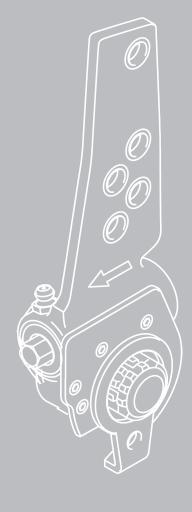


# **Fitting instructions**

# SAF slack adjuster S-ASA

**Edition 02/2015** 







## Dear customer,

This fitting instruction helps you to familiarise yourself with the products from SAF-HOLLAND with instructions for their proper use.

The fitting instruction contains important instructions on how to operate the product safely, properly and economically. Adherence to it helps prevent hazards, faults and reduce downtime and increase the reliability and service life of the product. Read the fitting instruction through carefully and follow the instructions accurately.

It must be ensured that all personnel with responsibility for performing tasks on the vehicle are able to consult the fitting instruction at all times.

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SAF-HOLLAND GmbH Hauptstraße 26 D-63856 Bessenbach

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### 1 General information

## 1.1 Ordering spare parts

When ordering original spare parts from SAF-HOLLAND, make sure that you pay attention to the assembly groups of the respective product.

Reproduction parts have a negative effect on the function of the product, have a shorter lifetime and cause risks and hazards, which SAF-HOLLAND cannot evaluate. They also increase the maintenance requirement.

For technical information on SAF-HOLLAND products and the purchase of parts, a comprehensive service network of SAF-HOLLAND partner companies are on hand to help you (visit us online at www.safholland.com).

For further instructions on identifying spare parts refer to our homepage www.safholland.com in the "Aftermarket" section.

Updates are published on the internet at www.safholland.com as necessary.

## 1.2 Liability

SAF-HOLLAND's "General Terms and Conditions" apply ..

SAF-HOLLAND does not recognise any liability claims for personal injury or material damage which are caused by one or more of the following causes:

- Improper use of the product.
- Failure to adhere to the fitting instruction and the safety instructions contained in it.
- Arbitrary constructional changes to the product.
- Insufficient maintenance of parts which are subject to wear.
- The use of any spare parts other than original SAF-HOLLAND parts.
- The use of damaged parts.
- Disasters due to external influences or acts of God.

### 1.3 Warranty and general terms and conditions of business

For information on our current warranties and general terms and conditions, refer to the "Sales" section of our homepage at www.safholland.com

#### 1.4 Environmental protection

All components and consumables used for maintenance and care must be disposed of in an environmentally friendly manner.

Recyclable components must be cleaned of oil and lubricants and recycled. When doing so, you must adhere to the disposal instructions for the respective consumables and the valid national and regional regulations.

#### 1.5 Target group

The operating manual for the product is restricted exclusively to use of the product by the user and personnel authorised and instructed by the user.

The user must ensure that the personnel authorised by him receive regular instruction on the content of the operating manual and in particular the safety instructions it contains.

## 1.6 Proper use

The product has been constructed using state-of-the-art technology and in accordance with the recognised rules of technical safety. However, its use may result in hazards for the operator or third parts or damage to the device or other objects of material value. The product must only be used as a steering axle or fixed axle. Proper use also includes:

- Adherence to the fitting instruction and implementation of the working steps stipulated in the fitting instruction.
- Adherence to all maintenance and care instructions and additional inspections.
- The use of the listed consumables and their disposal in an environmentally friendly manner.

Operationally safe function can only be guaranteed if all the instructions, adjustments and performance limits for the product are adhered to.



# 1.7 Safety instructions and symbols used in the fitting instruction

The following symbols are used to denote particularly important information and sections of the text. Make sure that they are always read and adhered to before working with the product.



#### **CAREFUL!**

This safety instruction with the signal word warns of a possible damage to the product.



#### NOTE:

Marking for special user tips and other particularly useful and important information for efficient work and economical use.

# 1.8 Marking used for sections of text

- Marking for instructions for actions and information in safety instructions
- 1., 2., 3., ... Marking used for working steps



# 2 Fitting instructions

# 2.1 Lifting and supporting the vehicle axle



#### **CAREFUL!**

- Observe the the safety directions given by the manufacturer for any work on the vehicle!
- Locally given safety precautions must be observed!
- The vehicle axle must be lifted with a hydraulic jack!
- 1. Secure the wheels on a flat and straight surface.
- 2. Use jack stands and lift the axes with a hydraulic jack.
- 3. Release the parking brake.

# 2.2 Installation slack adjuster

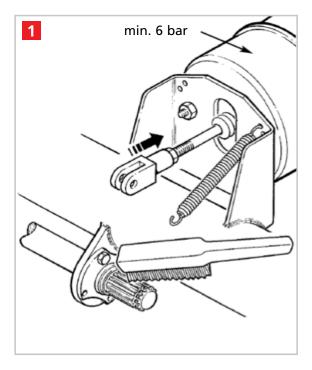
Detailed fitting instructions are supplied with every SAF-HOLLAND Slack Adjuster. Those instructions are appropriate for the particular reference supplied.

However, allowing for dierences in the exact conguration, the following procedure should be undertaken to fit all SAF-HOLLAND S-ASA Slack Adjuster:



#### NOTE:

The correct length of the brake chamber piston rod must be set correctly for all vehicle specific applications before installing any SAF-HOLLAND slack adjuster.

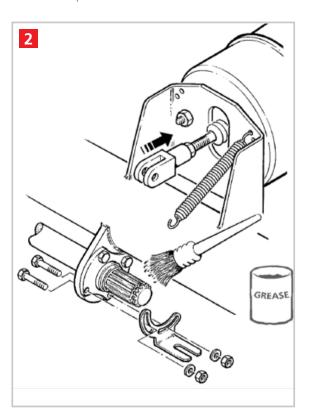


- 1. Check that the brake chamber push rod is in its fully released position.
- 2. With spring brakes, a minimum pressure of 6 bar is required in the system to ensure that the piston is fully released.

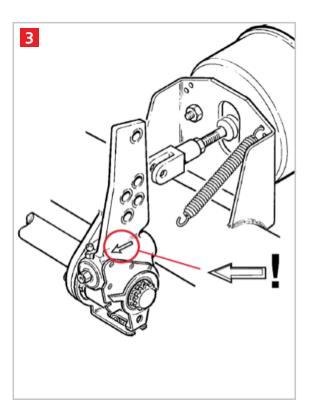
If this is not observed, the basic setting will be wrong!

3. Clean the camshaft spline.





- 1. Grease the camshaft spline.
- If a new slotted anchor bracket is supplied with the S-ASA it should be tted to the existing camshaft support bracket but not tightened.



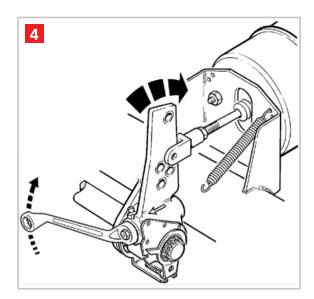
1. Fit the S-ASA onto the camshaft, so that the arrow on the housing points in the direction of the application of the S-ASA, and the control arm end mates with the anchor bracket.



# NOTE:

Oserve mounting position!

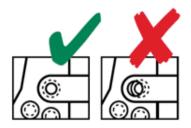




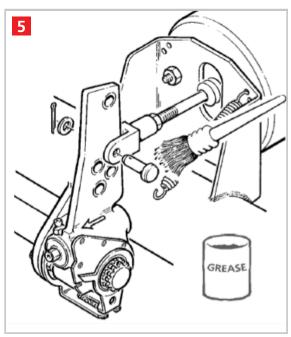
1. Wind the S-ASA into the clevis on the brake chamber piston rod by rotating the hexagon nut on the S-ASA in a clockwise direction until the hole in the S-ASA coincides with the holes in the clevis.

#### Do not use an air wrench to do this!



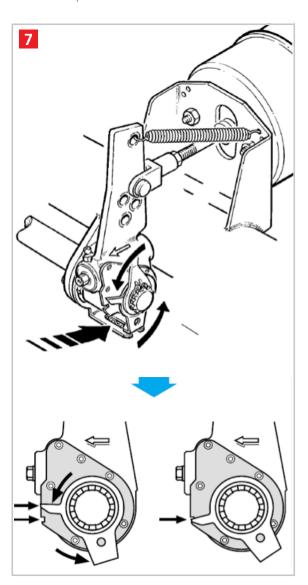


- 1. Grease the clevis pin then t it into the clevis through the S-ASA and secure.
- 2. The pin should rotate freely when no load is applied.



- 1. Fit a wear indicator and return spring, if either are required, at this stage.
- 2. Secure the S-ASA on the camshaft ensuring it is not pinched or restricted.
- 3. Install return spring.



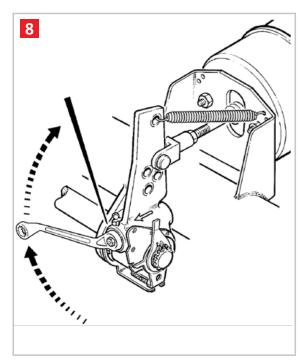


1. Rotate the control arm as far as possible, following the direction of the arrow cast on the S-ASA body.

Do not hammer the control arm.

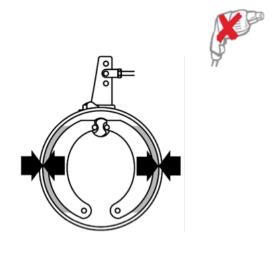


- 2. Where the S-ASA is so equipped, the indicator on the control arm should now be aligned with the notch in the cover plate.
- 3. Without moving the position of the control arm, fix the anchor bracket in place by tightening the mounting holts.

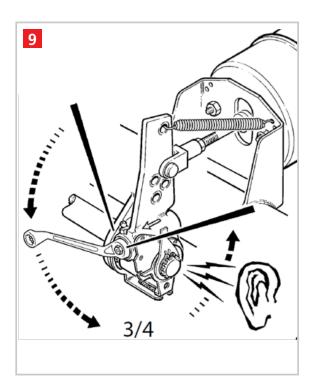


1. Close the brake clearance by rotating the hexagon nut on the S-ASA clockwise until the brake lining touches the brake drum.

Do not use an air wrench to do this!





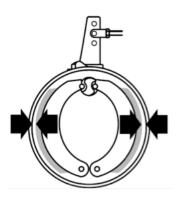


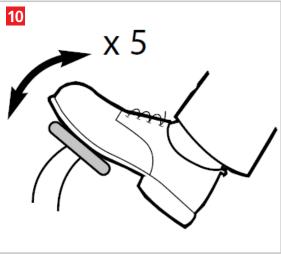
1. Back-o the brake clearance by rotating the hexagon nut a 3/4 turn anti-clockwise.

Do not use an air wrench to do this!



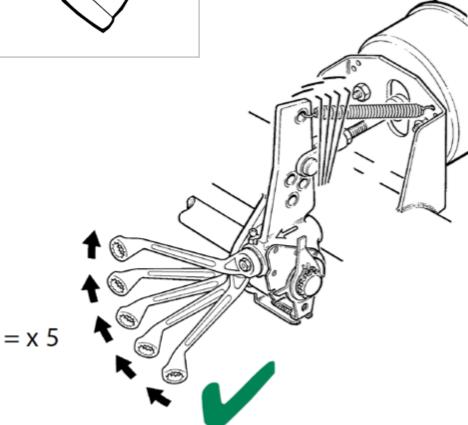
2. Backing-o produces a loud clicking noise.





# 2.3 Checking readjustment

- 1. Check that the S-ASA is functioning by applying the brakes about five times.
- 2. Check the freewheeling of the brake drum and check the clearance; repeat the adjustment at the slack adjuster, if necessary.
- 3. Leave a ring spanner on the hexagon nut so that any movement can be detected.
- 4. The S-ASA is working when the hexagon nut rotates clockwise on the return stroke.









**Notruf** +49 6095 301-247

**Emergency Hotline** 

Kundendienst +49 6095 301-602

**Customer Service** 

**Ersatzteile** +49 6095 301-301

**Spare Parts** 

+49 6095 301-259 Fax

service@safholland.de

www.safholland.com

