

## **Install 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.

**No liability is accepted for damages which arise by improper mounting!**

### **Dismantling of the original brake disc**

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

### **Renewal of the original outer ring (only necessary for self-assembly)**

1. Separate the brake disc holder and the brake disc by grinding the connecting rivets (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.
2. 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.
3. Clean the brake disc support and if possible sandblast it afterwards.
4. 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!
5. 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).
6. 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).
7. Check the plate for serial number and carry out any further procedure in accordance with the auxiliary table. Keep in mind how the brake disc was mounted (with 5mm or 6mm diameter rivets) (fig. 3).

### **Mounting with 5mm diameter rivets**

1. Drill all 10 brake disc absorption holes to a diameter of 4,92mm, tap M6 threads and deburr it. Attention: Drills and taps must always be applied in a straight position (fig. 4). Important: The thread length in the plate must always be more than 8,5mm (fig. 5).
2. Lay the outer brake disc ring on the brake disc support and align it.
3. Put the corrugated washer onto the floater and lay the floater onto the outer ring (fig.6).
4. There are three different screw lengths included in the set. The usage depends on the structure of the original brake disc holder (support table). At the end the screws should sit flush with the plate (fig. 7).
5. Secure all screws with thread-locker (medium strength), push it through the floater and fix them with a torque value of 8Nm (fig. 8).
6. Repeat this process crosswise with all 10 floaters.
7. Again, punch all ends of the screws for more security (fig. 7).

### **Mounting with 6mm diameter rivets**

1. Drill all 10 brake disc absorption holes to a diameter of 6mm and slightly deburr. On this plate, you do not need to drill threads. Attention: Drills must always be applied in a straight position.
2. Lay the outer brake disc ring on the brake disc support and align it.
3. Put the corrugated washer onto the floater and lay the floater onto the outer ring (fig.6).
4. There are three different screw lengths included in the set. The usage depends on the structure of the original brake disc holder (support table). At the end the screws should sit flush with the nut (fig. 9).
5. Put the screw through the floater and mount it from behind with a safety washer and with the half height screw nut. Secure all screws with thread-locker (medium strength). Repeat this process with all 10 floaters.
6. Then fix all screw connections with a torque value of 2,5Nm crosswise on the nuts sides (fig. 10).
7. Again, punch all ends of the screws for more security (fig. 7).

### **Mounting of the brake disc**

1. 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.
2. Before you start with the mounting, coat all fixing screws with a medium strength thread-locker.
3. 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!
4. 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.
5. If everything is okay, you can mount the brake pads, the wheel and the brake calipers according to the manufacturer's specifications.
6. Check the exact position of the brake calipers and the freedom of movement of the wheel and the brake disc. If necessary, correct it.
7. After having installed the brake disc, don't forget to check the freedom of movement to the brake caliper, etc.

### **Auxiliary table**

**No liability and guarantee is assumed to the up-to-dateness, correctness and completeness of the provided information and the data in this table! It is intended as a guide only!**

Ø of brake disc	plate number	Drills	Taps	Length of screws	ISO	Nut
260 with 5 mm rivets	1 236 337	Ø 4,92 mm	M6	M6 x 12	7984	without
260 with 5 mm rivets	1 231 343	Ø 4,92 mm	M6	M6 x 12	7984	without
285 with 6 mm rivets	1 454 179	no drilling	no thread	M6 x 14	7984	M6 flat
285 with 5 mm rivets	1 458 114	Ø 4,92 mm	M6	M6 x 12	7984	without
285 with 5 mm rivets	1 450 870	Ø 4,92 mm	M6	M6 x 12	7984	without
285 with 5 mm rivets	1 454 897	Ø 4,92 mm	M6	M6 x 12	7984	without
285 with 5 mm rivets	1 450 897	Ø 4,92 mm	M6	M6 x 12	7984	without
285 with 5 mm rivets	1 457 497	Ø 4,92 mm	M6	M6 x 12	7984	without
285 with 5 mm rivets	1 450 784	Ø 4,92 mm	M6	M6 x 12	7984	without
K100RS 285 with 6 mm rivets	1 450 870	no drilling	no thread	M6 x 16	7984	M6 flat
285 with 5 mm rivets	2 310 205	Ø 4,92 mm	M6	M6 x 12	7984	without

