

## Service of the Hub Unit

**for wheel hub**

- 03 307 3043 00
- 03 307 3044 00
- 03 307 3045 00
- 03 307 3046 00
- 03 307 3056 00



## 1 Wheel rock test

We recommend that you carry out the wheel rock test and wheel bearing noise test and check the function of the seal system (grease leakage) in the event of signs of a malfunction.

At brake disc changes and in the event of damage, e.g. brake overheating, inspect the bearing for grease leakage.

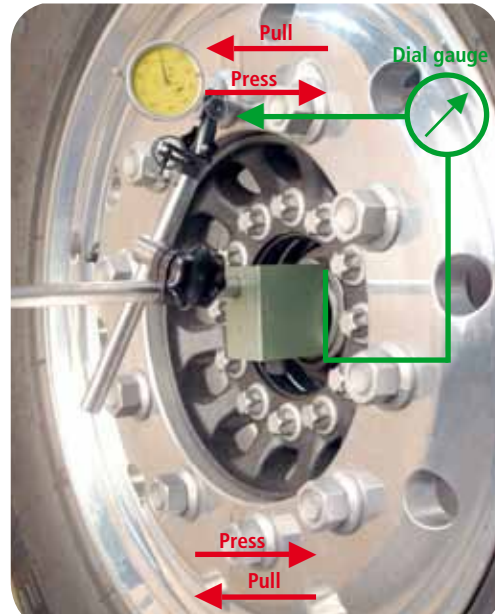
For further instructions, refer to the error flow charts under [www.safholland.com](http://www.safholland.com)

### Wheel rock test bearing 82 mm

1. Raise the wheel. **Do not remove the wheel!**
2. Carefully remove the wheel cap.
3. Check the prescribed tightening torque of the axle nut (900 Nm).
4. Position the magnetic foot of the dial gauge as shown on the right. Surface must be cleaned before.
5. By alternately pulling and pressing (first pull at the top an press at the bottom, then pull at the bottom and press at the top), rock the wheel and read off the travel on the dial gauge.  
**Rotate the wheel several times before each measurement!**

#### Note!

If a wheel rock of more than 0.25 mm (250  $\mu$ m) is measured, the hub unit has to be replaced.



### Wheel rock test bearing 88 mm

1. Raise the wheel. **Do not remove the wheel!**
2. Carefully remove the wheel cap.
3. Check the prescribed tightening torque of the axle nut (900 Nm).
4. Position the magnetic foot of the dial gauge as shown on the right (picture 1). Surface must be cleaned before.
5. By alternately pulling and pressing (first pull at the top an press at the bottom, then pull at the bottom and press at the top), rock the wheel and read off the travel on the dial gauge.  
**Rotate the wheel several times before each measurement!**

#### Note!

If a wheel rock of more than 0.22 mm (220  $\mu$ m) is measured, the hub unit has to be replaced.



picture 1

## 2 Grease leak test (bearing 82 mm and 88 mm)

Increased grease leakage:

1. **Indicator:** If the wheel flange is covered with grease up to half the height when "dry".
2. Carefully remove the wheel cap.
3. If the complete inside of the wheel flange, i.e. inside of cover, axle nut, axle tube and seal are covered with grease, an increased grease leakage has occurred.

**Note!**

**There may be a small amount of grease on the lower edge of the seal. This is normal and does not indicate grease leakage.**

Seal not completely covered (picture 2).  
Normal operating condition  
(= after a prolonged period of operation).  
Hub unit is OK.

Seal completely covered all over with tar-like grease (picture 3).  
Recommended measure:  
Replace the hub unit

„OK“



picture 2

„Not OK“



picture 3

## 3 Wheel bearing noise test (bearing 82 mm and 88 mm)

**Note!**

Frictional noises from the brakes or „break-away effects“ – caused by the sealing gasket or grease – are normal and have no effect on performance.

The brake pads must be away from the brake disc.



### 4 Annealing colours on the flange (only bearing 82 mm)

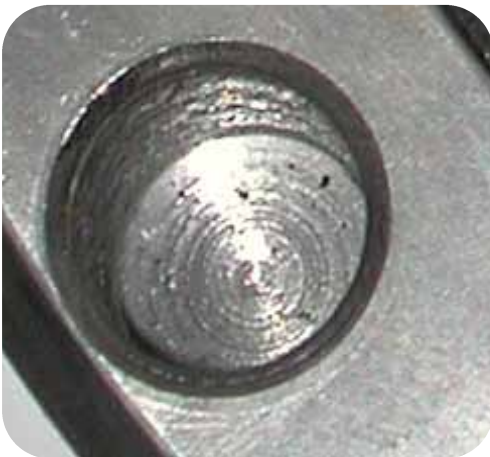
The discolouration is to be seen at the contact points to the brake disc and at the chamfer to the centering diameter or at the bottom of the blind holes (see figures). This discolouration is blue, red or occasionally tending to yellow.

**Discolouration in this area can be caused by incorrect function/operation of the brakes. The brake system must therefore be checked for tractor/trailer brake synchronisation and for adaption.**

It must be assumed that particularly the grease or the bearing race and the seal have been subjected to thermal damage. If large amounts of grease escape at the same time from the outer seal (under the cap), the hub unit must be replaced.

	Annealing temperature °C
Pale yellow	200
Straw yellow	220
Golden yellow	230
Yellowish brown	240
Terra-cotta	250
Red	260
Purple	270
Violet	280
Dark blue	290
Cornflower blue	300
Pale blue	320
Bluish grey	340
Grey	360

„OK“



„Not OK“



„Not OK“



**Recommended measure: Replace the hub unit**

# Datenerfassung „Hub Unit“ Data Input Sheet “Hub Unit”



SAF Meldungsnr.  
SAF Report no.

## Bitte beachten! / Please note!

- ☞ Die folgenden Daten sind zur Bearbeitung der Reklamation notwendig.  
*The following data are required for processing of the complaint.*
- ☞ SAF benötigt die Messwerte unbedingt vor Beginn der Reparaturarbeiten.  
*The measured values must be supplied to SAF before the start of the repair.*

## Fahrzeugeigentümer / Vehicle Owner

Firma Company			
Straße Street			
PLZ / Ort Post code / Town		Land Country	
Nachname Surname		Vorname First name	
Telefon Telephone		Fax Fax	
E-mail E-mail		Internet Internet	

## Kippspiel Prüfung / Wheel Rock Test

	Serial-Nummer / Serial number	Links / Left	Rechts / Right
1. Achse 1 <sup>st</sup> axle		mm	mm
2. Achse 2 <sup>nd</sup> axle		mm	mm
3. Achse 3 <sup>rd</sup> axle		mm	mm
4. Achse 4 <sup>th</sup> axle		mm	mm
5. Achse 5 <sup>th</sup> axle		mm	mm

## Fettaustritt (nach SAF Vorgabe) Grease Escape (to SAF Specification)

	links / Left		Rechts / Right	
	Ja / Yes	Nein / No	Ja / Yes	Nein / No
1. Achse 1 <sup>st</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Achse 2 <sup>nd</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Achse 3 <sup>rd</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Achse 4 <sup>th</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Achse 5 <sup>th</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Radlagergeräusch Prüfung (raues oder mahlendes Geräusch) Wheel Bearing Noise Test (rough or grinding noise)

	Links / Left		Rechts / Right	
	Ja / Yes	Nein / No	Ja / Yes	Nein / No
1. Achse 1 <sup>st</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Achse 2 <sup>nd</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Achse 3 <sup>rd</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Achse 4 <sup>th</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Achse 5 <sup>th</sup> axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## We are always there for you

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