

Installation instruction for brake disc conversion for BMW models

1. General information

Before you start with the conversion, we recommend you to diligently read the part certificate and the install instruction which contain some tips and notes. Works on the handlebar or on the brake system constitute a safety risk! Incorrect mounting can cause serious consequences! Please do not carry out the following operations when you are not sure with the handling on these work areas!

The brake system and their components are safety related motorcycle parts. Therefore this conversion must be performed by a qualified technician. Brake fluid can damage painted surfaces and covers. Protect all surfaces by means of suitable preservatives.

After the conversion you should carry out a test drive! After the test drive, carefully inspect all the screw connections for firm hold and tightness and all moveable parts for sufficient clearance. In addition to that, check all features of the electrical system and the anti-theft performance.

During the work, an instable motorcycle can easily fall over. Therefore, pay attention that the bike stands securely.

Personal injury! Children and pets must be kept away from the work area. Parts for the reinstallation can be damaged.

When dismantling single components make sure which screws you have used. Keep these screws and, if there are no other instructions, use them again when reinstalling the components.

2. Content and recommend accessory

1 outer ring	Screw M5x18 DIN 912
Floater	Washer M5 DIN 125
Corrugated washer	Stop nut M5 DIN 985
Screw M5x14 DIN 912	Hexagon nut (half-high) M5 DIN 439
Screw M5x16 DIN 912	Safety washers M5

3. Dismantling of the original brake disc

Original brake disc will be dismantled in accordance with the workshop manual.

4. Renewal of the original outer ring (only necessary for self-assembly)

- Grind down the connecting rivets of the brake disc holder and the brake disc (wear protective goggles!). If you have a floating system, you must drill the floater out. Rivets must always be grinded on the outer surface of the brake disc.
- Hit out the rivets with a hammer and a suitable pin punch. Do not damage the brake disc support! It is recommended to use the vise jaws as a supporting area or create a special device.
- Clean and sand blast the brake disc support.
- Inspect the brake disc support for damages and cracks. If you find any cracks on the rivet drillings, you must not use this brake disc support again!
- Measure the axial run-out of the brake disc support. The hub flange must be absolutely clean and flat (you can clean it with a scratch brush or a fine sandpaper. The bearing surface of the measuring device must also be very flat (check it with a dial gauge).
- If the axial run-out is more than 0,1mm, the brake disc support must be faced. Important: Some brake discs have a centering collar on the front surface. This collar must be shorted so that it is not thicker than the brake disc (4,5mm or less).
- Lay the outer brake disc ring on the brake disc support and align it (fig. 2).
- Put the corrugated washer onto the floater and lay the floater onto the outer ring (fig. 6-8).
- There are three different screw lengths included in the set. The usage depends on the structure of the original brake disc holder (Fig. 3-5).
- Put the screw through the floater. According to the construction of your motorcycle, either apply the washer M5 from behind and fix it with the M5 stop nut or mount it with the safety washer, the half height screw nut and a thread-locker. Repeat this process with all 10 floaters (fig. 9-11).
- Then secure all screw connections crosswise with a torque value of 6 Nm (fig. 12).
- After installing the brake disc, imperatively control the freedom of movement to the brake caliper etc.!

5. Installation of the brake disc

- Clean the wheel flange, on which the brake disc will be mounted, carefully (paint residues, old thread-locker, etc.) and examine it for any damages.
- A contact surface that is damaged or dirty is not flat. Therefore rubbing of the brake will not be prevented.
- Before you start with the mounting, coat all fixing screws with a medium strength thread-locker.
- Mount the brake disc by means of the original or the included fixation parts according to the requirements of the motorcycle manufacturer. Consider the torque value requirements of the vehicle manufacturers!
- Important: Check the brake calipers with regard to freedom of movement of the brake pistons and the swim and saddle bolts.
- Damaged brake calipers can wreck the brake disc.
- The overhaul of the brake calipers should be made by a well-equipped technician.
- If everything is okay, you can mount the brake pads, the wheel and the brake calipers according to the manufacturer's specifications.
- Check the exact position of the brake calipers and the freedom of movement of the wheel and the brake disc. If necessary, correct it. Reference value: Brake calipers must be placed in the middle of the disc. The distance of the pliers to the brake disc must be 1-2mm. The brake pads must not protrude outboard of the outer edge of the brake disc.

