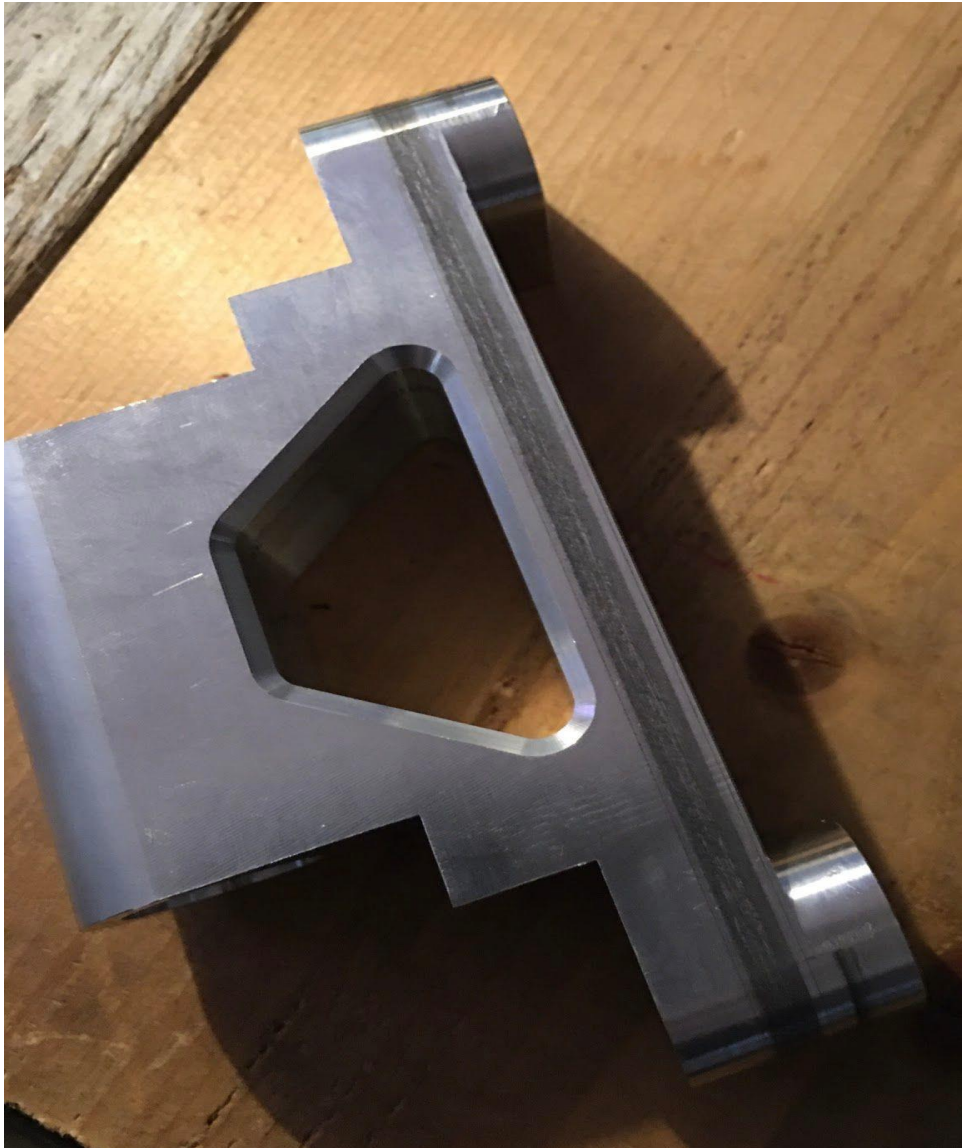


# European adapter Installation

These adapters are made to tight tolerances out of 6061 aluminum billet. They are strong and well made. A balance of strength vs weight. To make them more affordable they have a raw surface.



They may have some machining stains and slight marks. If desired these can be buffed or polished out with light sanding etc. If you decide to paint or powder coat them, please mask off all of the mounting surfaces.

Addition components required and

Part #'s:

Ducati Rotors used



2002-2007 Ducati 749, 848, 999 rotors are 320mm.

Brembo/ Ducati part# 49240751A, 49240551A (49240751A) or HP set#208.9737.11

EBC part# MD622X

Available used (usually low miles) on eBay for relatively low cost.

New aftermarket like EBC or Metalgear are fairly economical.

Verizon 8:39 AM 100%



### FEATURES

Brand	DUCATI
Model	BIPOSTO / R / S
Year	02/07
Cylinder capacity (cc)	999
Position	FRONT
Reference	1051
Outside diameter (mm)	320
Inside diameter (mm)	72
Side	L/R
Thickness (mm)	4,5
Hole number	5
Hole diameter (mm)	8,5

Privacy - Terms



High quality Brembo rotors are available used with low miles. Just make sure you get a thickness measurement before buying. Shy away from cheap Chinese aftermarket rotors. They are notorious for warping and having short lives.

If you want to use new rotors I recommend Brembo, Galfer or EBC. Also, Spanish made NG rotors are a good solution for the budget minded. They are heavy because they use steel carriers instead of aluminum but are well made.



I supply Stainless bolts necessary for mounting the adapters. Position the hub adapter without the disc. Torque your long OEM BMW bolts to manufacturer spec. Mount the rotor and torque the 8mm rotor bolts to 9-10 ft/lbs and use blue Loctite.



European Calipers tested

European calipers have a 100mm bolt spacing and a 30mm offset. *Japanese 108mm calipers will not work with this design.*

BMW S1000RR 2009 -18 *perhaps other years.*

34 11 7 714 783 Left

34 11 7 714 784 right.

Also 34 11 8 556 205 and 206 used on late model r1250GS's etc. These are mono block design and fairly common and inexpensive on the eBay etc.



S1000RR Brembo radial 34mm 4 piston Calipers Provide the best clearance for spoke wheels. But will require an 18 to 19mm Master Cylinder for dual use. 13 to 15mm for single brake

Ducati 1098,696,796,and 848 2010-13 (*perhaps other years and also Aprilia etc.*)

These Brembo radial 32mm 4 piston Calipers will work with a 16mm MC's but will feel soft. 17mm to 18 would be better for dual use. 13 or 14 OEM MC's are perfect for single brake. They are a close fit but they clear wire spokes.



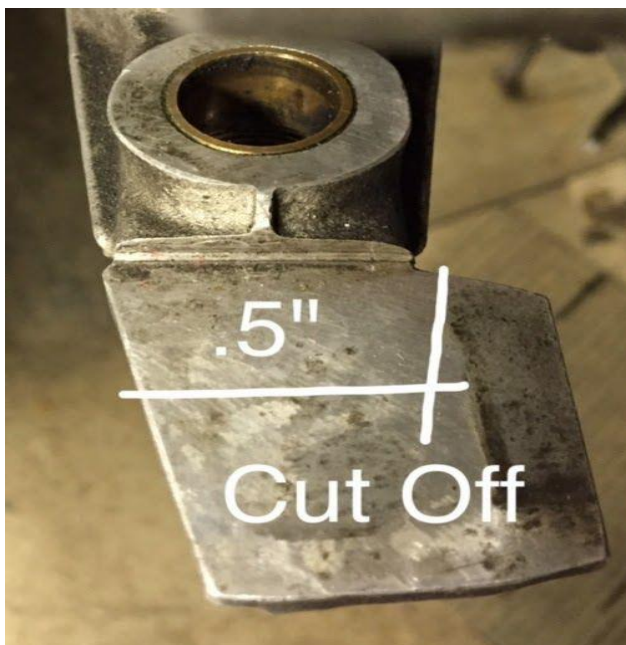
Brembo calipers are narrower than others, which is necessary to provide sufficient clearance for the spokes. There are even narrower calipers out there in the racing world, but because of expense I have yet to test any. Other Radial Calipers may work for European 100mm bolt pattern motorcycles, but have not been tested yet.

American made Haynes calipers used on late model S1000RR's have been found to work.

**Caliper bolts:** M10x 1.5 x 60mm Torque to 18-20ft/lbs and use Anti-seize so they can be removed for easier flat repair.

**Brake hoses:** Brake lines will need to be custom made because banjo fittings and various lengths are required to fit the new calipers. I recommend braided stainless hose. If you are using a stock under the tank Master Cylinder, then a 33" hose with a male M10 x 1.0 nipple at one end and a 10mm banjo fitting at the other seems to work well. If you are using a bar mounted MC, length and fittings will depend on bars used and Master cylinder selected. Just make sure the line is long enough to accommodate the forks at full extension but short enough

to prevent kinking. Routing of the line should allow the bars to turn freely without stressing the hose. Try several routes with some cheap plastic hose from the hardware store first before settling on a length. Another method that works is to have a short line made that couples to the main line and replaces the hard tube.



**Modifications:**

**Fork leg:** Unlike other airheads it is necessary to do a permanent modification to the OEM fork leg lowers on early disc brake models using the ATE swinging calipers.

To many, this is a deal breaker, but it is absolutely unavoidable with this configuration. It may be a good idea to find replacement lowers to keep as spares if for some reason you decide to have an OEM restoration.

Carefully cut the caliper mounting ears such that only a maximum of 1/2" remains.



**For dual brake applications** it is relatively simple, with my modification process, to make a left fork lower into a much less common right leg slider. Because the legs are very symmetrical, after neatly modifying the leg as above, have a qualified machine shop enlarge the axle hole to snugly fit the large end with the clamp bolt loosened. I used this method for my R90/6.



**Caliper Modification:** *(this should not be necessary for European 100mm Brembo calipers but may be required with other untested choices)*. Using a file, block sander, or a grinder, Shave off 2mm of material at a 12 degree angle from the inside leading corner of the caliper, the corner closest to the spokes, to create at least 2mm of clearance. Do not remove so much material that the integrity of the caliper piston barrel is compromised.



**Adjustment:**

Centering the caliper with the disk is achieved by moving the eccentric pin the way you would with a stock set up. Basically, adjust by sight until the disc appears centered between the discs. Start with the caliper adjusted as close to the fork as possible and then slightly outboard. A 1:00 position on the left side and an 11:00 position on the right

Take the bike for a short ride. Adjust again as needed, by eye. Once centered it will require no more adjustment.



4 piston calipers are very forgiving and do not need to be absolutely centered to work properly. The pistons will orient themselves to center the disc. The main reason for adjustment is to prevent the caliper body from being so out of line that it comes into contact with the friction disc. The caliper may still be able to pivot on the eccentric pin. This will not effect their operation because these calipers, unlike the OEM calipers, operate in the same plain as the piston travel. The pads, by design, will remain parallel to the disc.

When removing or installing the wheel at least one caliper will need to be removed when equipped with a dual brake set up. The fork legs can be machined with a curve to allow the calipers to swing out like the stock set up, but caliper removal is very simple, so the extra complexity is not really Required.



It is completely fine to have a gap between the adapter and the fork leg.

**Carefully bleed** all of the air out of the brake lines. It is best to do this with the calipers removed from the disc and clamped to a suitable piece of wood or metal in an upright position that puts the bleeder at the top. This will allow bubbles to reach the bleeder more effectively.

Make sure you use new pads and the proper break in procedure detailed by the manufacturer. Once you have properly broken in the pads you should notice a significant improvement in braking.

If you have further questions, do not hesitate to contact me at [r90xdesigns@earthlink.net](mailto:r90xdesigns@earthlink.net)  
Good luck with your project!

Please send pictures of your results.

Sent from my iPhone