SKF Pole Position

FORD, MAZDA
SMART, VAG
VOLVO

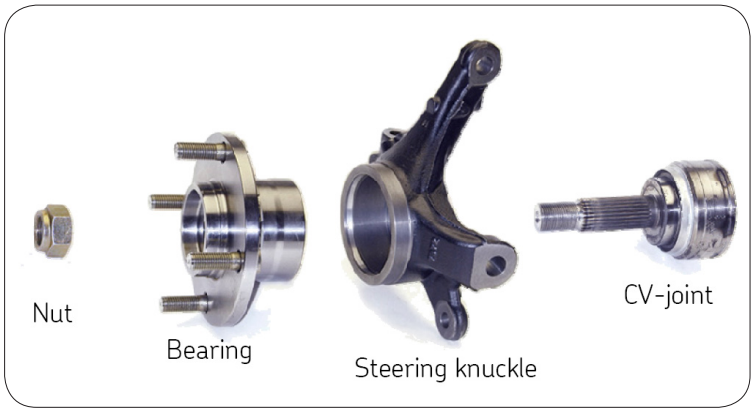
Issue 2 · 2010

VKBA 3569

The HBU 2.1 wheel bearing design from SKF

This bulletin focuses on detailed fitting guidelines when mounting a VKBA 3569 with a HBU 2.1 specific wheel bearing design – this is a design which is becoming more and more common in the market place. It will also highlight damage that may occur when the correct installation tools are not used during assembly.

This bearing design requires the use of special tools for dismounting, but more importantly the mounting of the bearing onto the vehicle. SKF does not offer a tool programme for bearing dismounting and mounting within our range – however, a variety of tools are offered by many different tool manufacturers and some are also designed and used by OEM workshops.



Bearing HBU 2.1 and associated components

The table below highlights all of the HBU2.1 bearing designs in our range; these are covered by the fitting guidelines highlighted in this bulletin.

KIT DESIGNATION	CAR MANUFACTURER	MAIN MODEL
VKBA 3550	AUDI, VW	A2, LUPO
VKBA 3568	SKODA, VW	FABIA, FOX, POLO IV
VKBA 3569	AUDI, SEAT, SKODA, VW	A2, CORDOBA (6L), IBIZA, FABIA, ROOMSTER, FOX, POLO IV
VKBA 3646	VW	MULTIVAN, TOUAREG, TRANSPORTER
VKBA 3660	FORD	C-MAX, FOCUS, FOCUS C-MAX
VKBA 6543	VOLVO	C30, C70, S40, V50
VKBA 6680	SMART	FORFOUR
VKBA 6800	MAZDA	3

Fitting guidelines for mounting the VKBA 3569

No pressure on the flange

When fitting the HBU2.1 type of bearing; under no circumstance should pressure be applied to the 'flange', as doing so will damage the bearing and replacement will be necessary. As mentioned earlier, there are many makes of specific fitting tools available in the market – using the correct tooling is imperative when installing the bearings listed in the table, on the first page. 'HOME MADE' tooling will also not work either, as damage could occur to the snap ring (if fitted) and the internal rolling elements.

Picture 1: VKBA 3569 and a correct mounting tool

Tight fit

Ensure that the two halves of the tool fit tightly behind the outer ring. Then lock the two halves together. (Pictures 2 and 3 highlight bearings with and without a pre-installed snap ring).

Picture 2: With snap ring

Picture 3: Without snap ring

Note: ALWAYS follow the vehicle manufacturers' recommendations for servicing and replacing wheel bearings, drive & braking components.

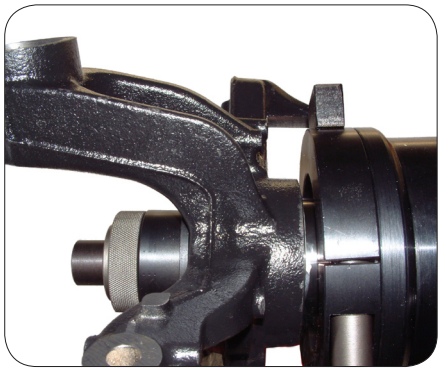
Use of anti fretting paste

Apply a small amount of anti-fretting paste (see picture 4) to the first 3–4 mm of the bearing shaft. (see picture 5)

Picture 4: SKF anti-fretting paste

Picture 5

Clean the knuckle/bearing housing and insert the bearing and the tooling, as shown in picture 6. Depending on application, apply equal pressure (at 90 degrees) to the bearing until the snap ring engages fully into the groove, or the bearing is fully seated.



Picture 6

Note: ALWAYS follow vehicle manufacturers torque recommendations when tightening the components.

Clean off any excess anti-fretting paste, ensuring that the ABS sensor is also clean of any excess grease. (see picture 7).

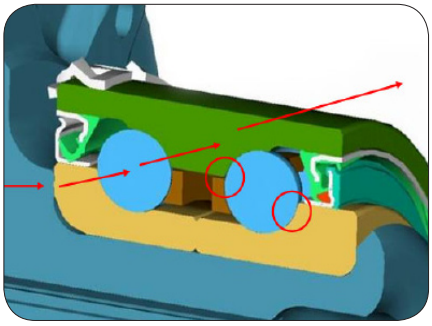
Refit all braking, and steering components as necessary.

Picture 7: Clean off excess grease

Note: Please be aware that some manufactured tools are APPLICATION SPECIFIC and can only be used for certain HBU2.1 bearings. Check with your preferred tool manufacturer before attempting to remove, or fit the bearing.

What happens if I put pressure on the flange during mounting?

As depicted in picture 8, if pressure is applied to the flange when pressing into the hub, the force is transmitted through the inner ring, rolling elements, then to the outer ring. When this force is applied, damage will occur to the bearing, as shown in picture 9 and 10.



Picture 8

Picture 9

Picture 10

If any resistance was felt during the removal of the driveshaft, a new replacement unit should be recommended to your customer. See the latest SKF CV Joint and Driveshaft catalogue for application listings.

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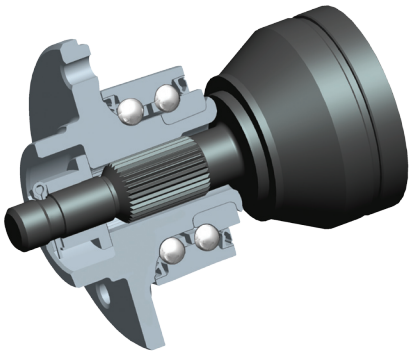
The perfect fit



SKF wheel bearings and CV-Joints are designed to fit together

As OE supplier to most car manufacturers for wheel bearings (over 30% of market share in Europe) and CV-Joints, why risk using components that haven't been especially designed for your customers from the beginning?

And with more than 100 years of experience in manufacturing wheel bearings that perfectly fit their CV-Joints, you can't go wrong with SKF aftermarket solutions.

A selection of CV-Joints that fit the wheel bearing VKBA 3569 (HBU 2.1) on some popular vehicle models.

CAR MANUFACTURER	MAIN MODEL	SKF CV-JOINT KIT DESIGNATION
AUDI	A2 (8Z0)	VKJA 5262, VKJA 5265
VW	Polo (9N_)	VKJA 5264, VKJA 3021, VKJA 5265, VKJA 5267
SEAT	Ibiza IV (6L1)	VKJA 5264, VKJA 5266, VKJA 5265
SKODA	Fabia (6Y2)	VKJA 5264, VKJA 5265, VKJA 5263, VKJA 5266

Did you know... ?

– When replacing the wheel bearing, you should also inspect the CV-Joint protective boot too – it's easy and highly recommended to reduce the risk of breakdown!

– If the CV-Joint protective boot is split or detached from the CV-Joint, the CV-Joint will more than likely be damaged by exposure to water and debris. At this point, the inspection or replacement of the CV-Joint is key to providing your customer with a professional repair.

– In addition to CV-Joint kits; SKF also offers driveshaft kits (no deposit required) and boot kits (including a universal boot that can be fitted on most cars).

SKF has a broad range of wheel bearings, CV-Joints, driveshafts and boots for a variety of aftermarket solutions.

PUB 80/I2 10770 EN.GB • 2010

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