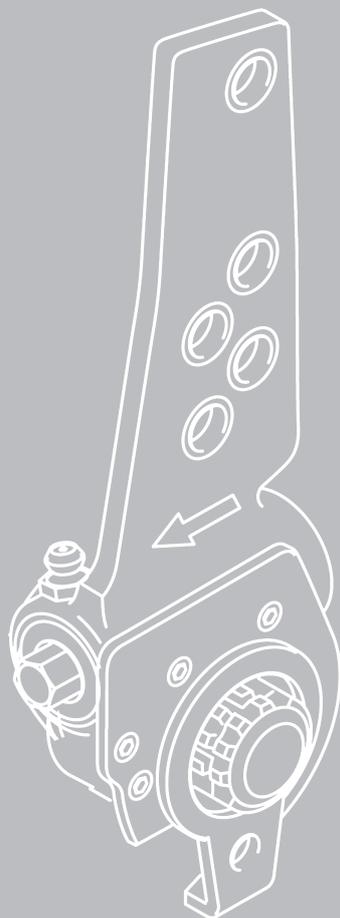


Service manual

SAF slack adjuster S-ASA

Edition 02/2015



Dear customer,

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

The service manual contains important instructions on how to operate the product safely, properly and economically. Adherence to it helps prevent hazards, faults and reduce down-time and increase the reliability and service life of the product. Read the service manual 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 service manual at all times.

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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 service manual 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 parties 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 service manual

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 Service manual

2.1 Service schedule

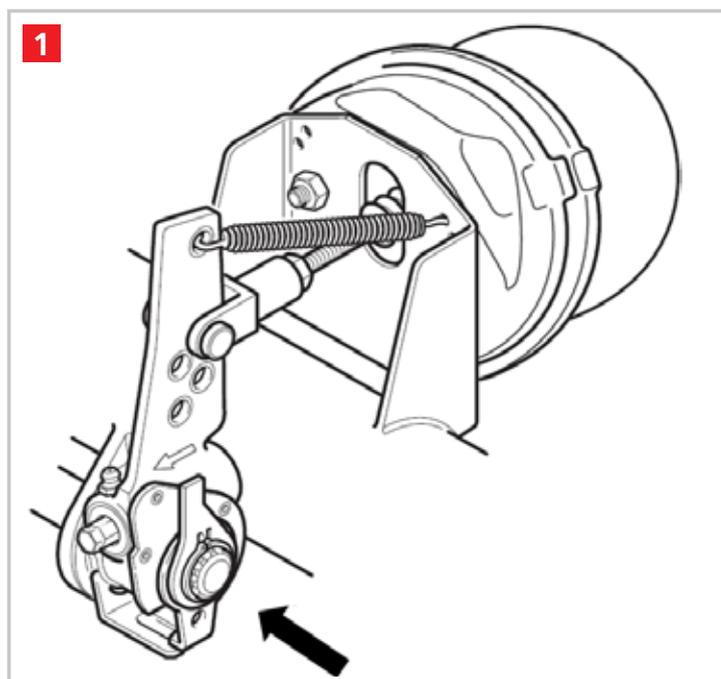
SAF S-ASA slack adjusters are long term greased (sealed for life) and delivered with a plug.

Regreasable slack adjusters from SAF-HOLLAND are equipped with a grease nipple.
Intervals for greasing shall be acc. to the following table:

Grease guideline

	every 6 months	every 12 months, or 150,000 km, or every brake pad change
On-Road vehicles		X
Off-Road vehicles	X	
Outside Europe	X	

2.2 Check slack adjuster

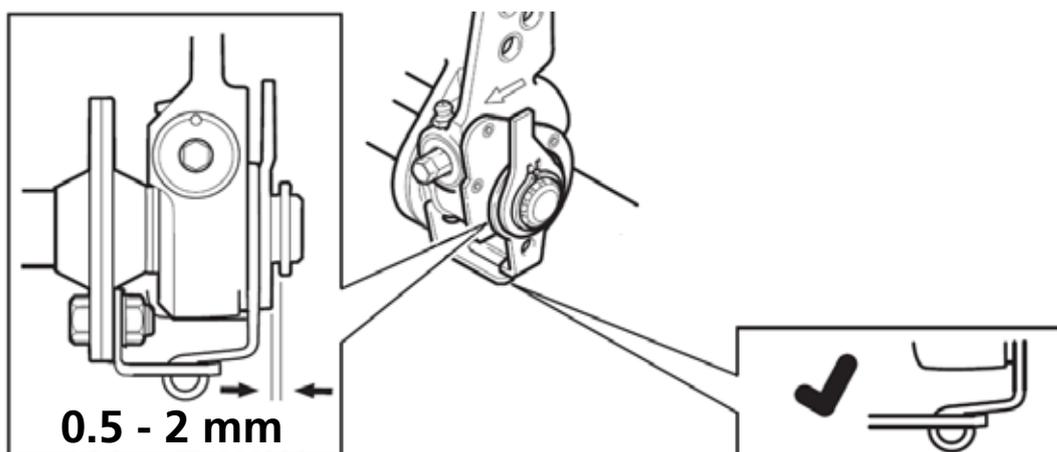


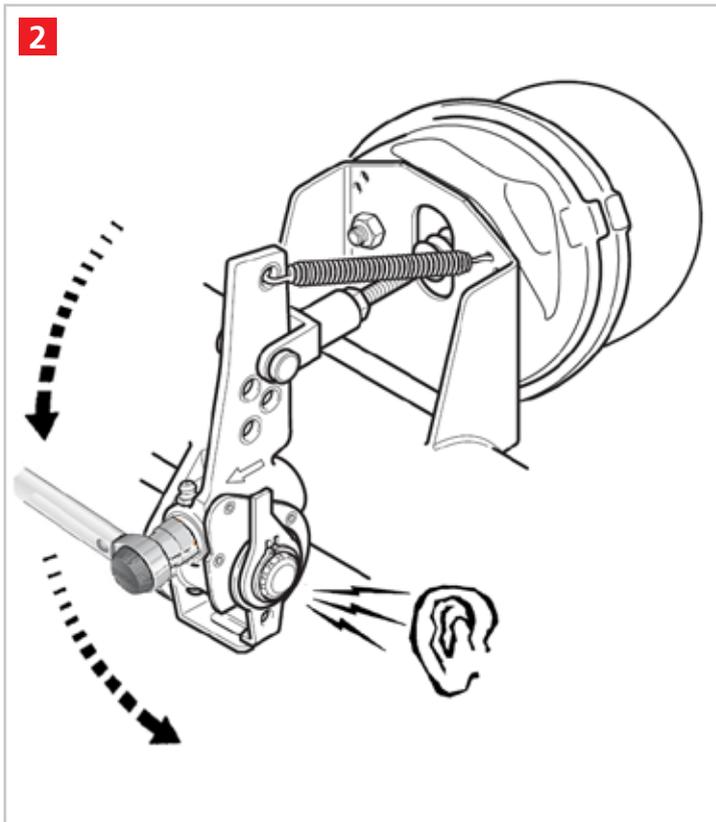
1. Check the xing of the anchor point and the condition of the control arm.
2. If the anchor point is loose, ret it.
3. If the control arm is bent or cracked, remove the automatic slack adjuster and replace it with a new one.
4. Check the condition of the cam and cam bush and, if appropriate, replace the cam and cam bush.



NOTE:

If the cam and cam bush are not replaced the working life of the replacement automatic slack adjuster will be severely reduced.



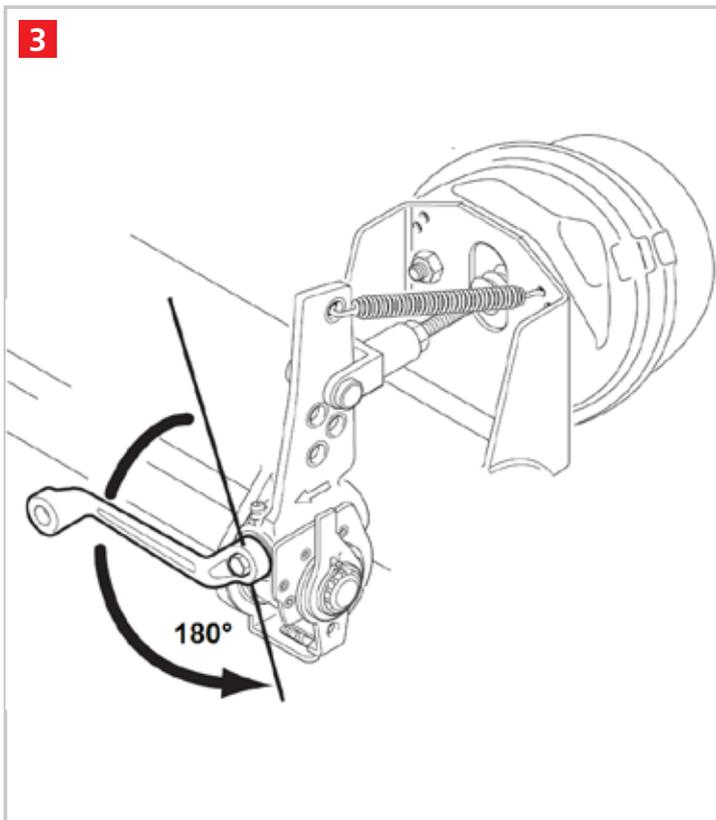
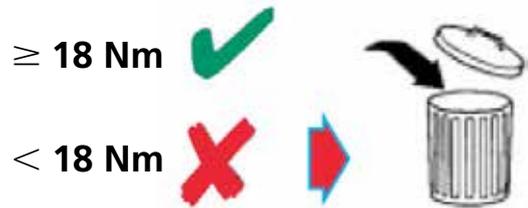


1. Using a torque wrench, rotate the hexagon nut on the automatic slack adjuster anti-clockwise through approximately 180 degrees.
2. There should be an audible "clicking" sound and the torque required to turn the hexagon should be 18 Nm or more.



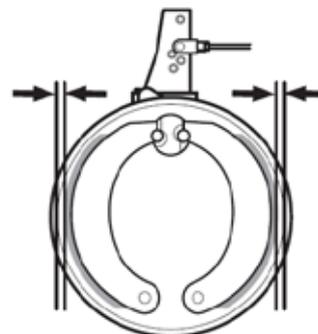
NOTE:

If there is no click or the torque required is below 18 Nm, remove the automatic slack adjuster and replace it with a new one. Observe the relevant S-ASA fitting instructions!

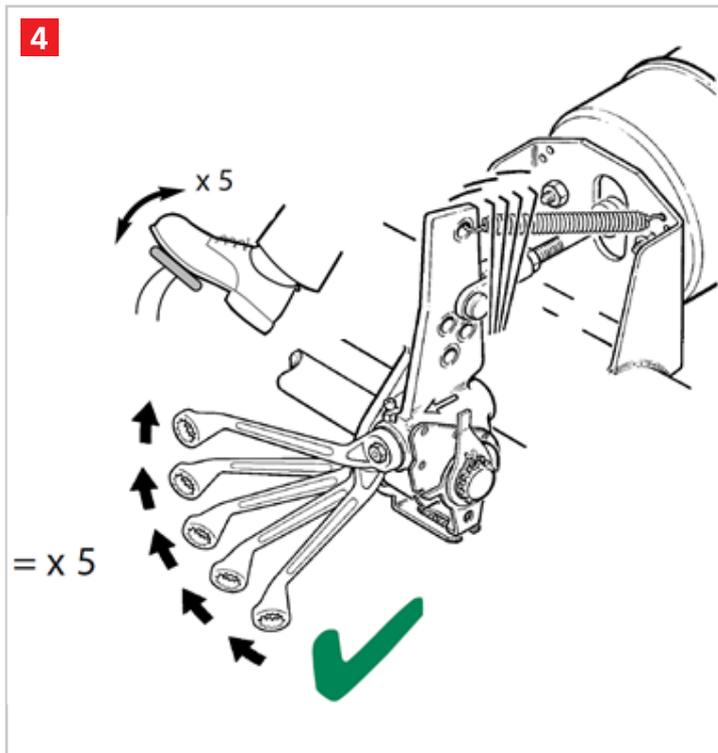


1. Using a ring spanner, rotate the hexagon nut on the automatic slack adjuster anti-clockwise through approximately 180 degrees.

Do not use an air wrench to do this!



2.3 Checking readjustment

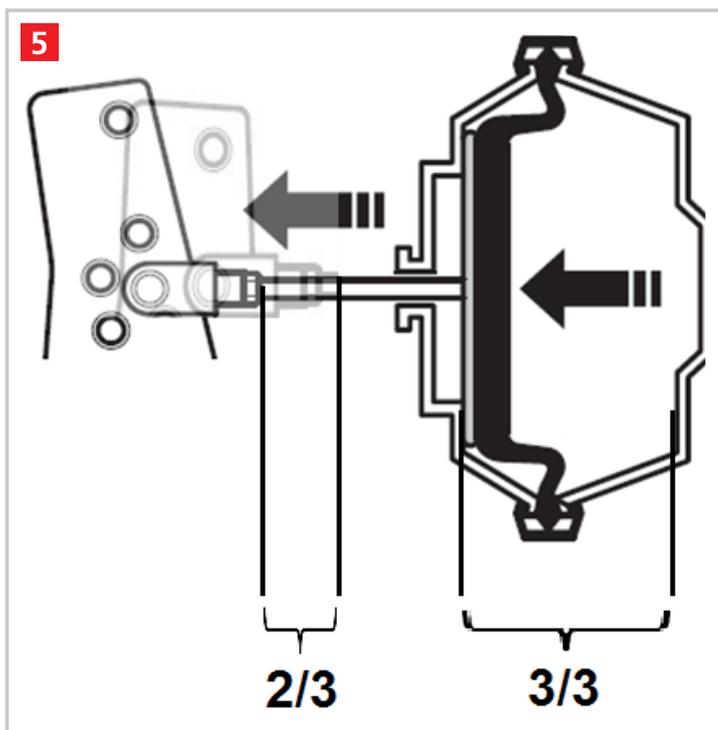


1. Apply the brake for a minimum of five times and, if the slack adjuster is working, the spanner will move clockwise each time the brake is released.
2. If the spanner does not move, remove the slack adjuster and check the cam and bush, as detailed in

**NOTE:**

If the cam and bush are OK, replace the slack adjuster with a new one and proceed with the checks detailed from

Observe the relevant S-ASA fitting instructions!



1. As a final confirmation, apply the brake and measure the stroke length of the brake chamber. This length should not be more than 2/3rds of the maximum stroke of the brake chamber.
2. If the stroke length is more than 2/3rds of the maximum stroke of the brake chamber, remove the slack adjuster and examine all aspects of the brake replacing or repairing as necessary. Observe the relevant S-ASA fitting instructions! However, if no other causes of failure are found, fit a new slack adjuster and proceed with the checks detailed from

$\leq 2/3$



$> 2/3$

**CAREFUL!**

Please note that the Automatic Slack Adjuster cannot compensate for other defects and deficiencies within the braking system.

Those defects, such as worn or missing brake return springs, loose wheelbearings, defective brake chambers, binding camshafts, worn cam rollers and worn anchor pins must be rectified if the brake system is to function properly.



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