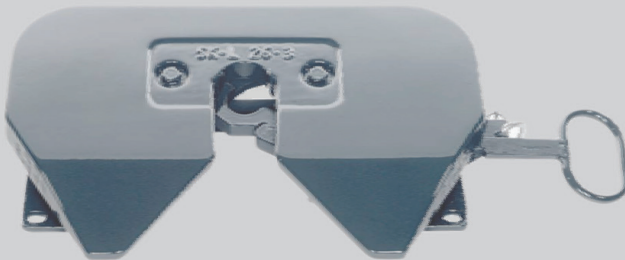


Mounting - Operation - Maintenance

Fifth Wheel SK-L 26.3

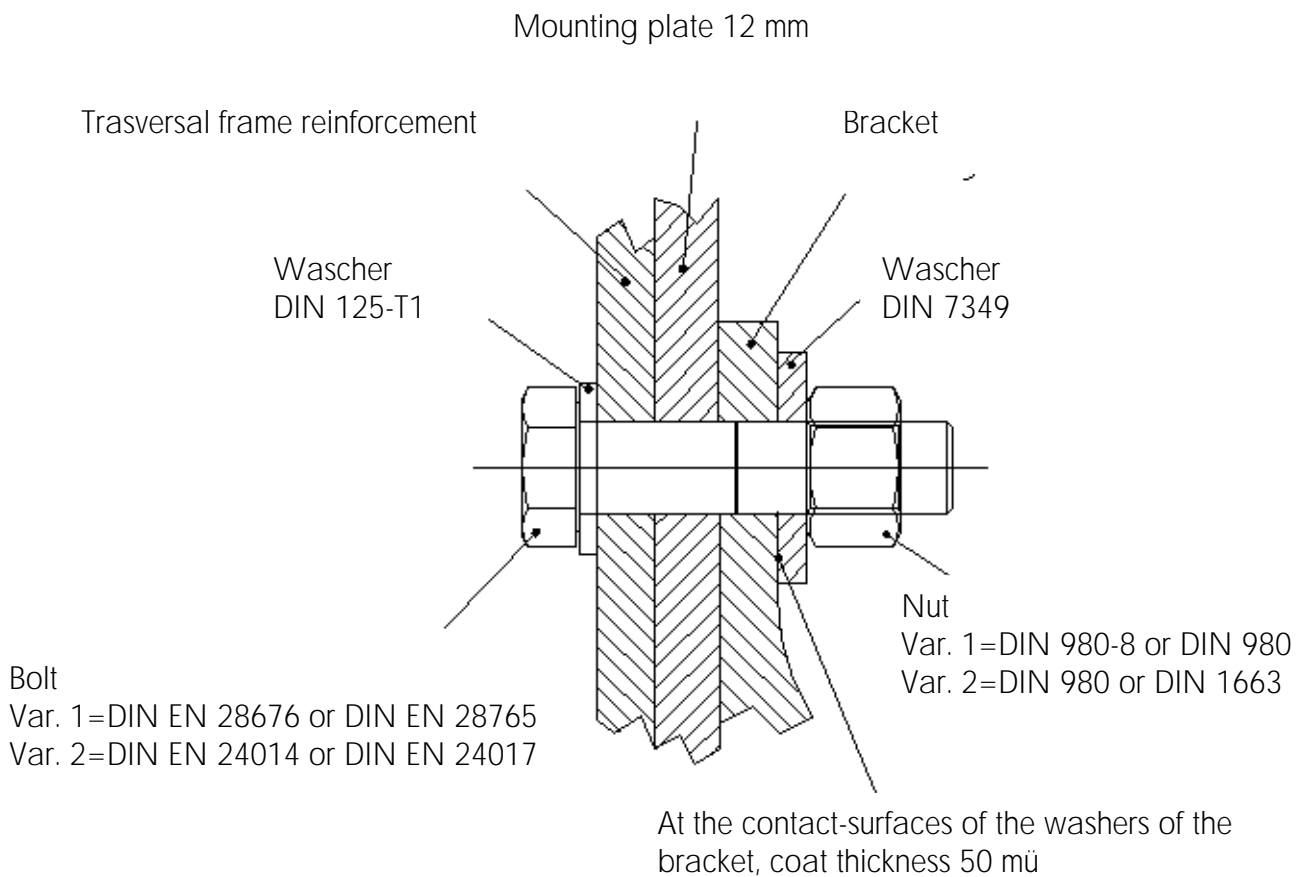


General Information

Failure to observe these instructions can lead to dangerous operating conditions. Please read through and carefully follow these instructions before mounting the fifth wheel and using it for the first time.

- Modifications of any kind will invalidate warranty claims and result in the cancellation of the design approval.
- The mounting of fifth wheels, mounting plates, sliders and kingpins, as well as repair work, may only be carried out by trained personnel or in suitable workshops.

1. Mounting Instruction



- We recommend the use of SAF-HOLLAND fixation-parts (refer to page 5)
- When mounting fifth wheels, please follow the relevant mounting instructions as provided by SAF-HOLLAND and the vehicle manufacturer.

To mount the Fifth wheel SK-L 26.3 it is absolutely necessary to have a sufficiently rigid frame (W_x, W_y) (examples see fig. 1 and 2).

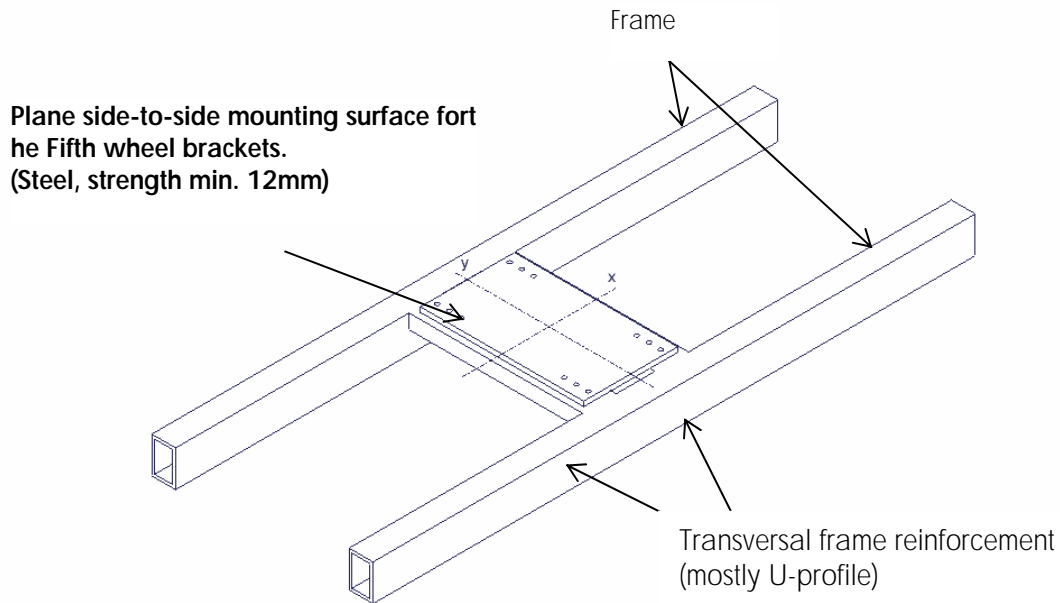


Fig. 1: Example for a frame with a plane side-to-side mounting surface for the SK-L 26.3

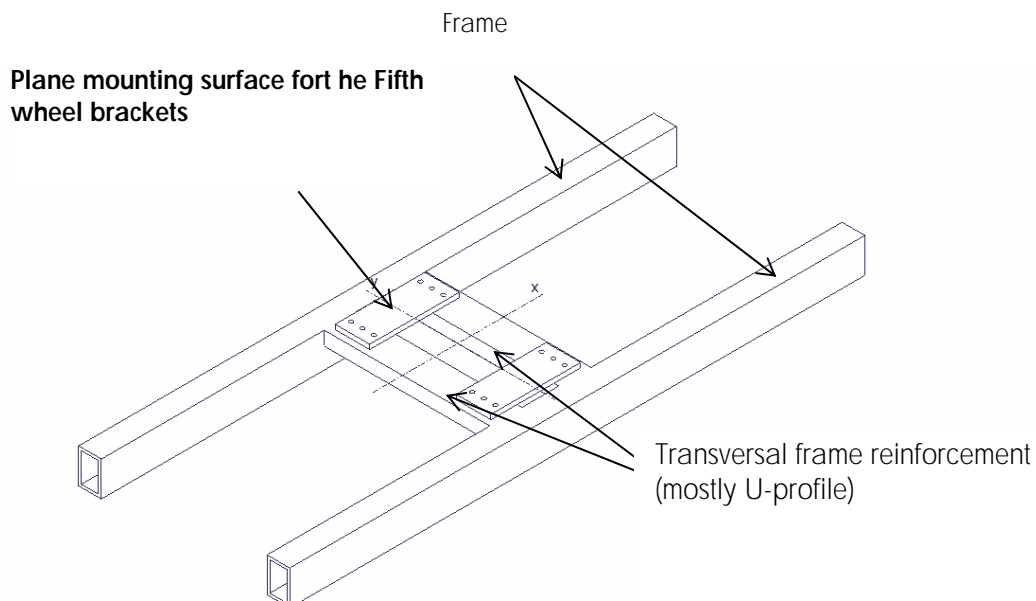


Fig. 2: Example for a frame with two plane parallel mounting surfaces for the SK-L 26.3

- The fifth wheel must be positioned to the articulation point recommended by the vehicle manufacturer.
- The fifth wheel has to be fastened with eight bolts (4 bolts a side):

	DIN-Standard	Bolt	Nut	Washer	Torque
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Variation 1	28765 o. 28676	M16x1,5 - 8.8			230 Nm +/- 10%
	980-8		M16 x 1,6 - 8		
	125-1			head-side	
	7943			nut-side	

Variation 2	24014 o. 24017	M16 - 8.8			220 Nm +/- 10%
	980		M16 - 8		
	125-1			head-side	
	7943			nut-side	

- The thickness of the paint layer in the locking region of the bolts must comply with standards prescribed by law so as not to impair the clamping pressure. Compliance with Governmental inspection regulations on bolts and the locking of these in vehicle construction is required.
- It is a requirement that the technical data be entered into the appropriate Vehicle Registration Documents in accordance with the local Vehicle Registration Regulations (e.g. §27 of the Regulations Governing the Registration of Road Vehicles in Germany).
- The fifth wheel must be able to move freely, and may not touch either the mounting plate or parts of the frame or auxiliary frame when used for its foreseen application.
- Applicable national regulations must be observed when installing the fifth wheel.
- If the fifth wheel is mounted on a slider, the relevant mounting instructions must be followed.

-
- Beside the superimposed load, the criterion for determining the max. permissible load for a fifth wheel and mounting plate is the D-value which can be calculated according to DIN 74081, with the following formula:

Example of a calculation:

$$D = g \cdot \frac{0,6 \cdot m_K \cdot m_A}{m_K + m_A - A} \text{ in KN}$$

$$D = 9,81 \cdot \frac{0,6 \cdot 2,5 \cdot 5}{2,5 + 5 - 3} = 16,35 \text{ KN}$$

Key:

m_K = permissible gross weight of the tractor in t
 m_A = permissible gross weight of the semi trailer
in t
 A = zulässige Sattellast in t
 g = Earth gravitation 9,81 m/sec.2

Example: $m_K = 2,5$ t
 $m_A = 5$ t
 $A = 3$ t

The data for permissible loads for SAF-HOLLAND fifth wheels and mounting plates can be found on the respective pages in the brochure. These data apply for use on paved roads and transport conditions as customary in Central Europe. Please enquire for conditions of use other than these.

2. Operating Instructions

Attention

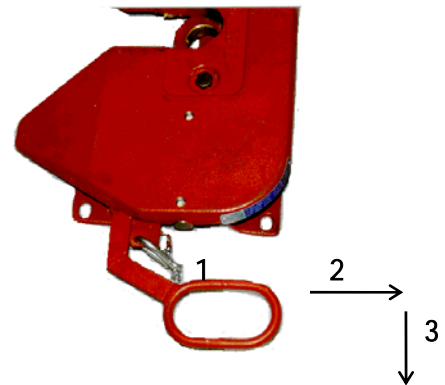
Before putting the fifth wheel into operation, apply ample coatings of long-life, high-pressure grease to the fifth wheel plate, the locking parts and the wearing ring.

2.1 Coupling

The semi trailer must be chocked and supported.

The fifth wheel must be ready for coupling, i.e. the unlocking handle must be fully extended. 1,2,3.

The locking mechanism is in the open position.

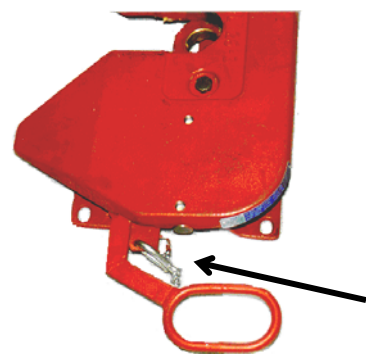


- The semi trailer plate must be approx. 5 cm lower than the fifth wheel coupler plate.
- Make sure there is no one between the tractor and semi trailer.
- Reverse with the tractor slowly under the semi trailer.

- The locking mechanism engages automatically.

Securing:

Inserting the hook into the slot beside the operating handle provides a check if the mechanism is properly locked. If it is not possible to engage the hook, the coupling operation must be repeated.



Start-up jerk to be made in low gear.

Attention! Do not commence driving under any circumstances without first having checked the locking mechanism is properly locked !

2.2 Uncoupling

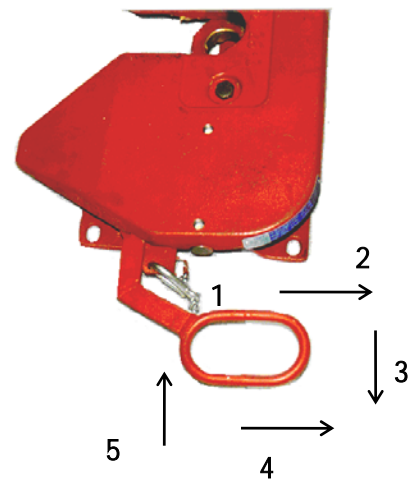
Secure the wheels of the semi trailer with chocks.

Raise the semi trailer using the landing gear until sufficient relief is given to the suspension of the towing vehicle.

Disconnect the supply cables.

Open the locking mechanism:

- Disengage snap hook ①
 - Swivel the unlocking handle to the rear 2, pull it out 3 and hook its lug onto the edge of the plate 4 & 5.



Drive the tractor out.

The fifth wheel is automatically ready for coupling again.

3. Lubrication

Lubricating the coupler plate

Apply ample coatings of long-life, high-pressure grease* to the surface of the plate prior to first time use, and then regularly.

Before doing the lubrication work, remove old grease and dirt.

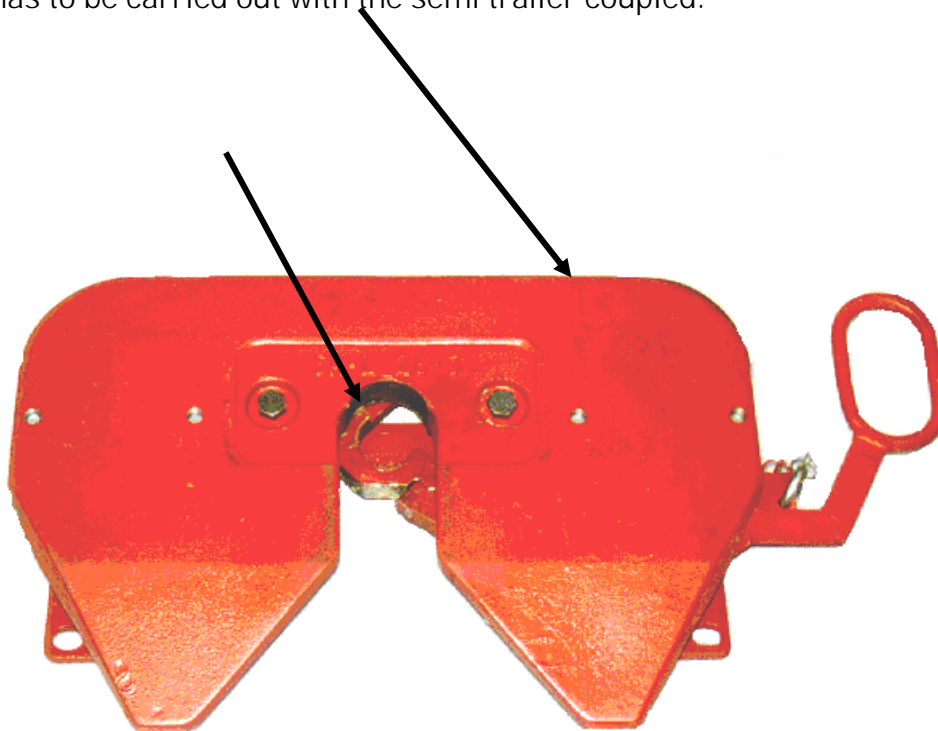
The lubrication intervals have to be adjusted to the operating conditions, to allow shorter or longer intervals.

* We recommend using a long-time high pressure lubricant (NLGI class 2) with MoS₂ or graphite additives, e.g. MOTOREX MOLY 218, SHELL RETINAX HDX2, Renolit LZR 2 (suitable for central lubrication systems), Renolit FG 150. If other lubricants are used, the lubrication intervals are to be adapted accordingly. When used with a central lubrication system obey the instructions of the manufacturer.

Lubricating the locking mechanism

The lubricating point for the locking mechanism and the wearing ring is at the rim of the plate.

Lubrication has to be carried out with the semi trailer coupled.



4. Maintenance

A fifth wheel is normally subject to wear during operation. This can be reduced to a minimum by proper maintenance. The following points must therefore be observed before putting the fifth wheel into operation and each time it is serviced:

- Apply ample coatings of long-life, high-pressure grease to the surface of the plate, the locking parts and the kingpin.
- We recommend that the bearing surfaces of the fifth wheel and the semi-trailer plate are checked for damage each time they are serviced and repaired if necessary (see **Wear limits**).
- Replace worn out or damaged parts with original SAF-HOLLAND spares.
- Important: A serial number is embossed on the manufacturer's plate and rim of the plate above the tension bow on each fifth wheel for proper identification.
- The functionality of the fifth wheel must be checked depending on the working conditions.

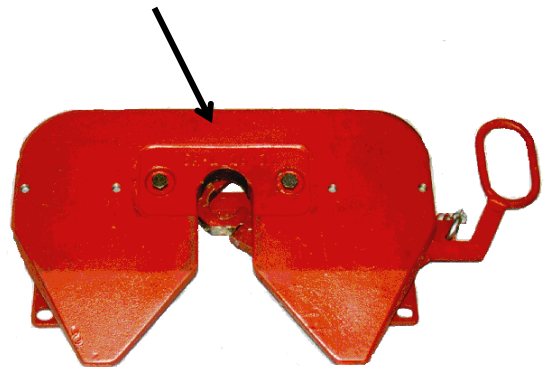
5. Wear Limits

The wear on the coupler plate can be checked by means of visible evidence of wear, i.e. without using any tools. The limit gauge (SAF-HOLLAND Order No.:A 659 920 032) is required for checking wear on the fifth wheel locking mechanism and the kingpin.

Coupler plate:

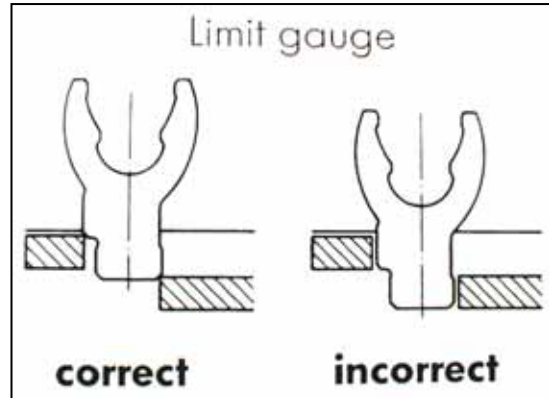
Visual control:

The coupler plate must be replaced when it is worn down to the bottom of the oil groove. Check also the semi trailer plate and replace it if necessary.



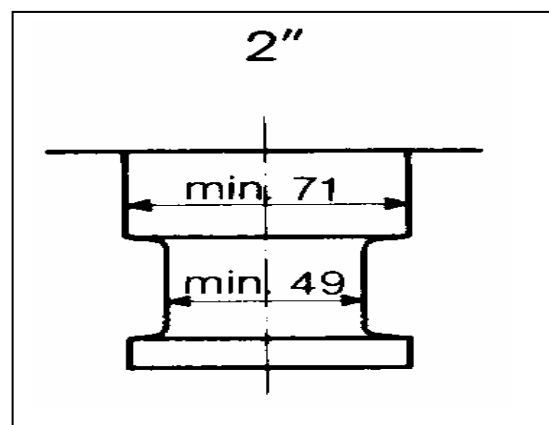
Locking mechanism:

Use the limit gauge to check wear on the locking mechanism. If the limit gauge slips into the locking mechanism from above, the parts must be replaced.



2"- Kingpin

Measure both diameters in the longitudinal and transverse directions using the limit gauge. If the diameters have been worn down to 71 mm and 49 mm, it is imperative that the kingpin be replaced





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