

Automotive Social Regional Resources

[Login](#) / [Create New Account](#)



[All messages](#) | [Search Forums](#) | [Return to allroad](#)

allroad cheap Brembo BBK (Big Brake Kit) DIY....

Posted by: [ricam78 \(9310\)](#) on 2011-06-30 22:25:33

[Share](#) | [Report](#)

UPDATE: 18Z retrofit part numbers and specs are at the very bottom of this post. The 17Z and 18Z retrofit is exactly the same except for the caliper part numbers, pad part numbers and rotors used. The 17Z uses Mercedes C230 Sport rotors while the 18Z uses Mercedes ML55 rotors. Good Luck!

Fist and foremost, This thread is a work in progress on a brake upgrade I am currently in the process of doing and if you decide to follow any of the info below, it is at your own risk!!! A special thanks to ar56, zawa and 05allroad for all of their help and input on this process. Some helped more than others (ar56!) and the fact that we all went on the same path at the same time has been VERY helpful in working things out. So here goes.

HOME BREW BBK DIY

I know this has been common knowledge for a good while as there are tons of threads about all over the net, but I figured I would try and consolidate as much helpful info as possible into one thread for others to check out.

Most of this info is covered in the Audizine thread here by drjonez:

[http://www.audzine.com/forum/showthread.php/423267-DIY-Cayenne-Touareg-Front-Brakes-\(el-cheapo-BBK\)?p=6387836&styleid=12&styleid=8](http://www.audzine.com/forum/showthread.php/423267-DIY-Cayenne-Touareg-Front-Brakes-(el-cheapo-BBK)?p=6387836&styleid=12&styleid=8)

Also here on Audizine by Raacerx:

[http://www.audzine.com/forum/showthread.php/314943-Touareg-Brake-Calipers-\(same-as-Cayenne\)](http://www.audzine.com/forum/showthread.php/314943-Touareg-Brake-Calipers-(same-as-Cayenne))

CALIPERS

Basically, there are some larger 6 piston Brembo calipers that come on certain vehicles that are basically bolt on ready for our allroads. There are 2 models of calipers available, a 17Z and an 18Z. In this post, I am going to go over the 17Z since that is the model that fits behind out stock 17" wheels. UPDATE: Spacers are needed to clear calipers with single spoke 17's as it looks as if they are 2-3mm too close.

The Brembo 17ZL and 17ZR (L=Left and R=Right) calipers come on the following Touareg Models and also on the Q7 and Cayenne's with the 17" wheels:

2004 Volkswagen Touareg 3.2L Base V6 BAA
 2005 Volkswagen Touareg 3.2L Base V6 BAA
 2006 Volkswagen Touareg 3.2L Base V6 BAA
 2007 Volkswagen Touareg 3.6L V6 BHK
 2004 Volkswagen Touareg 4.2L V8 AXQ
 2005 Volkswagen Touareg 4.2L V8 AXQ
 2006 Volkswagen Touareg 4.2L V8 AXQ
 2004 Volkswagen Touareg 4.9L TDI 5.0L BKW
 2007 Volkswagen Touareg 5.0L V10 TDI BWF

Here are the manufacturer part numbers for those calipers:

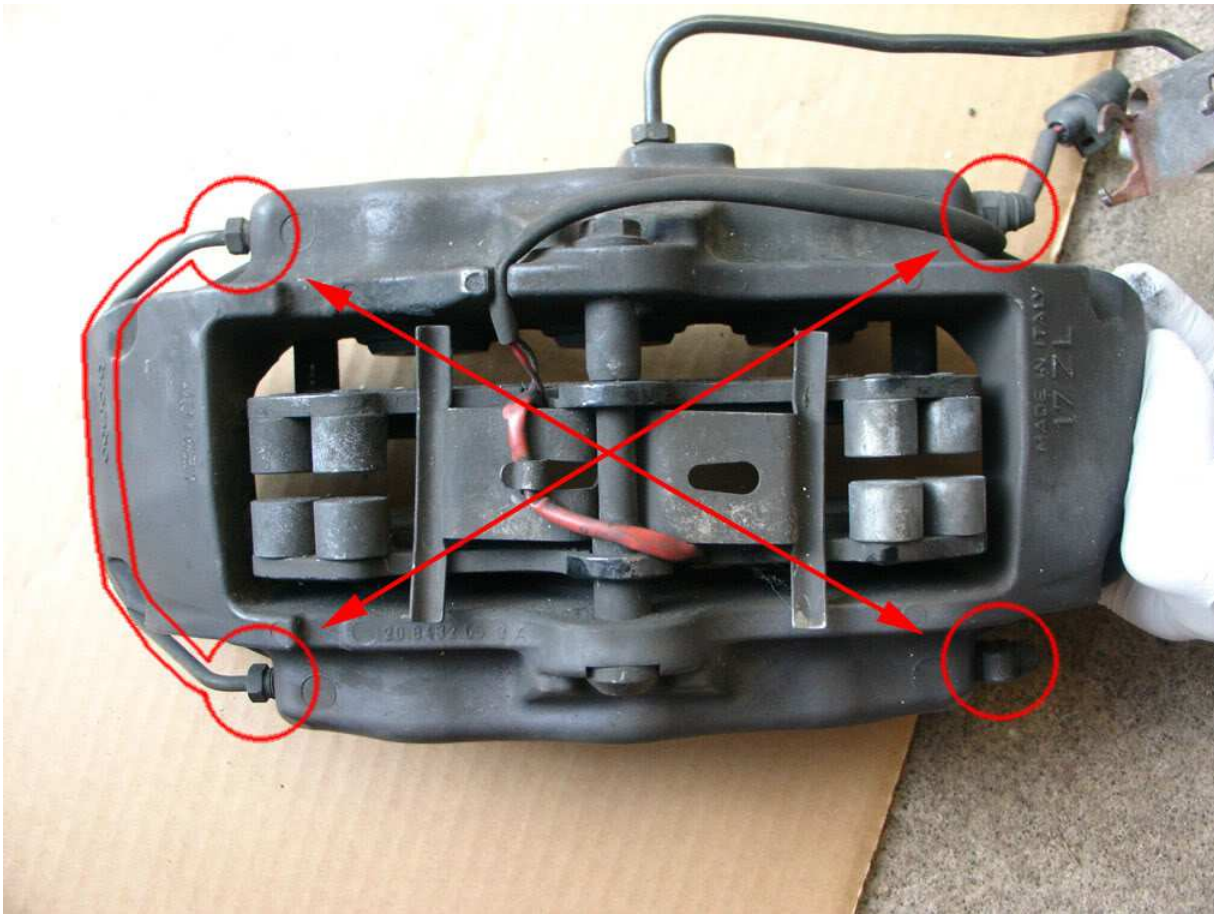
17Z Porsche Cayenne - Driver 955 351 421 32 - Passenger 955 351 422 33
 17Z VW Touareg - Driver 7L6 615 123 T - Passenger 7L6 615 124 H

Here are some pictures of the 17Z calipers I got from an 05 Touareg (and yes that is a full sized roll of shop napkins and these pics were also taken before the bleeders were swapped over):





Once the calipers are drained, cleaned (I used simple green and water 10:1 with a lot of effort) and serviced if you wanted to, the bleeders have to be swapped around since they were mounted on the front side of the rotor and now on our allroad they will be on the backside. Here is an image of what needs to be switched around:



In the end, the 17ZL will be on drivers side and 17ZR will be on passenger side and the caliper piston size will go from smaller to larger in the direction that the rotor is spinning, so smaller in this case will be at the bottom with the larger at the top of the caliper and the bleeder crossover will be on the bottom of the caliper.

Here you can see the slight difference in the piston sizes with the smaller being on the left (Piston sizes are 34, 36 & 38mm):



If you want to rebuild the calipers, you will need to order some new parts.

First, here is a nice DIY on how to break down the calipers:
<http://forums.nasioc.com/forums/showthread.php?t=2103876>

Part number for the retaining bolts and spring clips is 7L0 698 269A



Here are some other part numbers:

Crossover pipe: 7L0 615 701

Bleeder Valve: 8A0 615 273

Dust cap for bleeder valve: 211 611 483

Piston Seals and Dust boots (1 kit req for each caliper): 7L6 698 471A

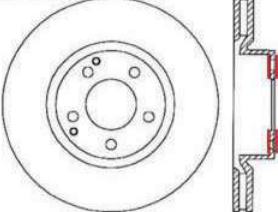
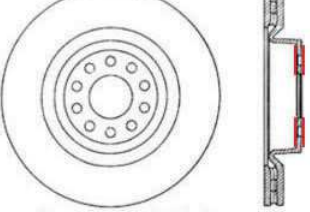


That covers the calipers!

ROTORS

In order to get these things to work on the allroad, there are a few things that need to be done.

The rotors that need to be used with the 17Z rotors are the rotors that come on the 2005 Mercedes C230 SPORT. Sport is key here as the normal C230 rotors will not work. The specs of this rotor are in the image below on the left. The rotor specs on the right are those of the stock allroad rotors.

120.35086	120.33066
FLOATING CROSS DRILLED.	<i>floating</i>
	
Outer Dia: 330.0 mm Height: 47.1 mm Nom Thick: 28.10 mm Min Thick: 26.00 mm Hub Reg: 67.0 mm Bolt Size: 13.3 mm Bolt Circle: 5 x 112.5 mm Weight: 21.60 lbs.	Outer Dia: 321.0 mm Height: 46.2 mm Nom Thick: 30.0 mm Min Thick: 28.0 mm Hub Reg: 68.0 mm Bolt Size: 15.5 mm Bolt Circle: 5 x 112 mm Weight: 21.47 lbs
'05 Mercedes C230 Sport Rotor Hat thickness = 5.70mm	'01 Audi allroad Rotor Hat thickness = 7.14mm
Difference of 1.44mm	

Notice from the image above that there is a difference in the thickness of the rotor hat. This MAY cause issues with your spacer bolts since the allroads standard hat is 1.44mm thicker. I am having ~2mm shaved off of my front spacer bolts to make sure this is not an issue.

The rotor only comes crossdrilled and part numbers are as follows:

Centric 121.35086 Standard Rotors
 Mercedes 203 421 13 12 (ATE, OEM, BALO, Zimmerman, Winhere...)
 PartsGeek W0133-1609302
 Centric 128.35086 Premium Rotors

Centric Standard Rotors:



© Copyright

Centric Premium Rotors:



Zimmerman Rotors:



Balo Rotors:



All of these rotors will need a VERY small bit of modification to work, but it is simple enough for any machine shop to do or anyone with a drill, 9/16" or 14mm drill bit and a 150 grit 3" sandpaper flapper wheel. What we are trying to accomplish is the following:



Once this is done, the rotor will slide right on. The flapper wheel technique to widen the rotor bore should be done for maybe 5 seconds and then test, 5 seconds then test etc. When you are getting close, try 2-3 seconds. arS6 said it took him 6 seconds, 6 seconds then 4 seconds and it was a perfect fit.

That covers the rotors!

HARDWARE

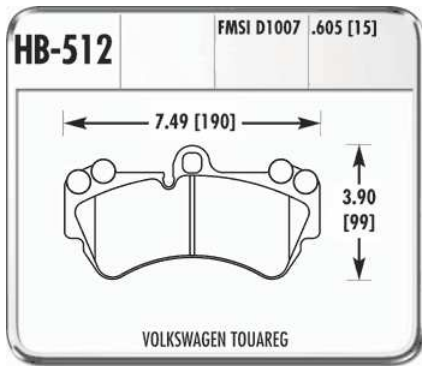
That bolts needed to bolt the calipers to the allroad need to be slightly modified. They basically need a small 1mm sleeve added to the 14mm bolt in order to make fit the 16mm mounting hole on the caliper. If you are handy and have time, you can put your own kit together OR you can buy a set from arS6 like I did :) JHM also sells them, but they are more expensive.

Here is a pic of the hardware from arS6:



PADS and SS LINES

Any pads for the models I listed above that had the 17Z's will work, just make sure they are for the 330mm rotors



I chose to go with these: Hawk HB512Z.605 Performance Ceramic Pads

UPDATE: I wasn't a fan of these pads, so I went with the EBC RedStuff pads for an 05 Touareg and I am MUCH happier!

For the stainless steel lines, I am under the impression that any Audi BBK stainless steel lines will work. I went with the Stoptech / Centric ones, part 950.33006







WHERE TO GET EVERYTHING

The hardest thing to locate and find are the calipers of course. Junkyards, ebay and craigslist are usually the key. A lot of calling around is needed. The more people call around, the higher the prices will probably get esp when they see there is a demand.

The hardware can be put together by yourself, bought from arS6 or bought from JHM.

The rest of the items can be bought anywhere you want, but I bought most of my items from Performance Peddler the same folks that did the Magnaflow GB for us since they are a Centric dealer. Call them at 1-800-470-1443 and speak with Francisco. I got these prices from them for the items below from him:

Stoptech / Centric Stainless Steel Lines: 950.33006 ~ \$55 shipped
 Hawk HB512Z.605 Performance Ceramic Pads ~ \$90 shipped
 Centric 121.35086 Rotors ~ \$61 x 2 ~ \$122 shipped
 Centric 128.35086 Premium Rotors (Didnt price from them yet)

Here are some tentative test fit shots from arS6. Not everything is completely torqued down fully and the his bleeders have not been flipped just yet.









Here are some pictures taken from my install:











Behind 18" A5 wheels:

**DIY Links:**

Here is a DIY from audiction.com on the front pad and rotor change on an allroad:
<http://www.audiction.com/audi-maintenance/front-brake-job-diy/>

Here is a DIY on HP-2 calipers. Use this along with the DIY above if you have HP-2's:
<http://audi-div.blogspot.com/2007/11/audi-a8-replacing-front-pads-hp-2-dual.html>

Here is a DIY from rennlist.com for changing the pads on these calipers:
[Brake Pad Swap DIY](#)

For and 18Z caliper retrofit, here are some part numbers and tips:

18Z Audi Q7 - Driver 7L6 615 149 - Passenger 7L6 615 150

Zimmerman Rotors
 front: 1634210312

EBC Redstuff Pads
 Front : EBC DP31473C

SS Stoptech Lines
 Front 950.33006

Front Caliper boots + seals
 (kit incl 2x30mm, 2x34mm & 2x38mm boots and seals)
 2 x 143.35037

Front Pins & Retention clip
 95535195900

Front Crossover Lines
 2 x 95535196110

Front Bleeder valves w/ boots
 2 x 93035191900

Installation hardware (bolts, sleeves and washers) is JHM or DIY

You also need to grind down the knuckle some to allow rotor clearance



Rotor modification is as follows (pic is of C230 rotor, but only center needs to be modified on ML55 rotor)



Here are 2 pics of my 18Z setup:





ENJOY

Thread:

- [allroad cheap Brembo BBK \(Big Brake Kit\) DIY....](#) [PIC](#) [URL](#) - **ricam78** 2011-06-30 22:25:33 (19172 views)
- [17Z caliper rebuild kits getting VERY hard to find](#) [PIC](#) [URL](#) - **bradnic** 2013-08-01 20:16:30 (229 views)
- [FYI: SS Brake, EBC Redstuff, and JHM Bolt kit part numbers:](#) [URL](#) - **haygood** 2012-11-25 04:11:42 (942 views)
- [what is the length of the caliper bolt hardware? how long is the sleeve? thx!](#) [NT](#) - **steinline** 2012-04-19 16:10:04 (1419 views)
- [BBK \(from Toureg\) question.](#) - **Mike B** 2011-10-10 10:28:14 (1840 views)
 - [Posted this in the wrong spot.](#) [NT](#) - **Mike B** 2011-10-10 10:48:54 (1662 views)
- [Quick update: Spacers are needed to clear calipers with single spoke 17's....](#) - **ricam78** 2011-07-21 17:49:57 (1849 views)
- [Here's the same hardware with stainless steel sleeves.](#) [NT](#) [PIC](#) - **arS6** 2011-07-02 16:48:49 (2117 views)
- [Dang... I'm gonna have to try this!!](#) [NT](#) - **D'villeAR(akaNappy)** 2011-07-01 16:18:35 (1722 views)
 - [Can always lowball him on this set :\)](#) [NT](#) [URL](#) - **ricam78** 2011-07-01 16:26:30 (1808 views)
 - [Isn't a new set of calipers just slightly over \\$800 \(touareg set\)?](#) [NT](#) - **julex** 2011-07-02 10:20:16 (1758 views)
 - [Yup, around 840+ shipping from GAP](#) [NT](#) - **ricam78** 2011-07-02 10:30:08 (1730 views)
- [No way these are gonna fit with 17's!](#) [PIC](#) - **serf2k** 2011-07-01 13:35:16 (2179 views)
- [How do we change/improve the rears to match?](#) - **haygood** 2011-07-01 12:01:11 (1802 views)
 - [Here is a rear upgrade that looks pretty straightforward \(thanks 05allroad for the link!\)](#) [URL](#) - **ricam78** 2011-07-02 14:40:12 (1973 views)
 - [B6 S4 is actually a better option. It's cheaper and is 300mm](#) [NT](#) - **FateZero** 2011-07-03 12:53:21 (1844 views)
 - [Does it a direct bolt on, or require adapters?](#) [NT](#) - **05allroad** 2011-07-03 13:27:10 (1723 views)
 - [Bolts on. All B5-B7 S4 brake stuff bolts onto AR if you use the complete brake kit](#) [NT](#) - **FateZero** 2011-07-04 21:05:49 (1814 views)
 - [So really just the same caliper adapter needed to mount the b5s4? Sweet. Any idea if the stock](#) - **05allroad** 2011-07-04 21:45:42 (1754 views)
 - [I ran stock B5 S4 Avus wheels with those brakes on my B5 S4 and they just barely cleared. Large](#) - **FateZero** 2011-07-05 17:23:05 (1809 views)
 - [Noticed that the V8 allroad uses the same pads as 2.7 up front, but different rears. Anyone](#) - **05allroad** 2011-07-02 17:26:29 (1730 views)
 - [The V8 rears are a 269x22mm, hence the different pads. Which is why I'm wondering why](#) - **BobR** 2011-07-02 17:32:31 (1720 views)
 - [I like it. I guess I'll price everything out and see what is more cost effective. Seems like not](#) - **05allroad** 2011-07-02 17:37:55 (1726 views)