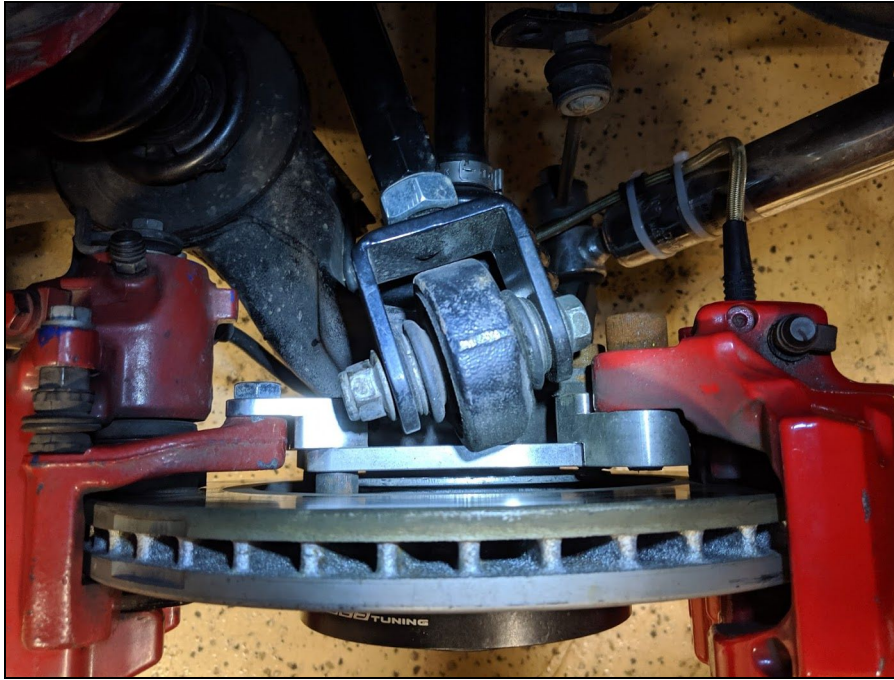
\*Note - The swing-arm mounting holes were not yet countersunk for this image.



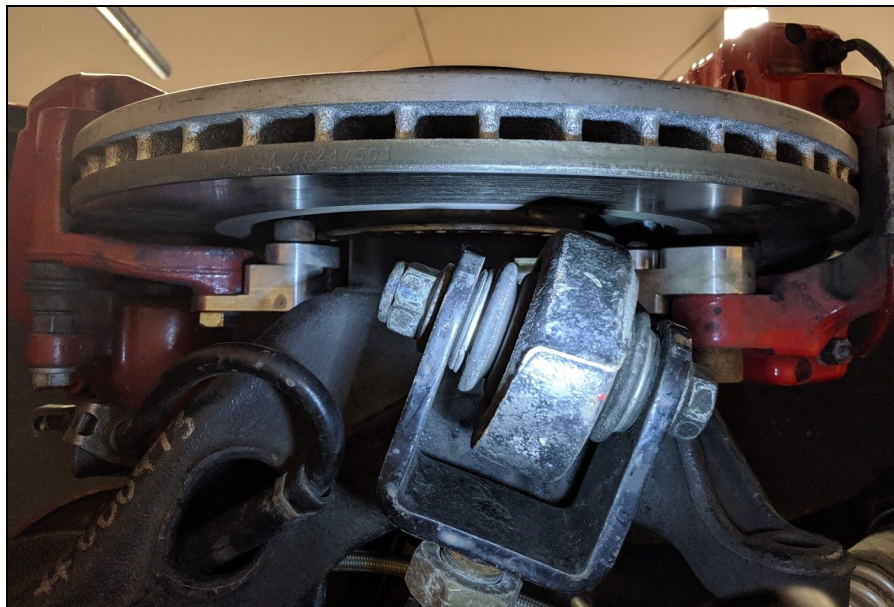
\*Note - The swing-arm mounting holes were not yet countersunk for this image.

---





Top view image shows how the brackets and calipers are installed on the trailing arm



Bottom view shows how the handbrake cable is rerouted through a different hole in the trailing arm

If you encounter a roadblock or need some support, please get in touch with us!

RizPiz Designs LLC  
[rizpizdesigns@gmail.com](mailto:rizpizdesigns@gmail.com)  
(571) 449 - 6799

**THANK YOU FOR YOUR SUPPORT !**

**\*Disclaimer** - This kit is designed for OFF ROAD use only! RizPiz Designs LLC. is not liable for installation failures or injuries.

[www.rizpizdesigns.com](http://www.rizpizdesigns.com)  
Document Revision 1.0 / December 2019