

SKF Technical Bulletin

VKBA 6699 – Bearing design evolution + Mandatory use of proper tools to dismount and mount HBU 2.1 wheel bearing



MERCEDES Sprinter, VW Crafter



- SKF Bearing design evolution.
- Use of the correct tools for mounting and dismounting HBU 2.1



Car Make	OE Nb of the Complete knuckle
Mercedes	A 906 33 02 420, A 906 33 02 520, A 906 33 03 420, A 906 33 03 520
VW	2E0 407 303P

SKF has developed and applied a new bearing design for the SKF Wheel bearing VKBA 6699. This design optimization guarantees the same quality level, which is full in line with OE requirements. It can be used for applications with all payloads, up to 1,850kg and from 1,850 kg.



Aftermarket bearing design:

 2 bearings for payloads up to 1850kg and from 1850kg.





SKF bearing design:

 1 bearing for all payloads up to 1850 kg and from 1850 kg.













The HBU 2.1 requires the use of special tools for dismounting and especially for the mounting the bearing on the vehicle.

For the vehicles listed on previous page, car makes only offers a complete knuckle as spare part. With the VKBA 6699 kit, SKF offers a time-saving solution as only the bearing needs to be replaced. Therefore, less mounting steps and adjustments (e.g no wheel or axle alignment) are necessary in comparison to the replacement of the OE complete knuckle!





Pictures on premature bearing failures.

Basic fitting instructions for HBU 2.1

Always use the proper tools for all steps.

- 1. Remove the old bearing from the steering knuckle.
- 2. Carefully clean the surface in the steering knuckle and make sure there are no damages.
- 3. Install the new HBU 2.1 pressing on the outer-ring side of the bearing.

The critical point is that mounting pressure has to be applied on the outer-ring. Pressing on the inner-ring (the flange) will seriously damage the bearing and lead to premature failure. Therefore, it is important to use proper tools as well as follow the mounting steps!

Note! Never use a standard hydraulic press applying force on the flange. This force goes through the inner-ring to the rolling elements and lastly to the outer-ring. This applied force causes damages on the bearing raceway which could lead to the early bearing failure.



Click here to watch SKF technical videos on Youtube!

