

1. BBS-wheels for racing purposes

These wheels are developed for racing purposes only and therefore are neither suited nor allowed for street use.

2. Running time (limit/inspection)

Racing wheels are meant to perform for a reasonable lifespan. It is recommended that running time reports are kept for each wheel.

Keeping such reports of distance and wheel location will maximise the lifespan of all wheels and assuring optimum value.

BBS stamps the serial number into each wheel and this can be used for report identification. This serial number is not stamped into certain aluminium wheels that are used in Ferrari Challenge, Touring Cars, WRC, etc.

Due to the range in material properties, impacts due to accidents or impacts due to off-course excursions, it is impossible to state the exact durability time of said wheels as all of these factors will affect the proper running time.

Slight damage in highly stressed zones can reduce the lifespan of the wheels.

We strongly recommend regular visual inspection for damages and cracks after each use during cleaning if possible. Also the valves must be checked and it's recommended to replace the valve core after each use.

!!!Attention!!!

Subsequent mechanical and/or thermal works aren't allowed without approval of Fa. BBS Motorsport GmbH. For example → remove paint, repainting, anodize, straighten out, etc..

The subsequent works aren't fulfill the delivery status and the checked version of the wheels and may lose their characteristics. Repainting can be executed on the special cases, provided the permissible temperature and drying times be respected and accorded to the arrangement with BBS Motorsport GmbH (Sales).

3. BBS Service

BBS offers the following suggestions:

3.1 Standard inspection (minimum)

- visual inspection of damage and the possible repairs thereof.
- crack inspection by means of dye penetrant detection method in our crack testing unit and evaluation by our qualified inspectors
- inspection of vertical and lateral run-out at rim edge on both bead flanges.

3.2 Revision

- standard inspection according to pos. 3.1
- removal of paint
- completely new painting

For service of this nature, all wheels must be supplied free of tires and entirely cleaned with soap and water to be free of all brake dust.

4. What to do in case of damage

Damages such as scratches, dents and deformations can not be avoided in racing.

Due to notch sensitivity of the material used, certain damage depending on its position and severity can lead to premature wheel cracks and must be dealt with accordingly.

Below please find a description of possible damage:

4.1 Scratches

In general, scratches occur in the section between the brake caliper and the inner rim or the back of the spokes. These are mostly caused when the car goes through the gravel trap or picks up debris. Scratches on the outside of the spoke (see sketch below) occur mostly from side to side contact and must also be dealt with accordingly:

a. Scratches on spoke surface

In case of paint abrasions only, there is no danger. However, if the material is damaged even to a minimal depth these slight scratches can lead to premature cracks. Location is important.

Wheels showing scratches have to be checked and if possible repaired by BBS.

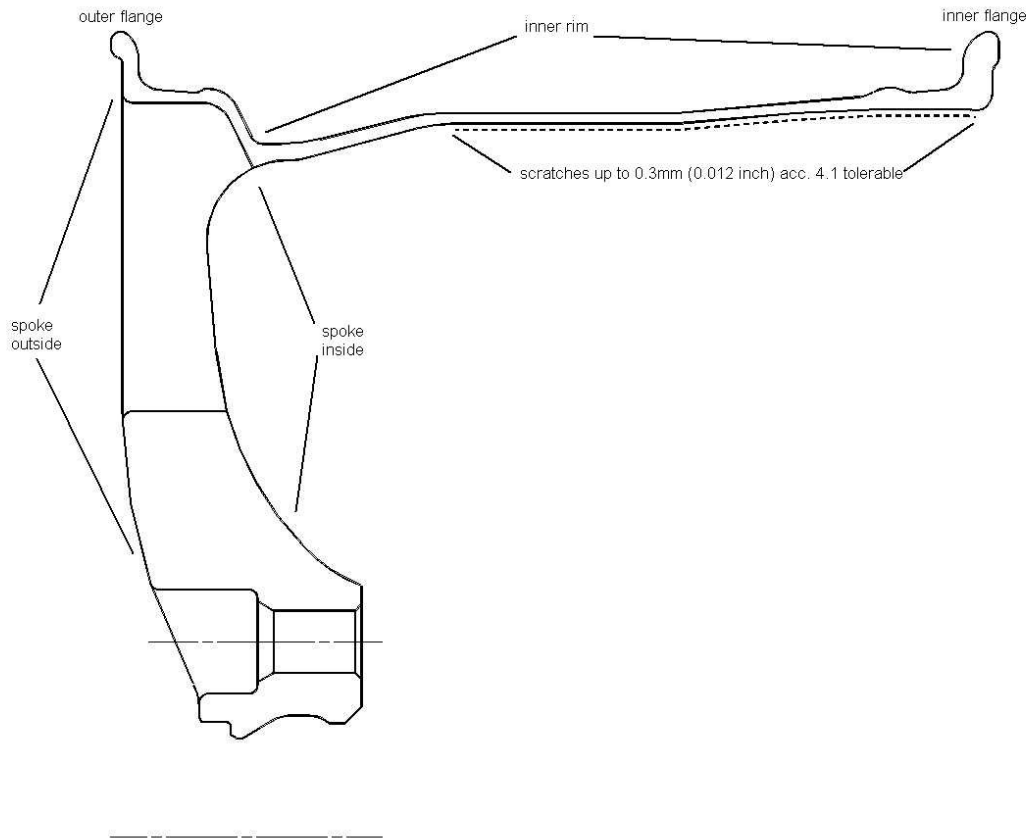
b. Scratches on inner rims

BBS tests on damaged wheels showed that circumferential scratches on the marked inner rims (see sketch) in depths up to max. 0.3 mm (0.012

inch) did not have any significant influence on durability. If the damage is of concern it is highly recommended that the wheel be inspected by BBS.

4.2 Dents

- Dents mainly occur on rim edges and spokes from either contact or tire mounting.
- Minor dents that are not too sharp up to depths of 1 mm (0.040 inch) can be massaged. Sharp notches up to 1 mm depth (0.040 inch) have to be ground down substantially to the bottom.
- If repair occurs, it is best to try and reapply corrosion protection (paint).



4.3 Deformations

Generally, deformation occurs to the inner and outer rims at the rim edges.

From our experience deformation up to 1 mm (.040 inch) in either vertical or lateral run-out generally does not have a negative influence on performance. This must be considered in general as different class cars can be more or less sensitive to vibration caused by run-out.

As a rule it is highly recommend to have damaged wheels tested by our BBS-experts in order to prevent further damage.

5. Jump pressure

5.1 General information

- In wdk guideline 104, the maximum jump pressure is defined at **3.3 bar (48psi)**.
- If the beads are properly set on the rim shoulders, the setting pressure may be increased up to **4 bar (58psi)**.
- If higher pressures are required for assembly, the assembly process must be stopped. In this case, proceed as follows:
- Disassemble the beads and apply assembly paste again on all sides (including any potential rim protection). - Apply assembly paste on both rim shoulders. - Assemble the tyre again and fill it with compressed air
- If this still does not cause the tyre to jump over the hump at a maximum of 3.3 bar, the tyre and the wheel should be measured. Whether the tyre is the cause can be clarified by assembly of a different tyre for comparison (if possible, use a different tyre model!). Specific types of humps (e.g. asymmetrical humps) generally require higher jump pressures. The limit, however, is still set at 3.3 bar.

(Source: BRV - German Tyre Retailer and Vulcanization Trade Association)

ATTENTION!!!

Excessive jump pressure can lead to deformation or even damage the wheel. If high jump pressures become necessary, precautions should be taken like supporting of the rim flanges by suitable means, a protection cage or similar

5.2 Racing tyre assembly

For assembly of racing tyres, extremely rigid tyre beads/carcasses may lead to considerably higher jump pressures in comparison with conventional road tyres.

For this reason, modern single-piece BBS motorsport tyres for GT racing can withstand maximum jump pressures of up to 8 bar. However, it must always be ensured that the tyres are filled in stress-relieved condition and in a safety cage.

For 3-part tyres, a maximum jump pressure of 5 bar is admissible. Higher pressures may lead to deformation and damage at the fitting or leakage.

Wheels with special rim geometries (deviating from ETRTO), e.g. at LMP1 AERO tyres, must be supported during assembly and the maximum jump pressure of 4 bar must not be exceeded.

For assembly of historic BBS motorsport tyres, wdk guideline 104 must be observed (see chapter 5.1).

6. Assembly of multi-part tyres

6.1 General information

If multi-part tyres have to be disassembled due to damage, replacement of the bed/spider, loss of air or similar, the following points must be observed for reassembly to ensure that proper function is restored.

- Install a new sealing ring
- Use new screws
- Tightening torque for M6 screws → 16.5 Nm + 2 Nm
- Tightening torque for M7 screws → 28 Nm + 2 Nm
- **Only original BBS motorsport steel screws and sealing rings may be used.**

!!!Attention!!!

BBS Motorsport GmbH does not warrant for independent disassembly and assembly for multi-part wheels