

WHEELBRAKE 2051 I 2361 AAA

Readjust Brakesystem Service

EN





We recommend training through the AL-KO Academy to ensure optimum servicing of our products. Information about the training programme can be found on the Internet at www.alko-tech.com/de/al-ko-academy.

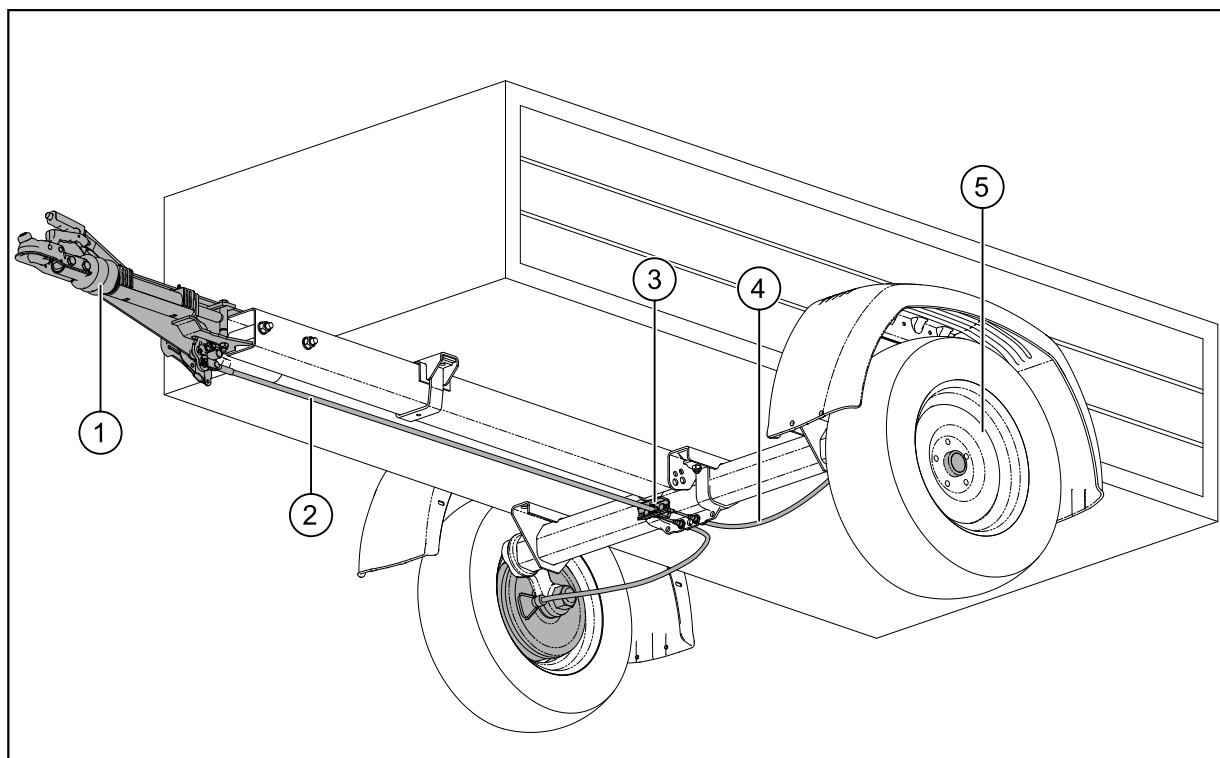
SERVICE MANUAL

Contents

Functional overview.....	4
Type overview.....	5
Type plate.....	6
Tightening torques.....	8
Maintenance of wheel brake 2051/2361 AAA.....	9
Replacing brake shoes 2051/2361 AAA.....	19
Removing and installing brake drum / replacing compact bearing.....	28
Removing and installing complete wheel brake 2051 AAA.....	34
Removing and installing complete wheel brake 2361 AAA.....	41
Adjusting the brake system.....	47
Adjust the wheel brake.....	49

FUNCTIONAL OVERVIEW

Body and components of an overrun brake



Pos	Designation	Description
1	Overrun device	Absorbs the overrun forces and deflects them via the deflection lever into a pulling force
2	Brake rod	Forwards the pulling force to the compensation profile. The brake rod can also be adjusted
3	Brake compensation	Ensures that both Bowden cables are pulled evenly even when braking unequally
4	Bowden cables	One Bowden cable pull per brake drum, which activates the brake via the expanding joint lock
5	Wheel brake	Drum brake system, with floating mounting, converts the energy occurring at the overrun device into braking force

Function of a wheel brake

The basic components of a wheel brake are the same for all AL-KO wheel brake types.

The brake back plate, also known as the anchor plate, carries the main components of a wheel brake.

The expanding joint lock opens when the Bowden cable pulls on it, thereby pushing the brake shoes apart.

The brake shoes themselves rub against the brake drum, thus generating the braking torque.

The adjuster unit ensures, either automatically or manually, that the distance between the brake shoes and the drum is not too great so that braking can always take place with constant quality.

TYPE OVERVIEW



CAUTION! Risk of accidents!

Mistakes when working on the wheel brake can lead to dangerous situations.

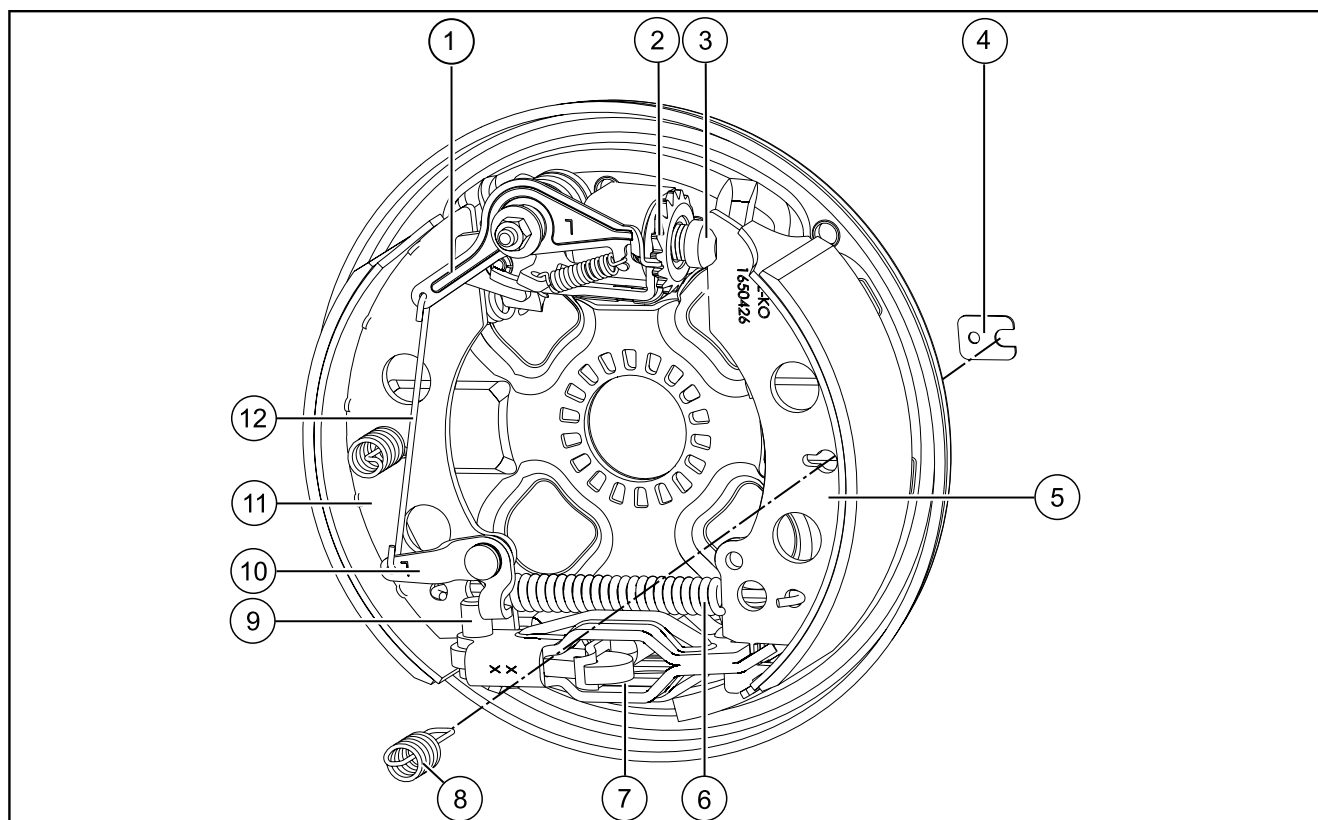
- All work on the wheel brake may only be carried out by specially trained personnel.
- Use only original AL-KO spare parts.



Self-locking nuts and the axle stub bolt may only be used once. After removal, dispose of the parts according to the local regulations and replace with new parts.

Types	Permissible brake load
2051 AAA	Type 2051: 650 kg / 750 kg
2361 AAA	Type 2361: 900 kg / 950 kg / 1000 kg

Function

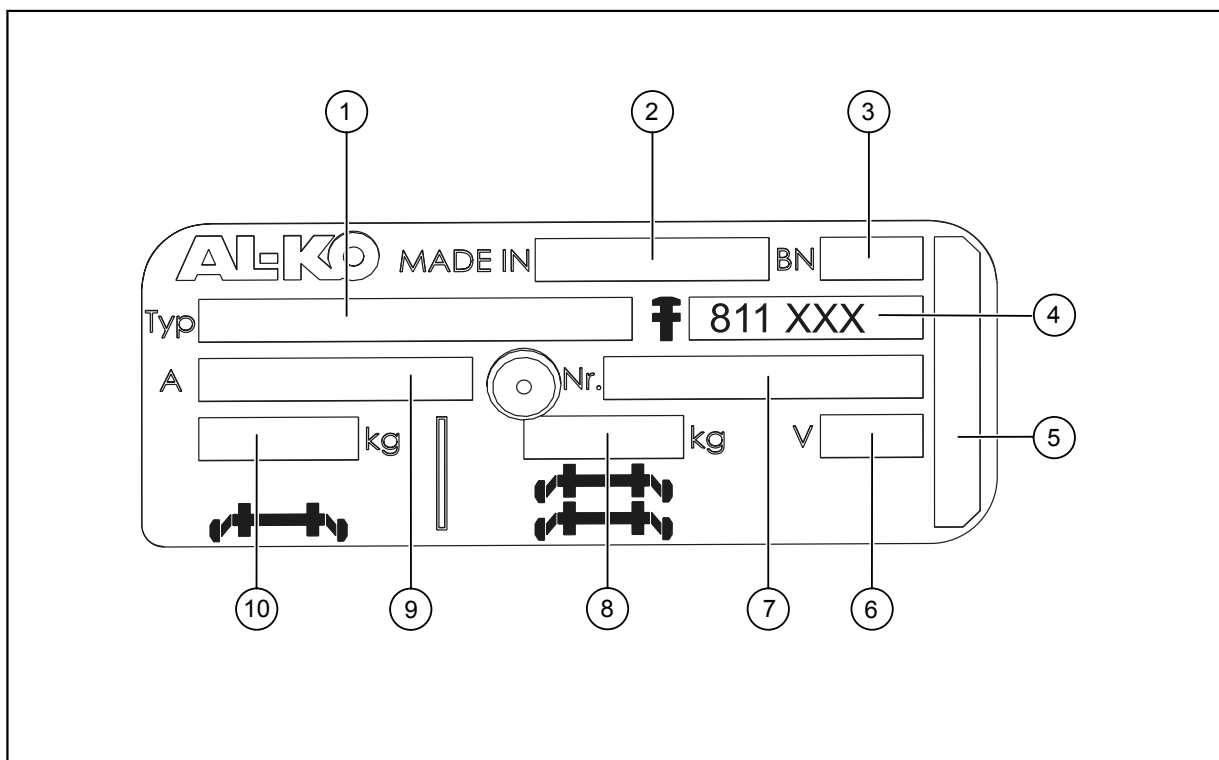


1	Adjustment lever	7	Expanding joint lock with hook-in eye for Bowden cable
2	Adjusting nut	8	Pressure spring
3	Adjusting screw	9	Rivet stud
4	Cover plate	10	Relay lever
5	Primary shoe	11	Secondary shoe
6	Tension spring	12	Connecting wire

TYPE PLATE

Axle type plate

There is a type plate on the axle from which the spare part number (ETI no.) can be determined. All spare parts can be identified in the AL-KO spare parts list using the ETI no. and the indicated axle load. The AL-KO spare parts list is available from the AL-KO service station or can be downloaded from the service portal. www.alko-tech.com/de/serviceportal



1	Type designation and type	6	Version ■ P = Euro1 axle ■ C = Compact axle ■ S = Standard axle / braked and unbraked ■ T = Standard axle with torsion bar suspension
2	Country of manufacture	7	SAP Material No.
3	Manufacturing works	8	Permissible axle load for tandem axle
4	ETI No. (spare part number)	9	Order No.
5	Customer-specific text	10	Permissible axle load for single axle

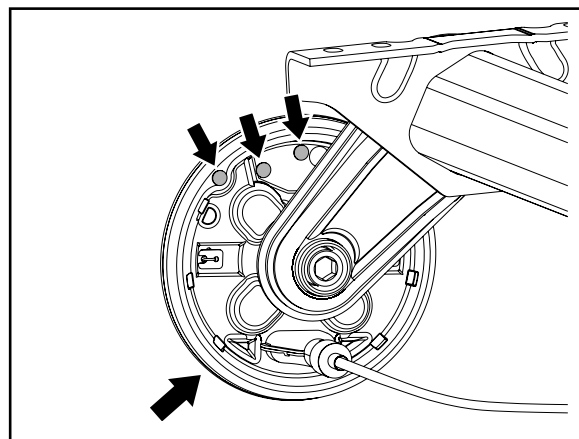
Imprint on the wheel brake

On the rear of the wheel brake is an imprint showing the wheel brake type in the brake back plate.

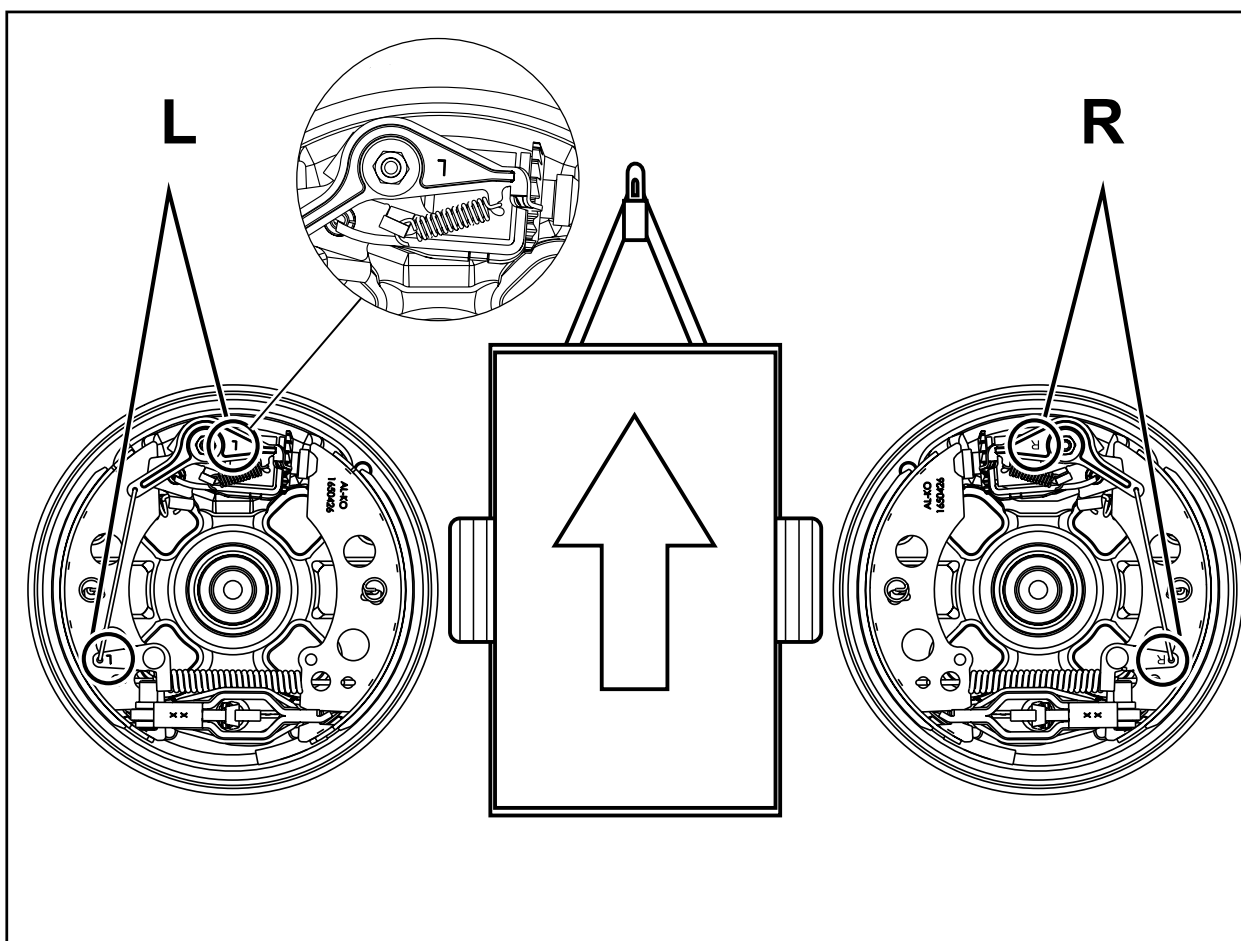
If it is a wheel brake with automatic slack adjustment (version AAA), there are 3 red plugs in the brake back plate and “AAA” is engraved in the cap of the brake drum.

In the case of wheel brakes with centring bracket (from year of manufacture 2019), the marking WNK-01 (02, 03...) is also located on the edge of the brake back plate.

Wheel brakes with M22 screws can be identified by the black coated cylinder screw.



Distinction between left and right wheel brakes



The wheel brakes for the right-hand and left-hand sides of the axle (as seen in driving direction) are different. Whether it is a wheel brake for the right-hand side or left-hand side can best be identified from the relay lever and adjustment lever of the wheel brake.

On the left-hand wheel brake (L) there is an "L" on relay lever and adjustment lever, on the right-hand wheel brake (R) there is an "R" at these points.

TIGHTENING TORQUES



The locking medium has to be replaced on bolted joints on which locking media were used. Locking media are, for example, self-locking nuts, spring lock washers, cotter pins, bolts coated with bolt locking compound, nuts, etc.

Bolted joint/strength class	Tightening torque
M 6 hexagon nut	10 Nm
Flange nut M 24x1.5	290 ±10 Nm
Axle stub bolt M 20x60 (RB 2051 only)	370 ±10 Nm
Axle stub bolt M 22x60 (RB 2051 only)	640 ±15 Nm
M 30-10 hexagon nut (RB 2361 only)	800-850 Nm

The tightening torques indicated here apply only to this product. For bolted joints with explicitly indicated tightening torques, these torques must be used.

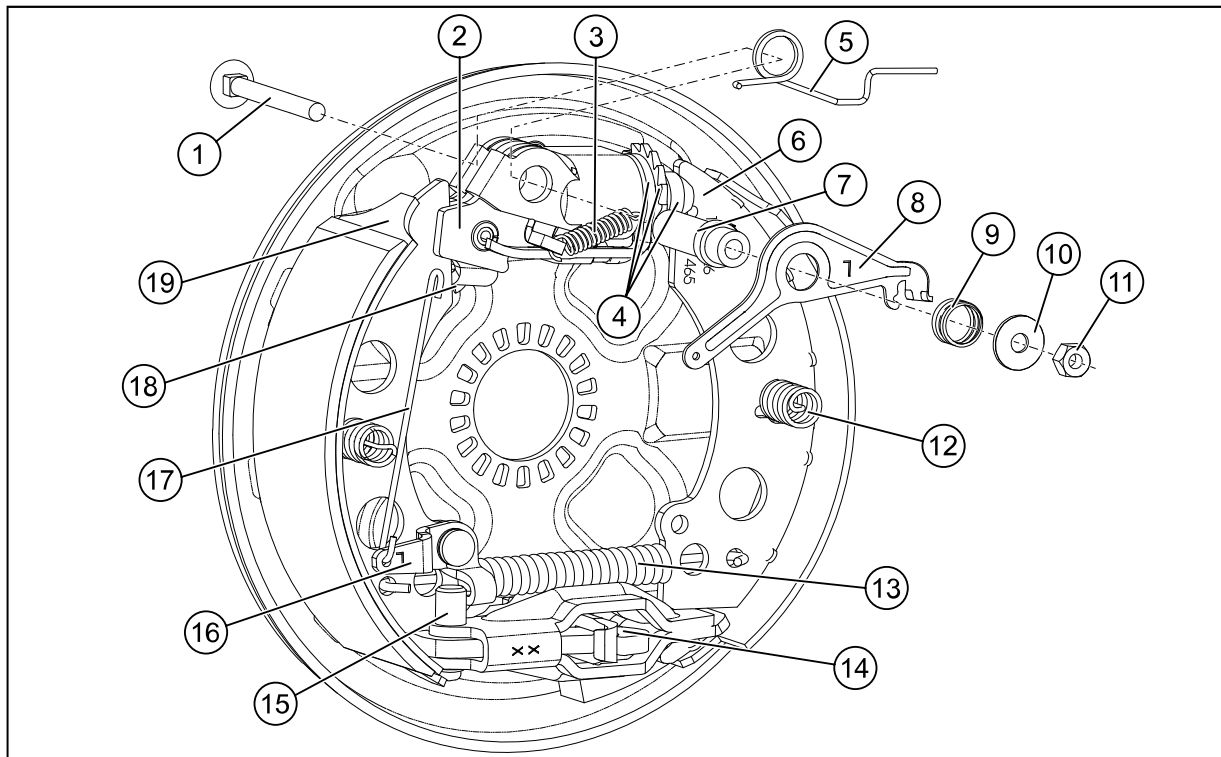
The tightening torques indicated here may change; always compare with the latest service manual.

Use a suitable torque wrench for tightening the bolts. Torque wrenches are subject to mandatory inspection and calibration at regular intervals. There use only calibrated torque wrenches appropriate to the measuring range.

MAINTENANCE OF WHEEL BRAKE 2051/2361 AAA

Preparatory work

- Release the handbrake lever and lift the trailer using a lifting platform



1	Carriage bolt M6x60 8.8	11	M6 hexagon nut
2	Automatic reverse lever	12	Pressure spring
3	Adjustment lever tension spring	13	Tension spring
4	Tension clip, adjusting nut and adjusting bolt	14	Expanding joint lock with hook-in eye for Bowden cable
5	Centring bracket	15	Rivet stud
6	Primary shoe	16	Relay lever
7	Bearing pin	17	Connecting wire
8	Adjustment lever	18	Automatic reverse lever tension spring
9	Pressure spring	19	Secondary shoe
10	A6.4 washer		

Required tools

- Special tool for removing the cap
- Torque wrench
- Screwdriver

RB 2051 Order No. 603751

RB 2361 Order No. 603752

Working implements required

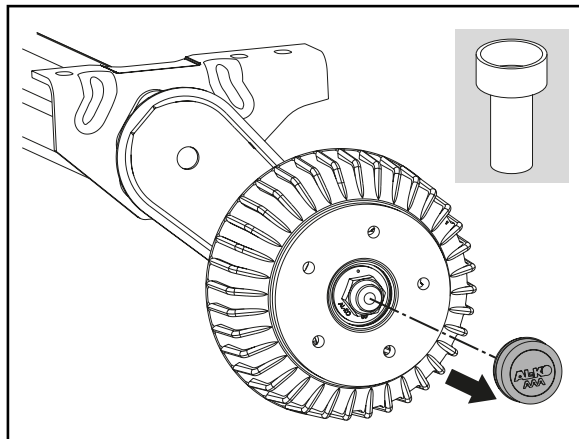
- Sealing lacquer

Working implements required

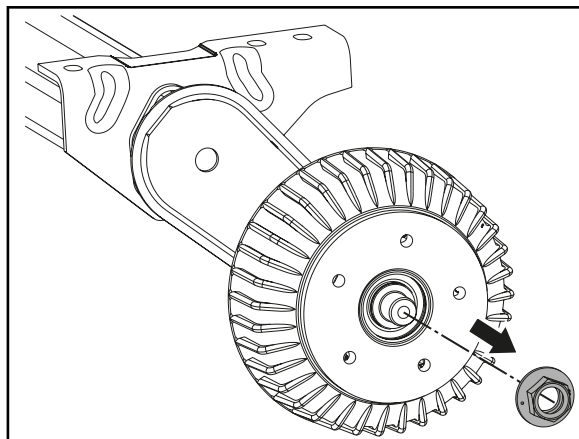
- Lubricating grease (temperature-resistant between -30 °C and +600 °C).

Maintenance 2051/2361 AAA

1. Unhook the Bowden cable from the wheel brake (see Service Manual 695100 Hooking in the Bowden cable).
2. Remove the cap using the special tool.



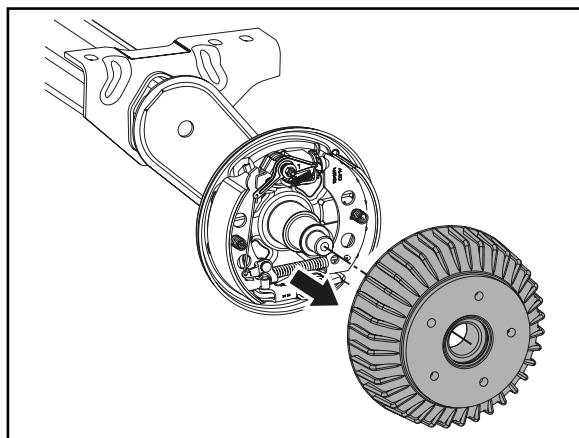
3. Loosen the flanged nut.



4. Turn the brake drum slightly by hand and pull off.



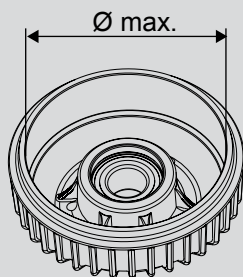
If the brake drum cannot be removed, turn the adjusting nut back (opposite to the direction of the arrow on the brake back plate), see "[Adjust the wheel brake](#)".



**CAUTION!**

Check the diameter of the brake drum!

Replace the brake drum if the maximum brake drum diameter is reached or exceeded as otherwise brake malfunctions or brake failure may occur!

**Wheel brake type****Brake drum diameter**

1637

Ø max. 161 mm

2051

Ø max. 202 mm

2361

Ø max. 232 mm

3062

Ø max. 303 mm

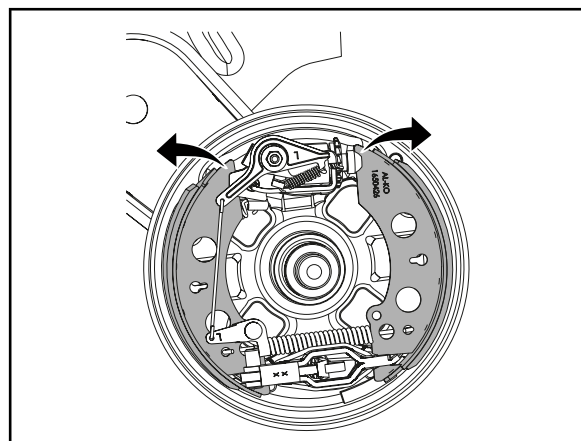
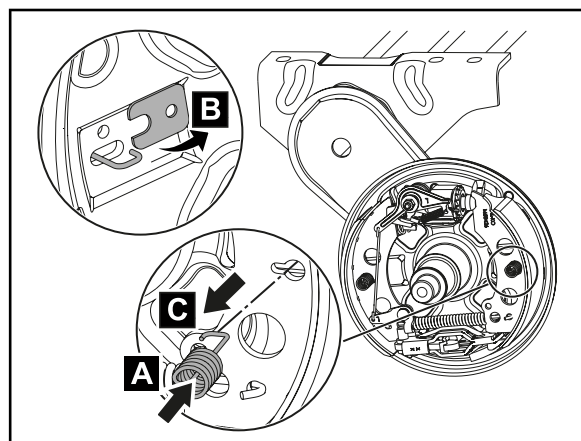
3081A / 3081B

Ø max. 303 mm

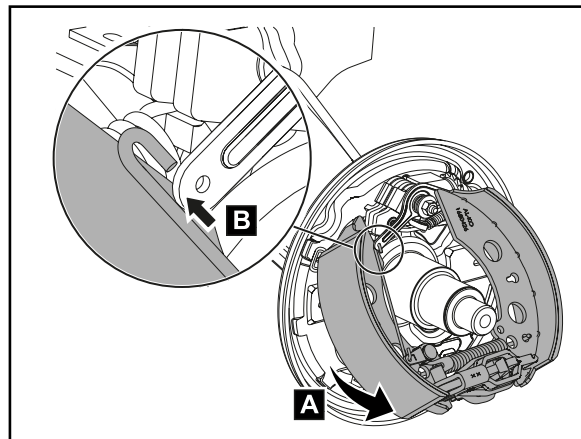


Take care that the cover plates do not fall down!

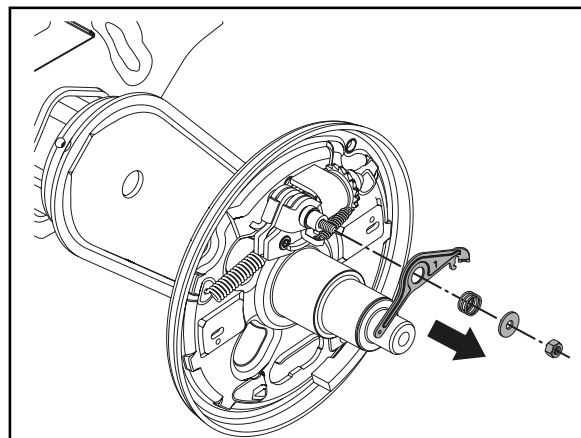
5. Press the pressure spring on brake shoe (A), unhook the cover plate on the rear of the brake back plate from the pressure spring (B) and pull out the pressure spring (C).
6. Remove the pressure spring on the other brake shoe in the same way.
7. Pull the brake shoes apart and unhook from the bearing points on the adjuster unit.



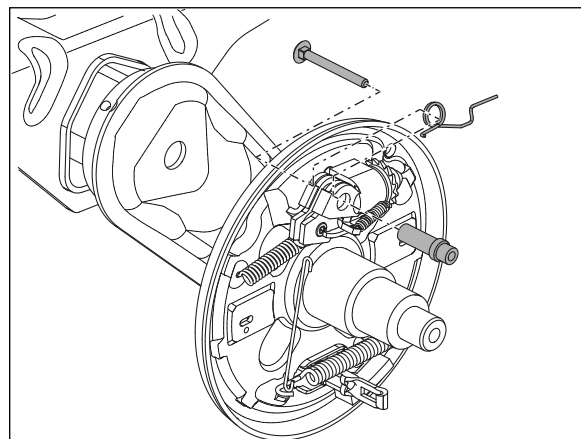
8. Remove expanding joint lock with brake shoes from the brake back plate (A) and unhook the connecting wire from the adjustment lever (B).



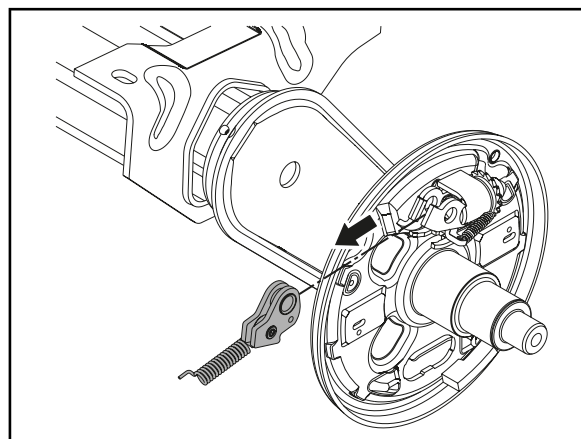
9. Remove adjustment lever with spring, washer and nut.



10. Pull out the screw, bolt and centring bracket on the adjusting unit.



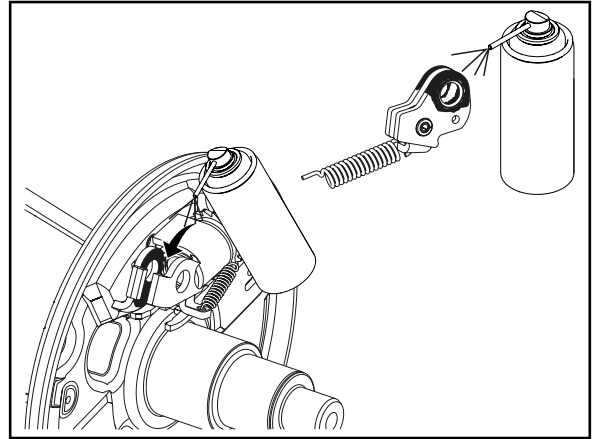
11. Remove the automatic reverse lever with spring from the housing.



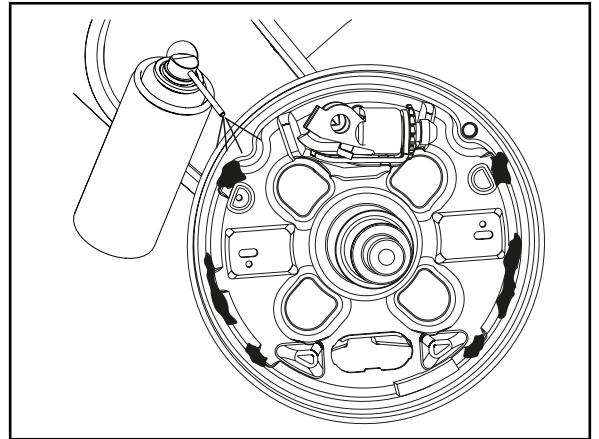
**CAUTION!****Observe the temperature limits of the grease!**

The lubricating grease must have a temperature resistance from -30 °C up to +600 °C .

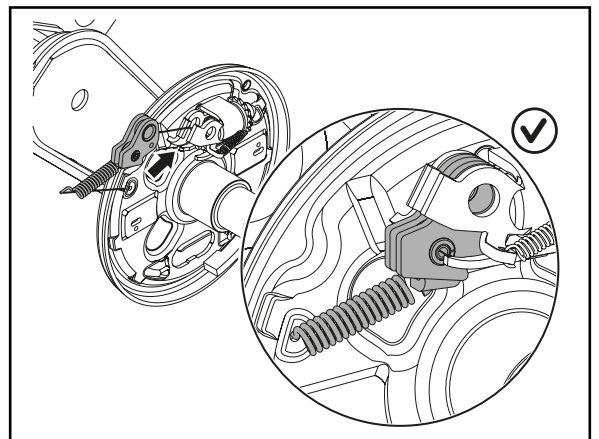
12. First clean, then grease the automatic reverse lever and the inside of the housing so that the automatic reverse lever can move easily.
13. Check the tension spring on the automatic reverse lever for damage, replace if necessary.



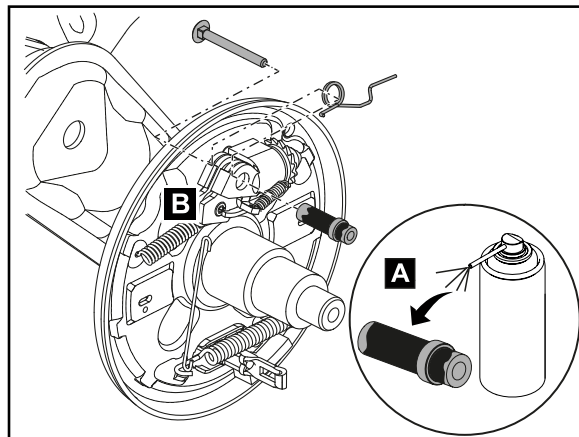
14. First clean, then grease the brake back plate on the supporting surfaces of the brake shoes.



15. Install the automatic reverse lever in the housing again and hook the spring into the brake back plate.

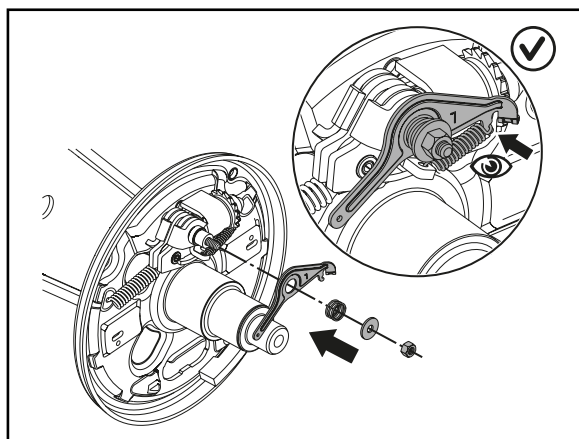


16. First clean the bolts at the bearing point and at the adjustment lever, then grease (A) and remount them on the adjuster unit using the screw and centring bracket (B).

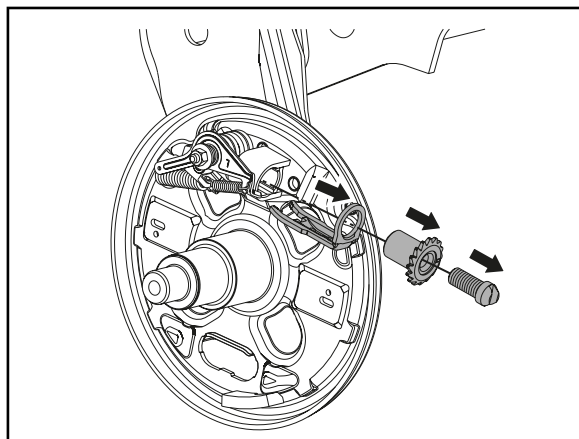


17. Install adjustment lever with spring, washer and nut on the stud again.

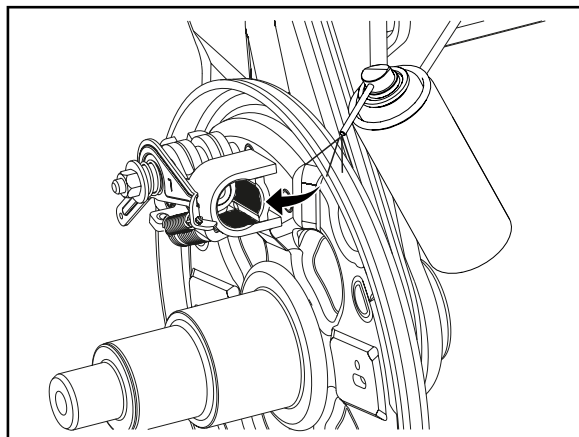
18. Tighten the hexagon nut to 10 Nm.



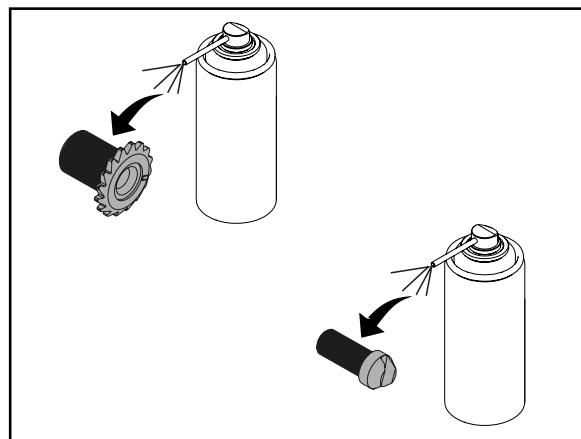
19. Pull out adjusting nut and adjusting bolt with tension clip.



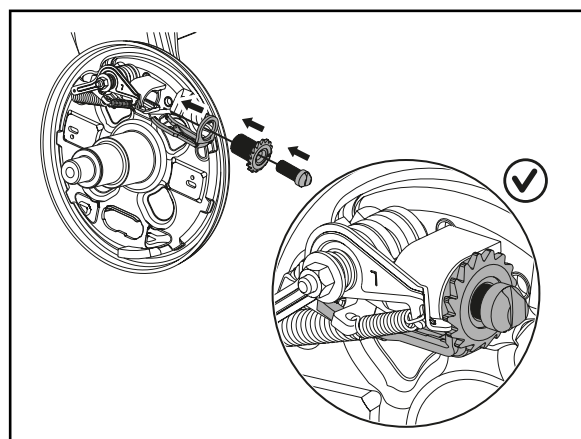
20. First clean, then grease the bearing point of the adjusting nut in the adjuster housing.



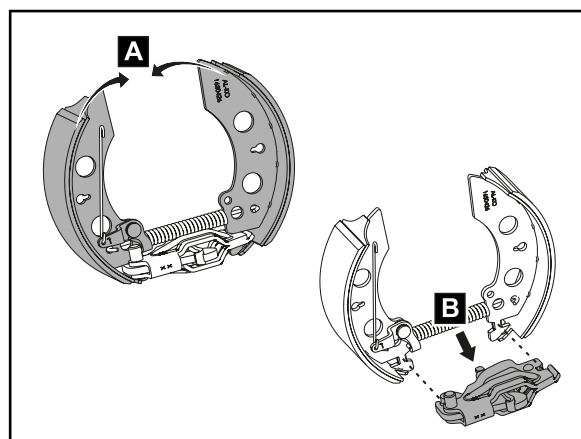
21. First clean, then grease the adjusting nut and adjusting bolt at the bearing points.



22. Install adjusting nut and tension clip in the adjuster housing on the brake back plate and screw in the adjusting bolt.

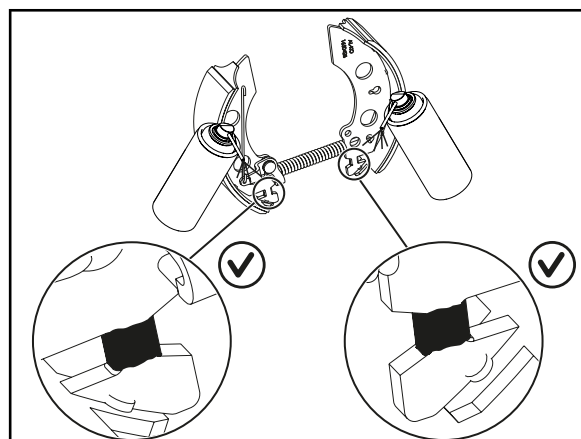


23. To unhook the expanding joint lock, fold the brake shoes back (A) and unhook the expanding joint lock (B).



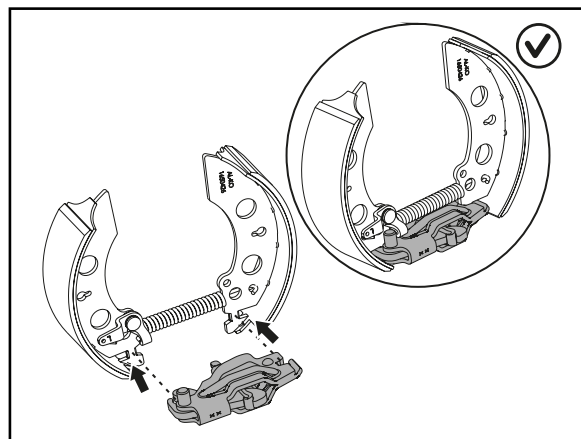
24. First clean, then grease the bearing points of the expanding joint lock on the brake shoes.

25. Clean the deflection lever first, then grease it.

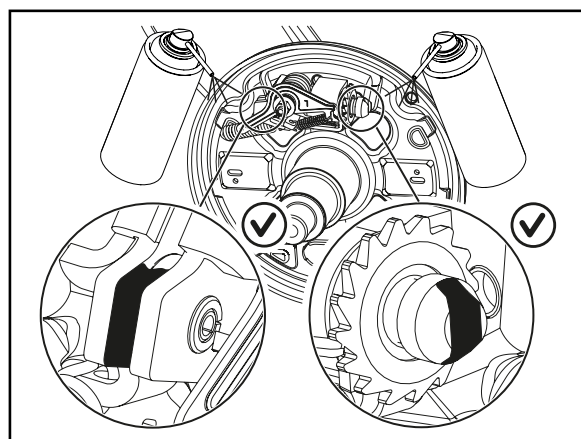


i Install the expanding joint lock so that the rivet stud of the expanding joint lock is on **the same side** as the relay lever on the secondary shoe.

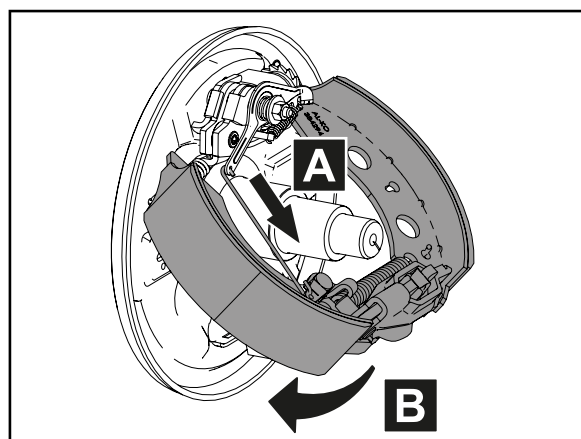
26. Hook the expanding joint lock into the brake shoes.



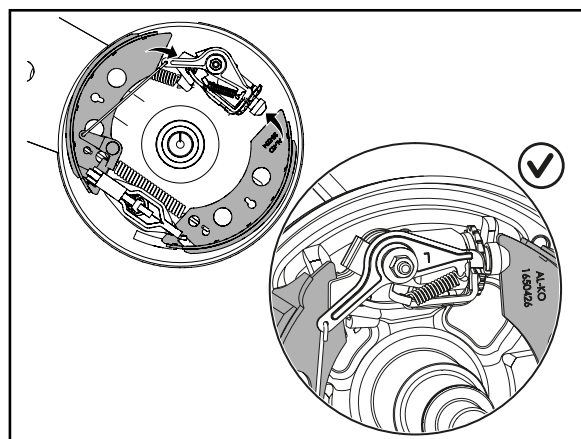
27. First clean, then grease the bearings of the brake shoes on the adjuster unit.



28. Hook the connecting wire into the adjustment lever.

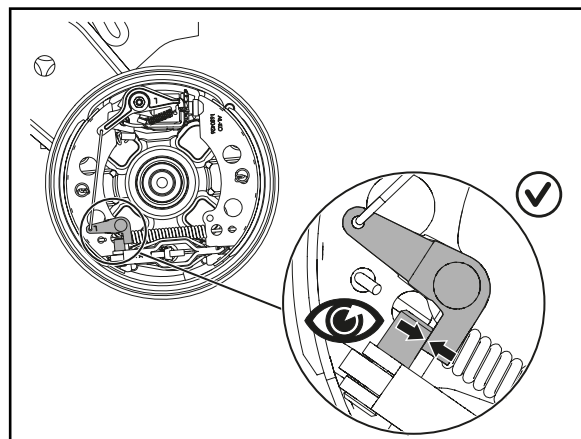


29. Pull the brake shoes apart and hook into automatic reverse lever and adjuster unit.

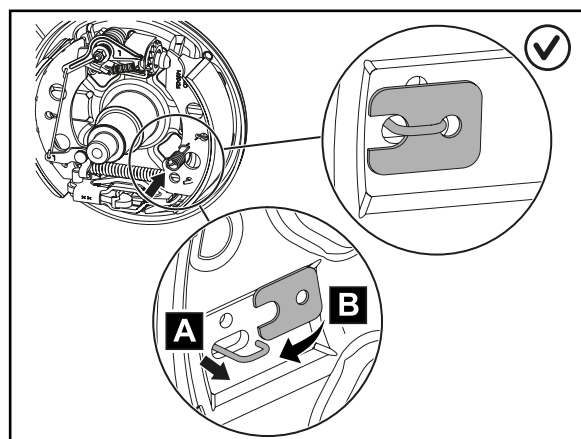


i When installed correctly, the relay lever must be in contact with the bearing pin on the expanding joint lock side!

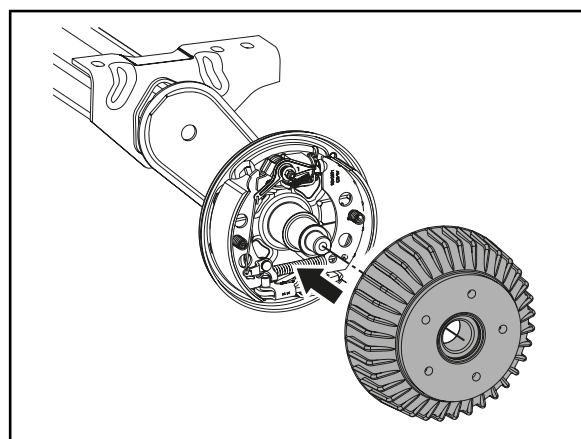
30. Check the position of the relay lever on the expanding joint lock bearing pin and correct, if necessary.



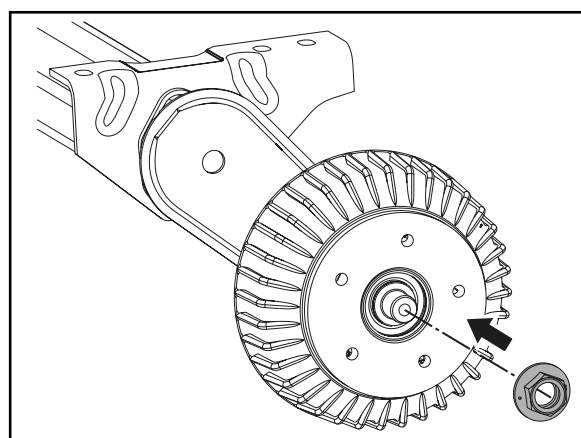
31. Install the pressure springs with cover plate (see figure).



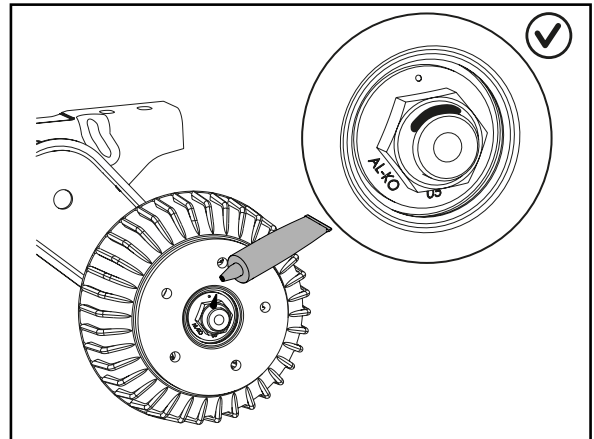
32. Install the brake drum.



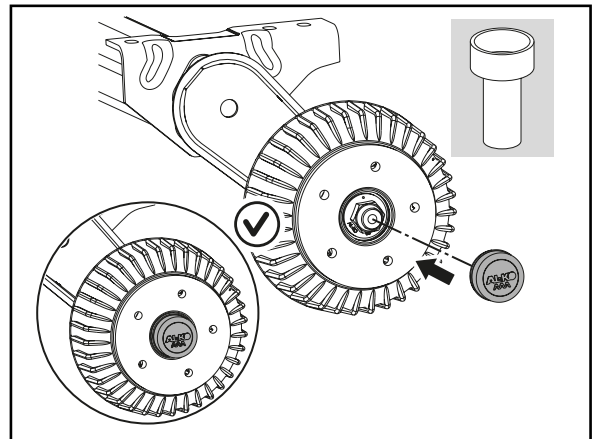
33. Screw on the flanged nut and tighten to the specified torque (see [page 8](#)).



34. Coat flanged nut with sealing lacquer.



35. Install the cap using the special tool.



36. Hook up the Bowden cable to the wheel brake again (see Service Manual 695100 Hooking in the Bowden cable).

37. Check the adjustment of the brake system. Adjust the brake system if necessary (see Service Manual 695103 Service – Brake adjustment).

REPLACING BRAKE SHOES 2051/2361 AAA

Preparatory work

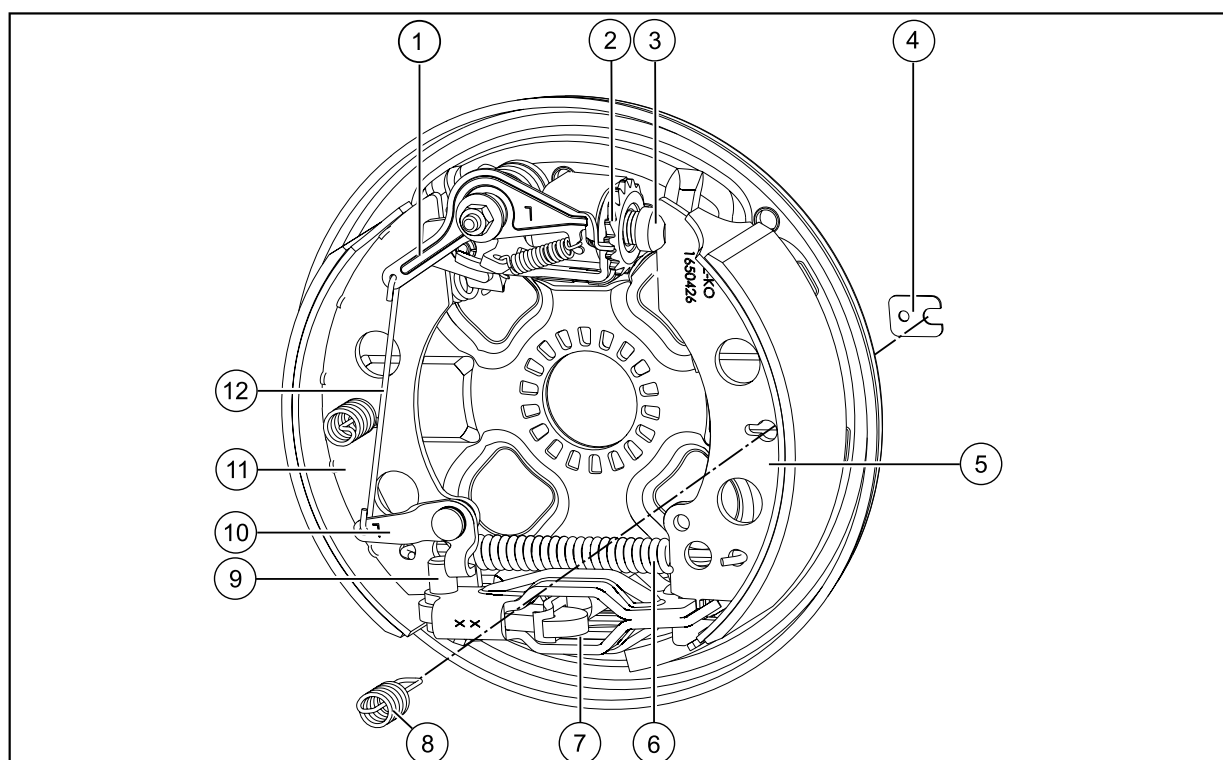
- Release the handbrake lever
- Lift the trailer using a lifting platform



Replace the brake shoes on both sides as soon as the thickness of the brake pads is < 2 mm!



Always replace the brake shoes on both sides of the axle!



1	Adjustment lever	7	Expanding joint lock with hook-in eye for Bowden cable
2	Adjusting nut	8	Pressure spring
3	Adjusting screw	9	Rivet stud
4	Cover plate	10	Relay lever
5	Primary shoe	11	Secondary shoe
6	Tension spring	12	Connecting wire

Required tools

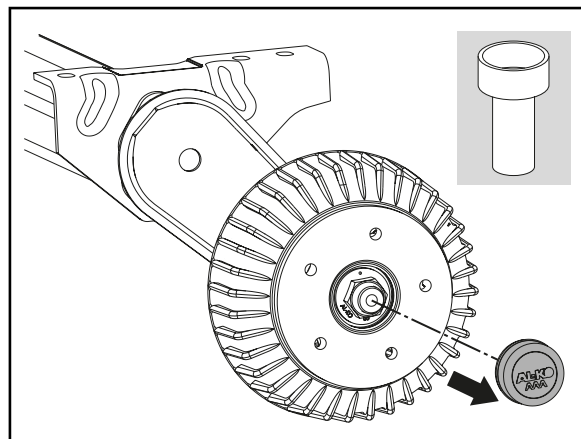
- Special tool for removing the cap (special tool Order No.: 603751)
- Torque wrench
- Screwdriver

Working implements required

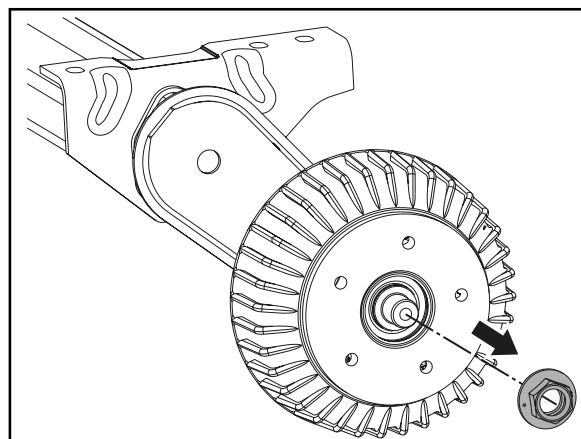
- Sealing lacquer
- Pen for marking
- Lubricating grease (temperature-resistant between -30 °C and +600 °C)

Removing brake shoes 2051/2361 AAA

1. Unhook the Bowden cable from the wheel brake (see Service Manual 695100 Hooking in the Bowden cable).
2. Remove the cap using the special tool.



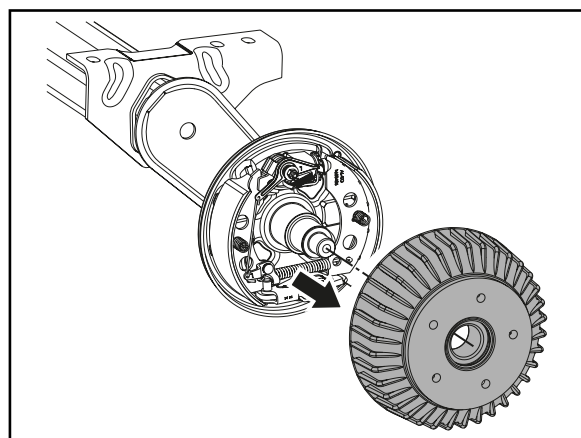
3. Loosen the flanged nut.



4. Turn the brake drum slightly by hand and pull off.



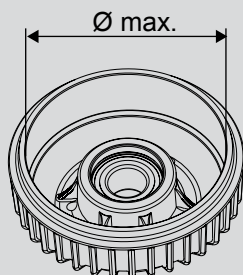
If the brake drum cannot be removed, turn the adjusting nut back (opposite to the direction of the arrow on the brake back plate), see *"Adjust the wheel brake"*



**CAUTION!**

Check the diameter of the brake drum!

Replace the brake drum if the maximum brake drum diameter is reached or exceeded as otherwise brake malfunctions or brake failure may occur!

**Wheel brake type****Brake drum diameter**

1637

Ø max. 161 mm

2051

Ø max. 202 mm

2361

Ø max. 232 mm

3062

Ø max. 303 mm

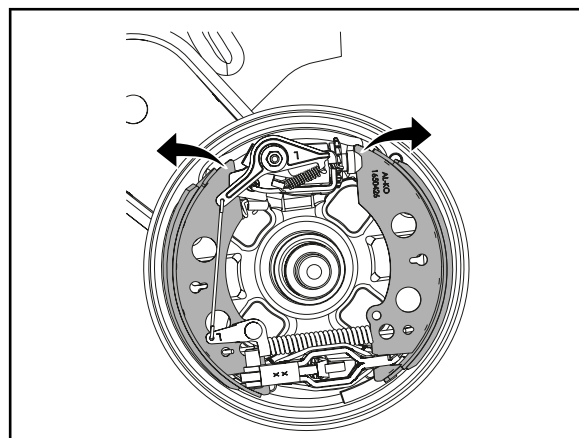
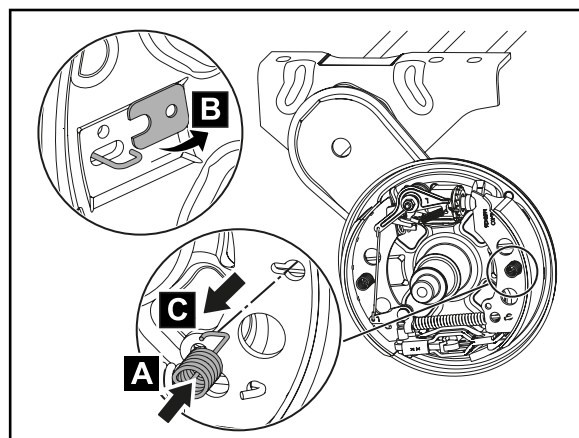
3081A / 3081B

Ø max. 303 mm

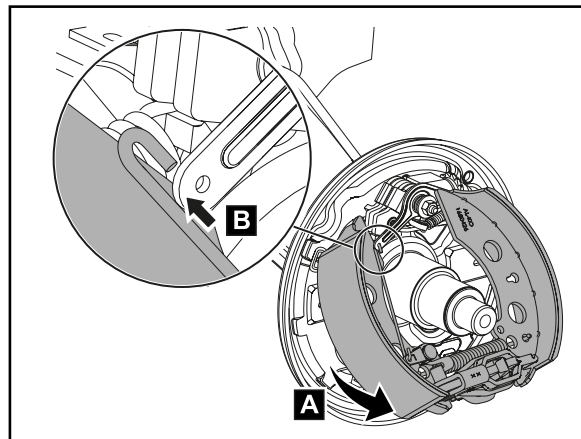


Take care that the cover plates do not fall down!

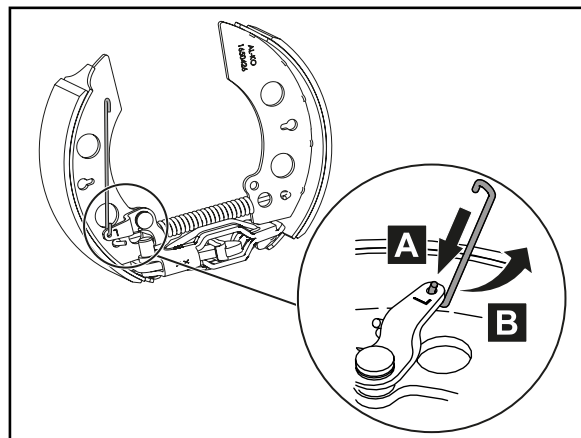
5. Press the pressure spring on brake shoe (A), unhook the cover plate on the rear of the brake back plate from the pressure spring (B) and pull out the pressure spring (C).
6. Remove the pressure spring on the other brake shoe in the same way.
7. Pull the brake shoes apart and unhook from the bearing points on the adjuster unit.



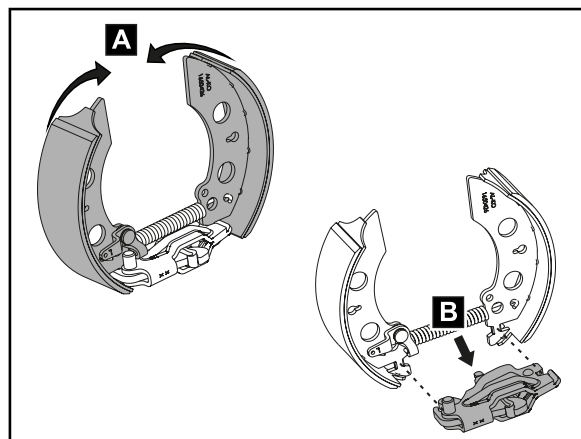
8. Remove expanding joint lock with brake shoes from the brake back plate (A) and unhook the connecting wire from the adjustment lever (B).



9. Unhook the connecting wire from the relay lever of the brake shoe.

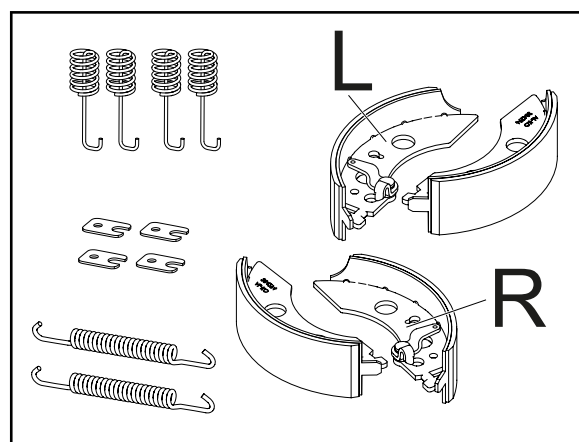


10. To unhook the expanding joint lock, fold the brake shoes back (A) and unhook the expanding joint lock (B).



Installing brake shoes 2051/2361 AAA

1. Check the scope of supply for completeness.

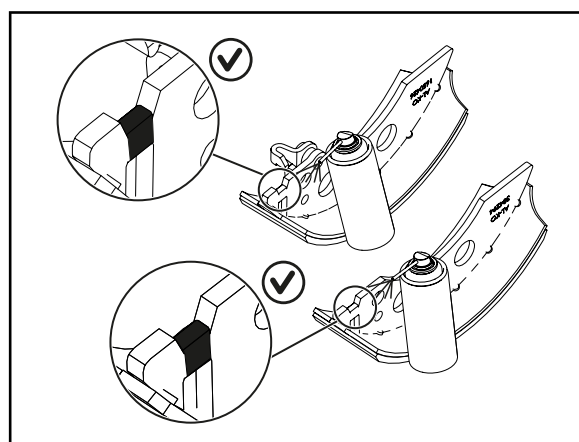


CAUTION!

Observe the temperature limits of the grease!

The lubricating grease must have a temperature resistance from -30 °C up to +600 °C .

2. Grease the bearing points of the expanding joint lock at the brake shoes.
3. Grease the deflection lever.

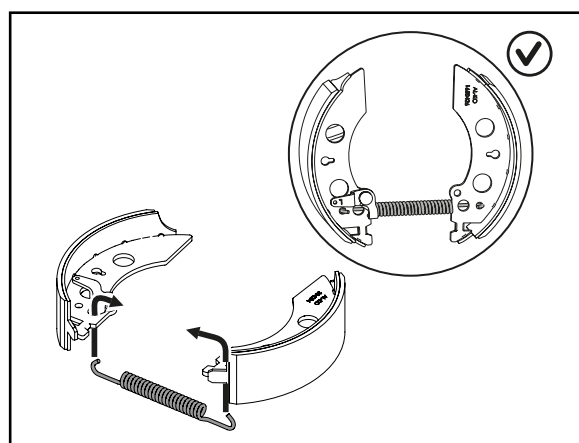


WARNING!

Pay attention to the correct positioning of the primary and secondary shoe!

The primary shoe is inserted into the adjusting screw, the secondary shoe into the automatic reverse lever. Attached to the secondary shoe is the relay lever into which the connecting wire to the adjustment lever is hooked.

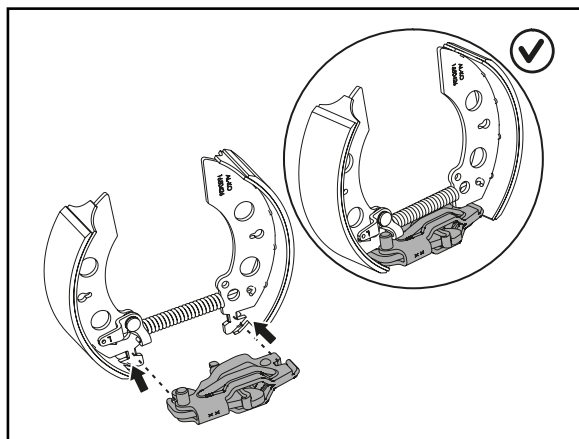
4. Hook the tension spring into the brake shoes so that it is on the rear side of the brake shoes. Pay attention to the correct positioning of the primary and secondary shoe.



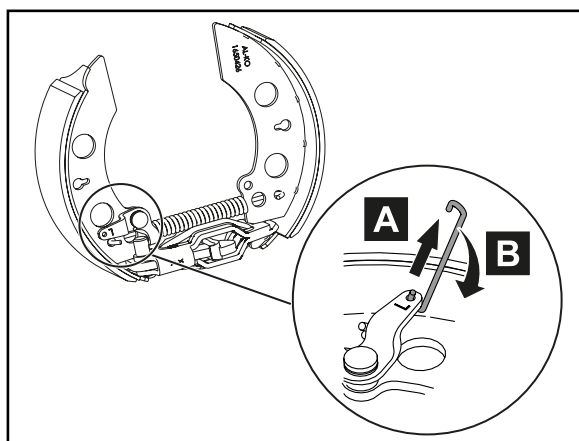


Install the expanding joint lock so that the rivet stud of the expanding joint lock is on **the same side** as the relay lever on the secondary shoe.

5. Hook the expanding joint lock into the brake shoes.



6. Hook the connecting wire from below into the relay lever on the secondary shoe.

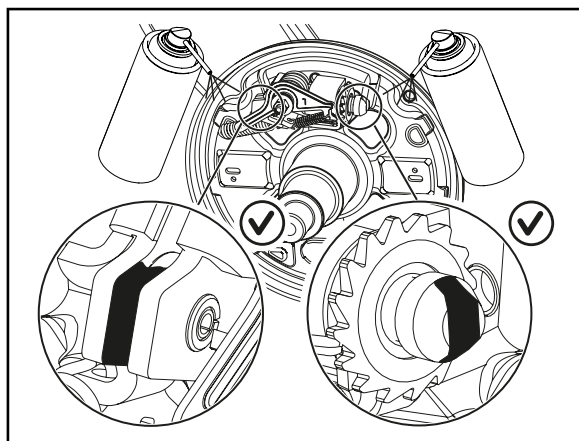


CAUTION!

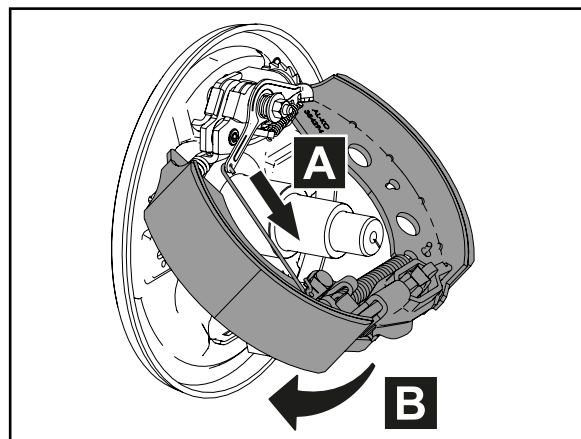
Observe the temperature limits of the grease!

The lubricating grease must have a temperature resistance from -30 °C up to +600 °C .

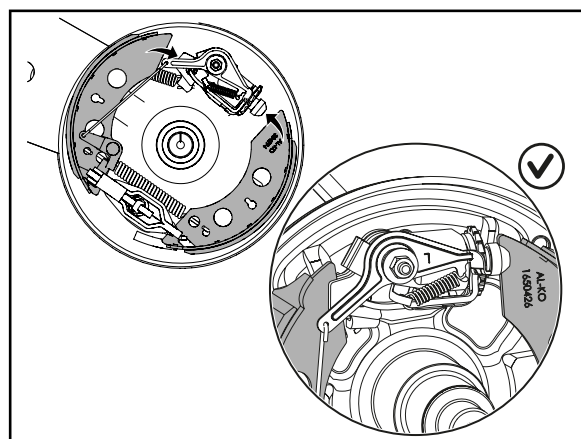
7. Grease the bearing points of the brake shoes on the automatic reverse lever and adjusting screw.
8. Grease the adjustment lever and bearing.
9. Grease the contact surfaces of the brake shield, see "[Maintenance of wheel brake 2051/2361 AAA](#)"



10. Hook the connecting wire into the adjustment lever.

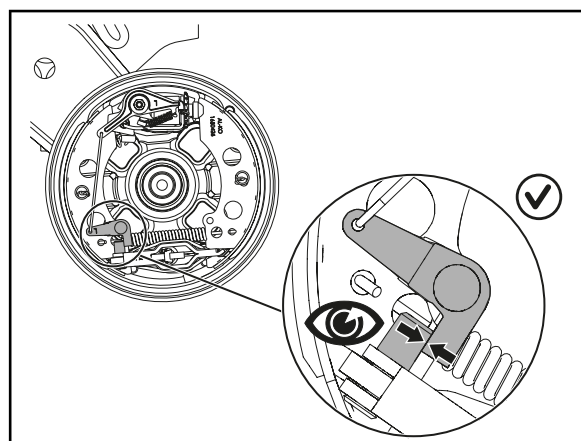


11. Pull the brake shoes apart and hook into automatic reverse lever and adjuster unit.

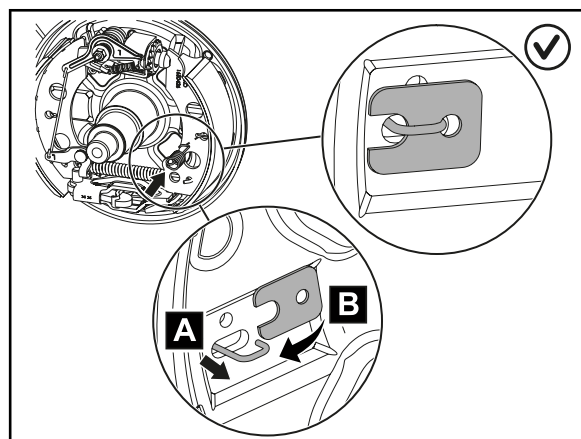


When installed correctly, the relay lever must be in contact with the bearing pin on the expanding joint lock side!

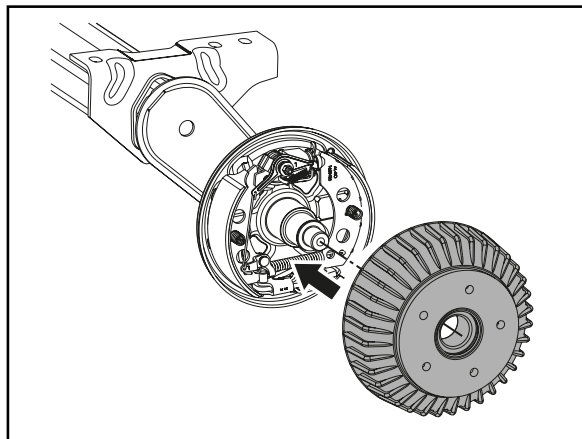
12. Check the position of the relay lever on the expanding joint lock bearing pin and correct, if necessary.



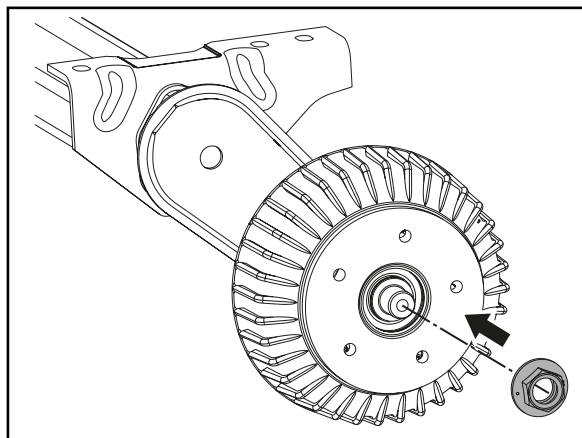
13. Install the pressure springs with cover plate (see figure).



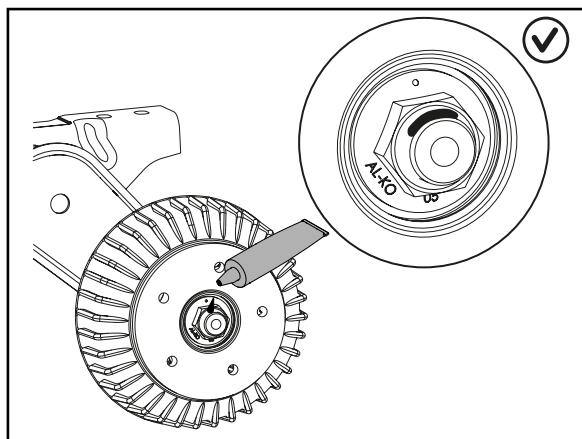
14. Install the brake drum.



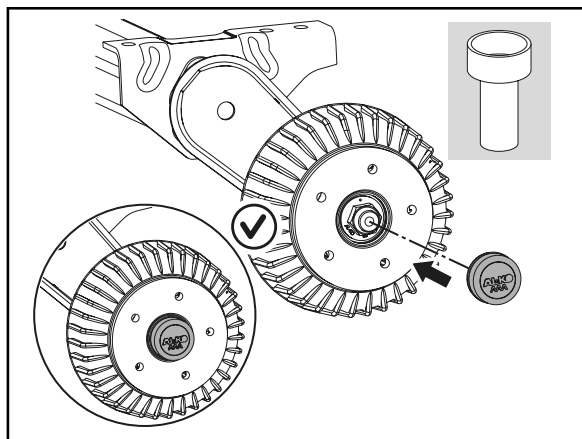
15. Screw on the flanged nut and tighten to the specified torque (see [page 8](#)).



16. Coat flanged nut with sealing lacquer.



17. Install the cap using the special tool.

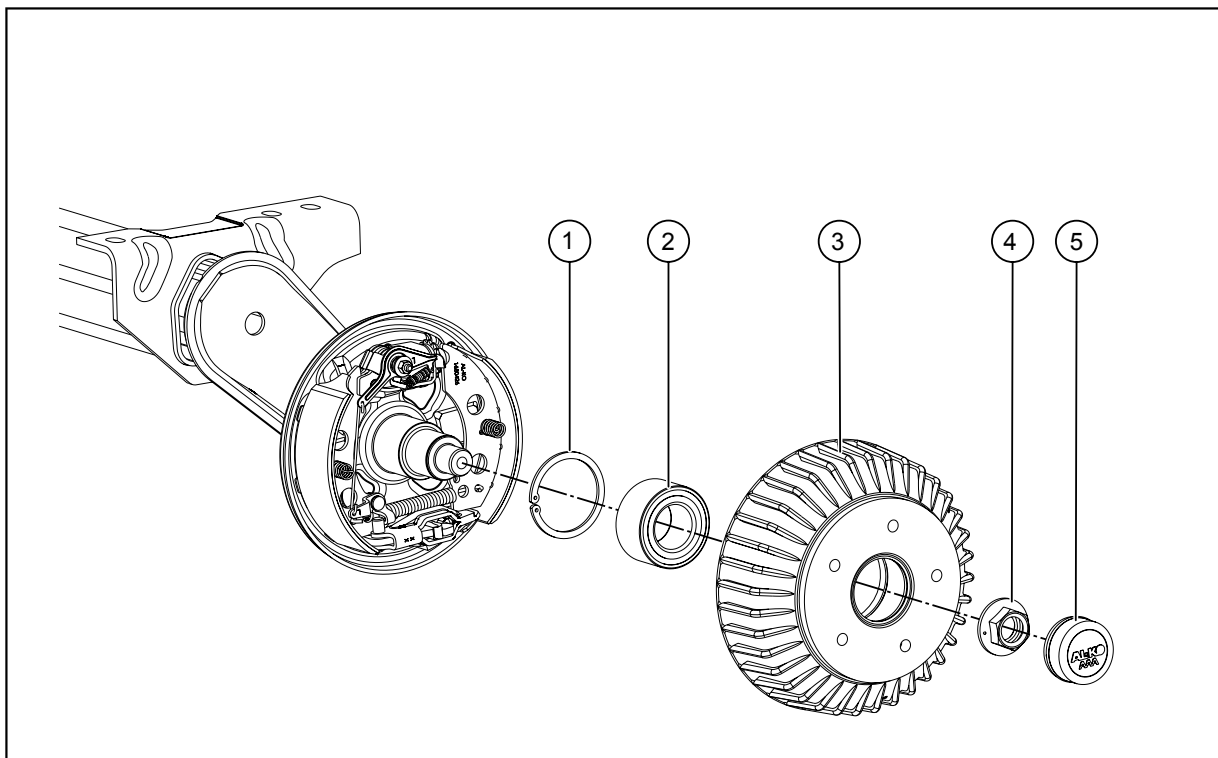


18. Hook up the Bowden cable to the wheel brake again (see Service Manual 695100 Hooking in the Bowden cable).
19. Install the brake shoes also on the other side of the axle.
20. Check the adjustment of the brake system. Adjust the brake system if necessary (see Service Manual 695103 Adjustment of the brake system).

REMOVING AND INSTALLING BRAKE DRUM / REPLACING COMPACT BEARING

Preparatory work

- Release the handbrake lever and lift the trailer using a lifting platform



1	Securing ring	4	M24x1.5 flanged nut
2	Brake drum compact bearing	5	Cap
3	Brake drum		

Required tools

- Special tool for removing the cap

RB 2051 Order No. 603751

RB 2361 Order No. 603752

- Torque wrench

- Circlip pliers

- Press punch for workshop press

Ø34 mm Order No. 1365643

Ø39 mm Order No. 1365644

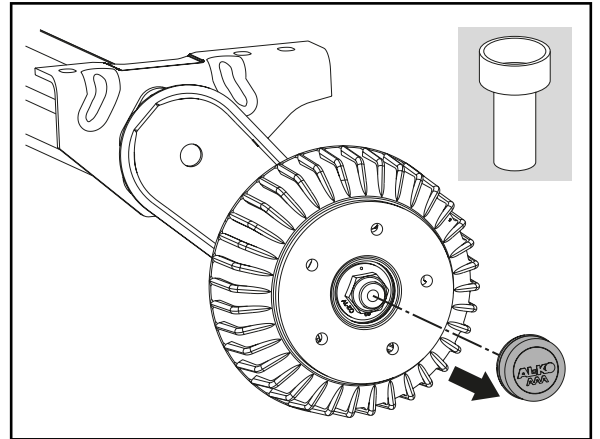
Ø42 mm Order No. 1365645

Working implements required

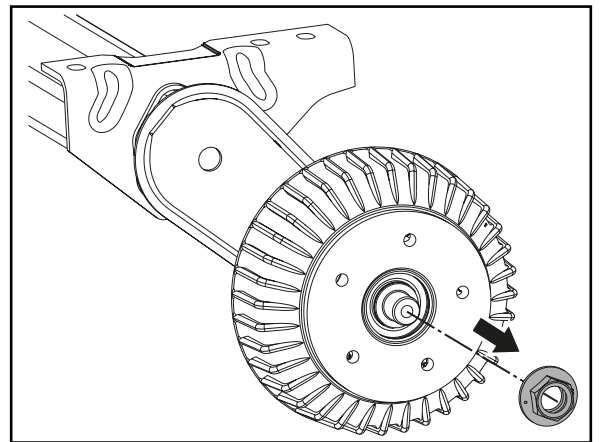
- Sealing lacquer

Removing brake drum 2051/2361 AAA

1. Remove the cap using the special tool.



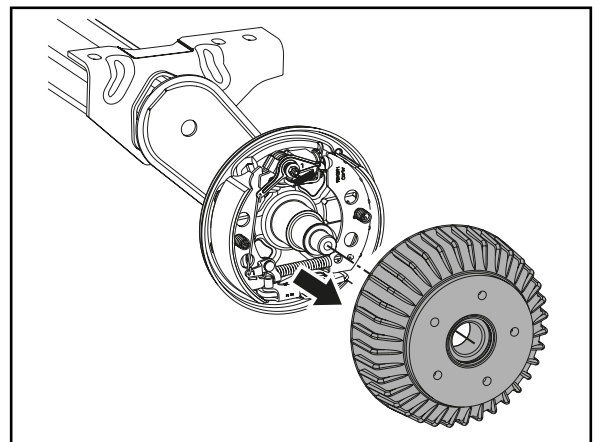
2. Loosen the flanged nut.



3. Turn the brake drum slightly by hand and pull off.

i If the brake drum cannot be removed, turn the adjusting nut back (opposite to the direction of the arrow on the brake back plate), see "[Adjust the wheel brake](#)"

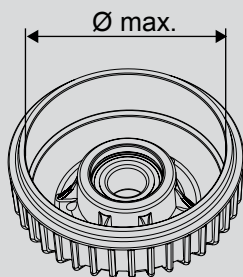
4. Inspect the brake drum for damage. If there are signs of damage or extreme running marks, replace the brake drum with a new drum.



**CAUTION!**

Check the diameter of the brake drum!

Replace the brake drum if the maximum brake drum diameter is reached or exceeded as otherwise brake malfunctions or brake failure may occur!

**Wheel brake type****Brake drum diameter**

1637

Ø max. 161 mm

2051

Ø max. 202 mm

2361

Ø max. 232 mm

3062

Ø max. 303 mm

3081A / 3081B

Ø max. 303 mm

Replacing wheel bearing (compact bearing) 2051/2361 AAA

**CAUTION!**

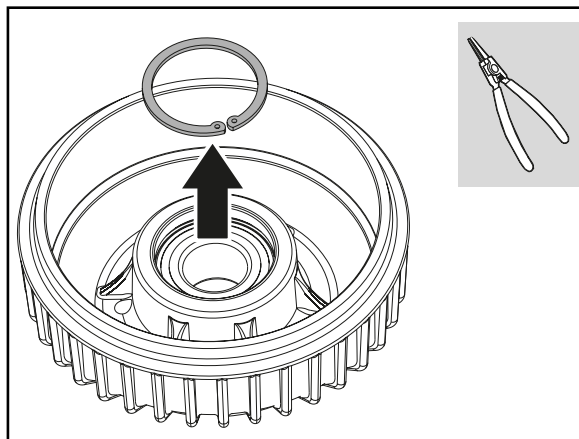
- Do not reuse used wheel bearings.
- Do not use force!



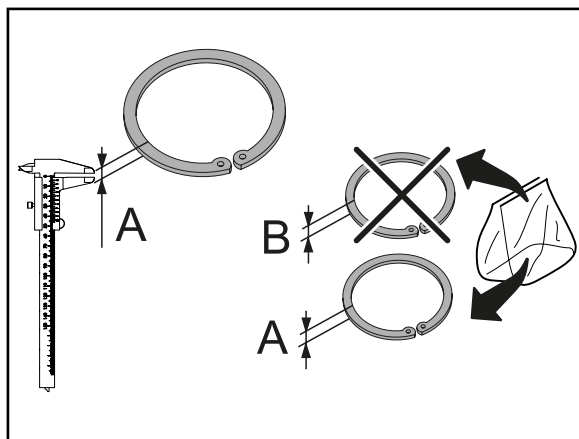
The bearing clearance is adjusted using the flanged nut.

See also bearing clearance inspection instructions 1365778!

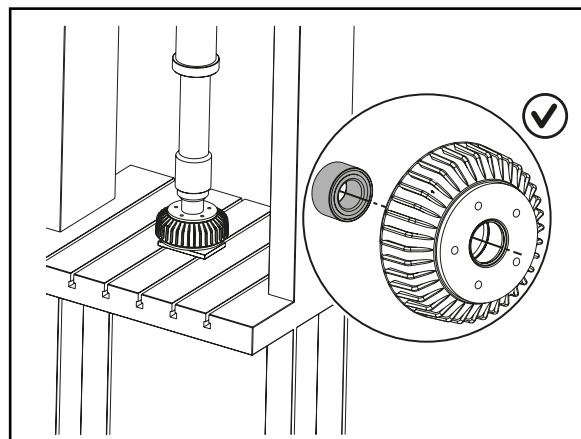
1. Remove the circlip using the circlip pliers.

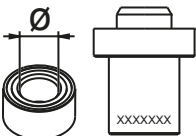


2. Measure the old circlip and take the new circlip with the same thickness from the package.

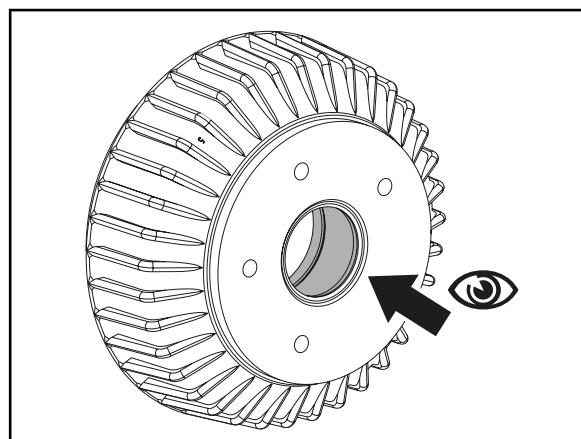


3. Press the bearing out of the brake drum using the workshop press and a matching punch.



	Ø (mm)	Article number
	34	1365643
	39	1365644
	42	1365645

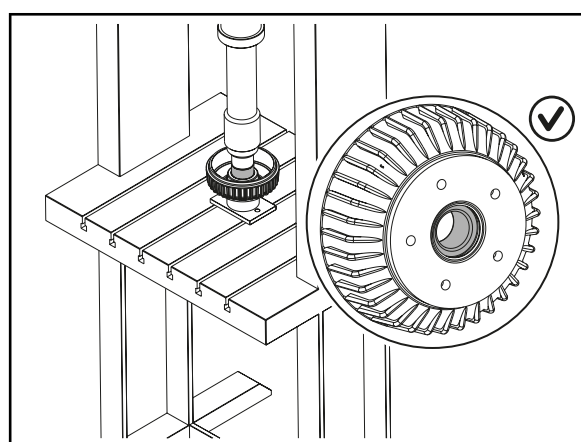
4. Inspect the bearing point on the brake drum for damage and dirt. Clean the bearing point, if necessary, or replace a damaged brake drum.



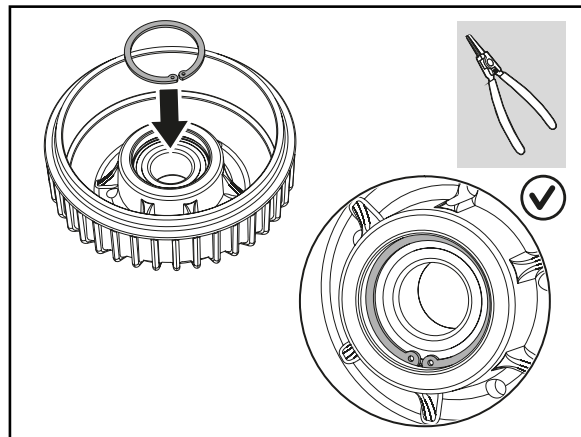
CAUTION!

Press only against the outer race when pressing in the bearing! Press only in vertical direction!

5. Press the new bearing into the brake drum using a matching punch.

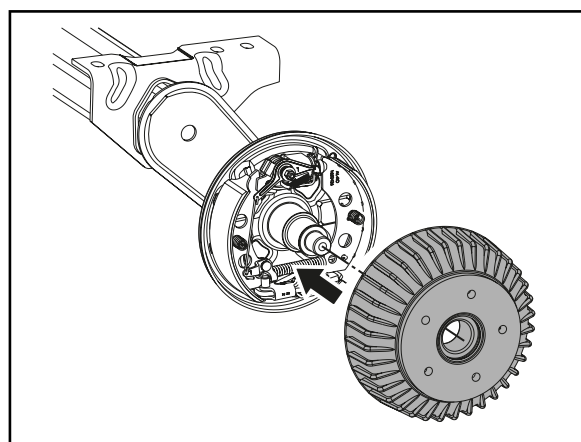


6. Install a new circlip.

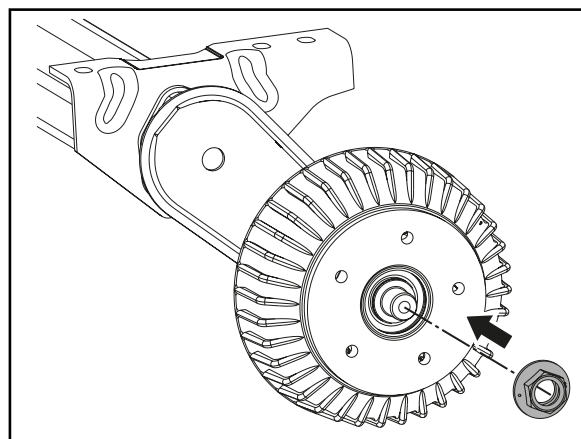


Installing brake drum 2051/2361 AAA

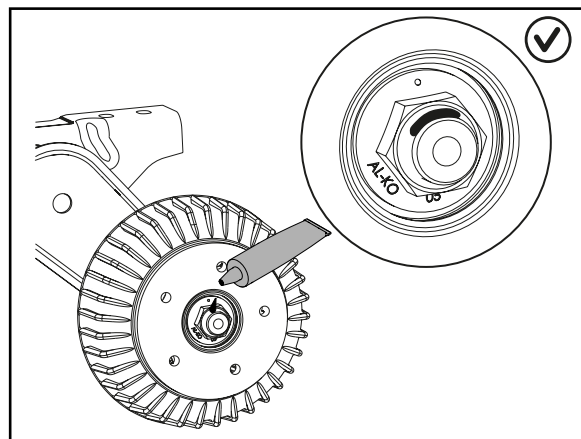
1. Install the brake drum.



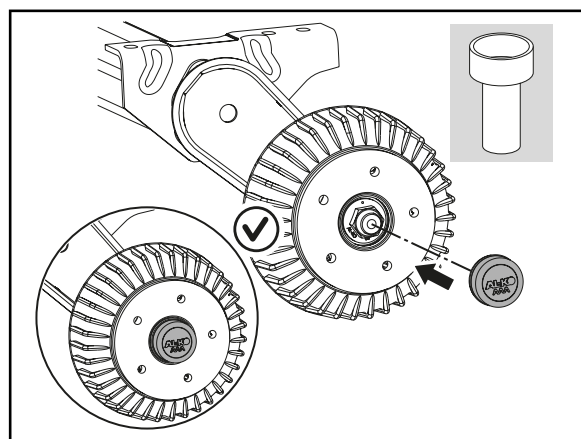
2. Screw on the flanged nut and tighten to the specified torque (see [page 8](#)).



3. Coat flanged nut on the axle stub with sealing lacquer.



4. Install the cap using the special tool.



REMOVING AND INSTALLING COMPLETE WHEEL BRAKE 2051 AAA

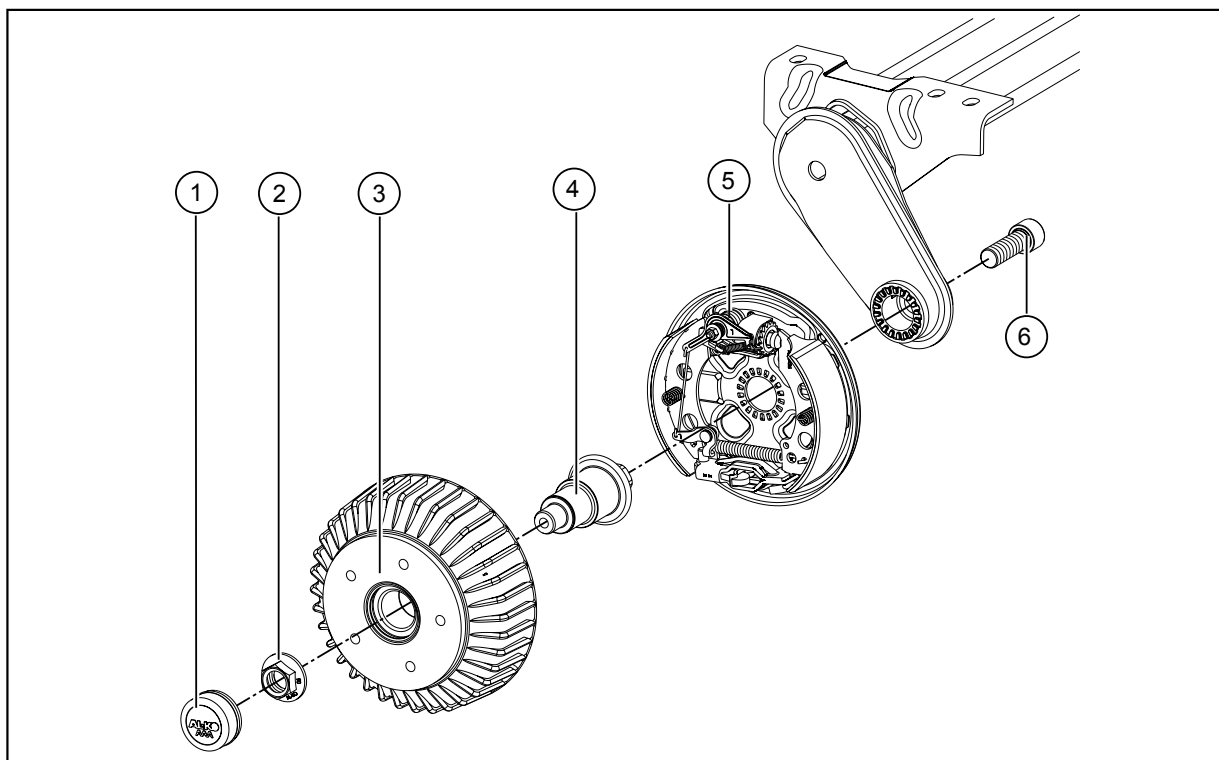
Preparatory work

- Release the handbrake lever
- Lift the trailer using a lifting platform



DANGER!

Always replace the brakes on both sides of an axle, never replace just one brake!



1	Cap	4	Axle stub
2	M24x1.5 flanged nut	5	Wheel brake 2051 AAA
3	Brake drum	6	Axle stub bolt M20x60 Up to 2018 Axle stub bolt M22x60 From 2019

Required tools

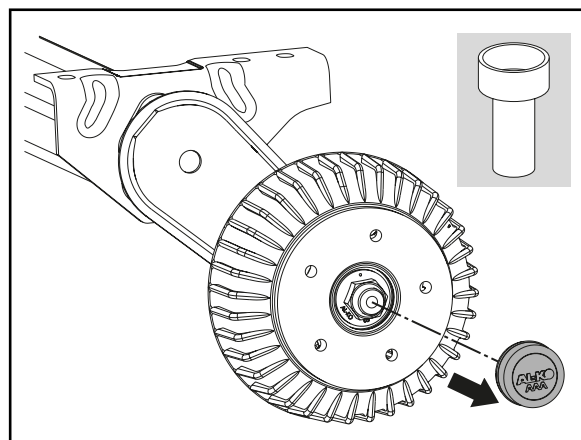
- Special tool for removing the cap (special tool Order No.: 603751)
- Torque wrench
- Poss. screwdriver
- Poss. thread tap M22

Working implements required

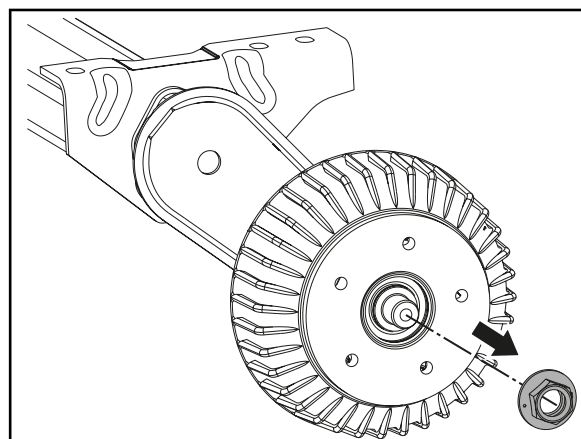
- Sealing lacquer
- Pen for marking

Removing wheel brake 2051 AAA

1. Unhook the Bowden cable from the wheel brake (see Service Manual 695100 Hooking in the Bowden cable).
2. Remove the cap using the special tool.



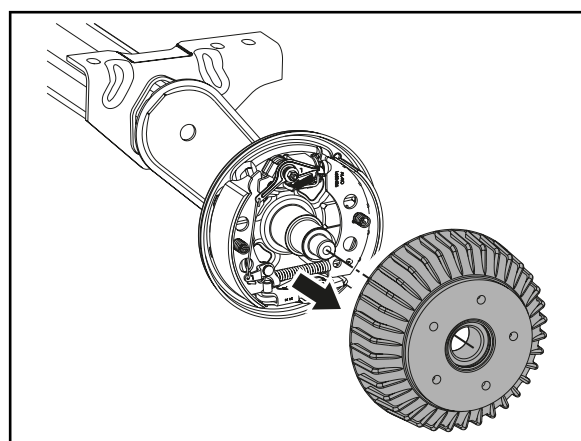
3. Loosen the flanged nut.



4. Turn the brake drum slightly by hand and pull off.



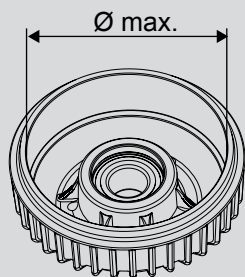
If the brake drum cannot be removed, turn the adjusting nut back (opposite to the direction of the arrow on the brake back plate), see "[Adjust the wheel brake](#)"



**CAUTION!**

Check the diameter of the brake drum!

Replace the brake drum if the maximum brake drum diameter is reached or exceeded as otherwise brake malfunctions or brake failure may occur!

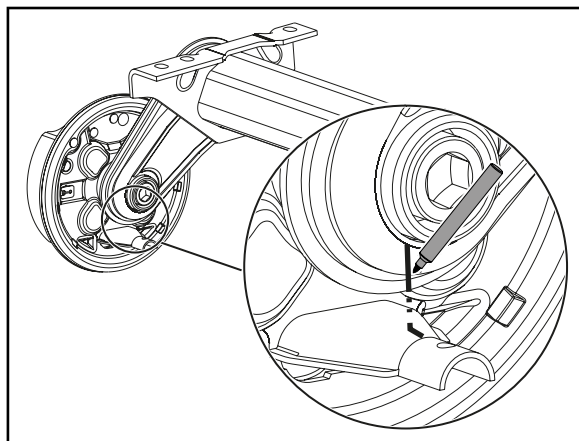
**Wheel brake type****Brake drum diameter**

1637	Ø max. 161 mm
2051	Ø max. 202 mm
2361	Ø max. 232 mm
3062	Ø max. 303 mm
3081A / 3081B	Ø max. 303 mm



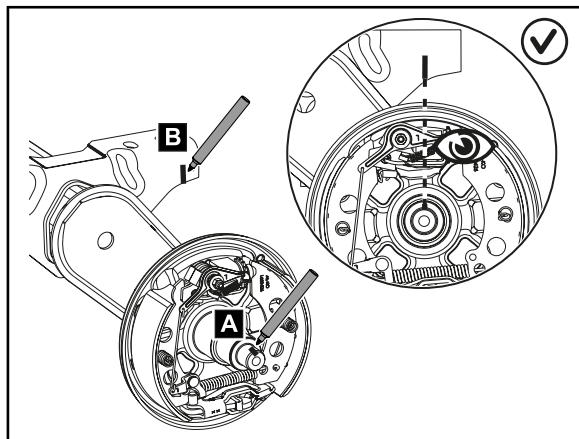
The position of the new wheel brake must correspond to the position of the old wheel brake. Therefore mark the position of the wheel brake on the swing arm.

5. Mark the position of the wheel brake Bowden cable adapter bracket on the swing arm.



The axle stub must be installed again in the same position as it was before.

6. In order to be able to install the axle stub in the same position again, make a mark on the axle stub and swing arm (alternatively on the axle bracket, frame, etc.).



**CAUTION!**

Take care that the wheel brake does not fall down!

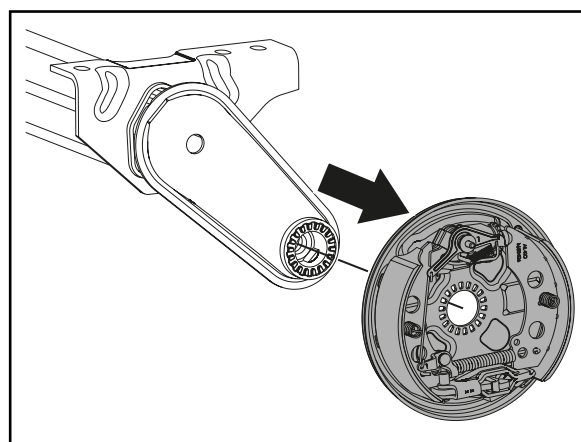
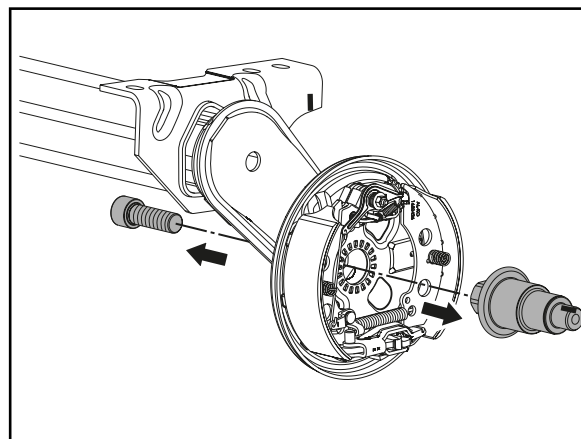
After unscrewing the axle stub, the wheel brake is held on the bush of the swing arm only by the splines. Hold the wheel brake to prevent it from falling off!

7. Unscrew the axle stub bolt.



With axle stub bolt M22 (bolt secured with adhesive), heat the bolt head to unscrew if necessary!

8. Remove the wheel brake.

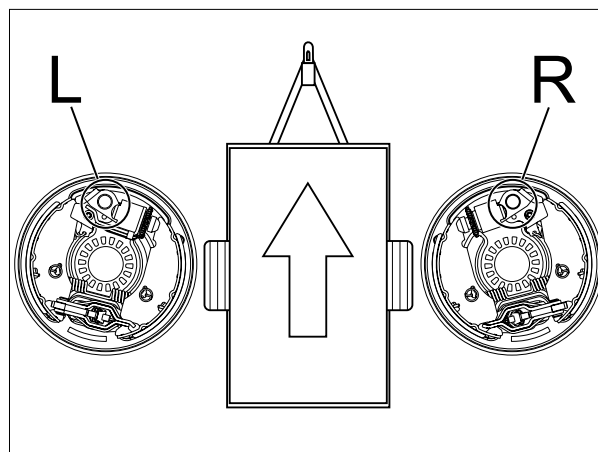


Installing wheel brake 2051 AAA

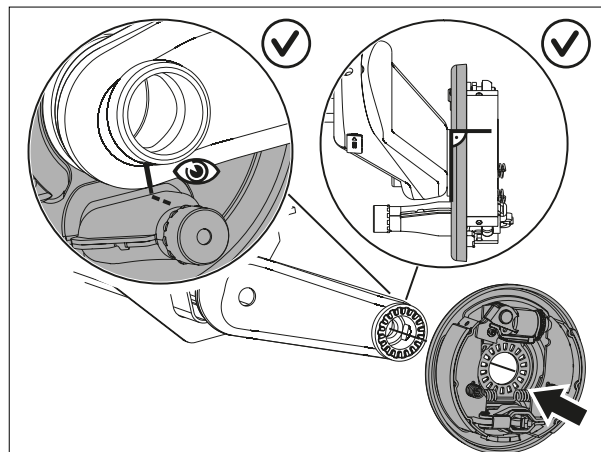
1. Before installing the (new) wheel brake, check that it is the correct wheel brake for the respective side (as seen in driving direction), observe the figure!



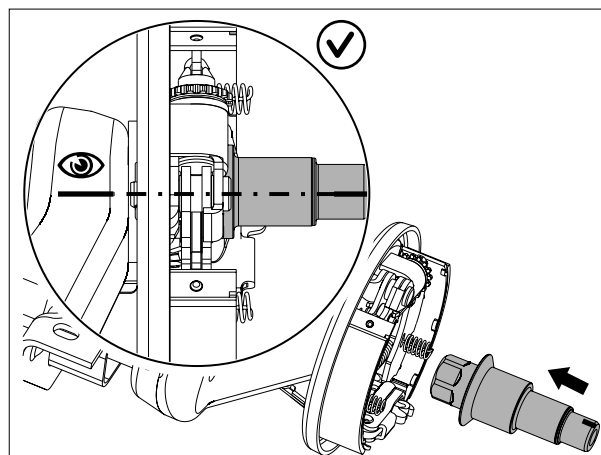
Viewed from the front, the adjusting housing bolt is located on the left side of the adjuster unit on the left wheel brake (L), and on the right side on the right wheel brake (R).



2. Place the wheel brake against the swing arm so that the Bowden cable adapter bracket is aligned with the mark on the swing arm and the brake back plate is on the tooth profile of the swing arm.



3. Clean the axle stub bolt thread (oil- and grease-free) and recut if necessary to remove adhesive residues.
4. Install the axle stub so that the marks previously made are aligned and the axle stub is in its original position (see figure).





Important installation and storage information for axle stub bolt M22 (bolt securing):

Installation information:

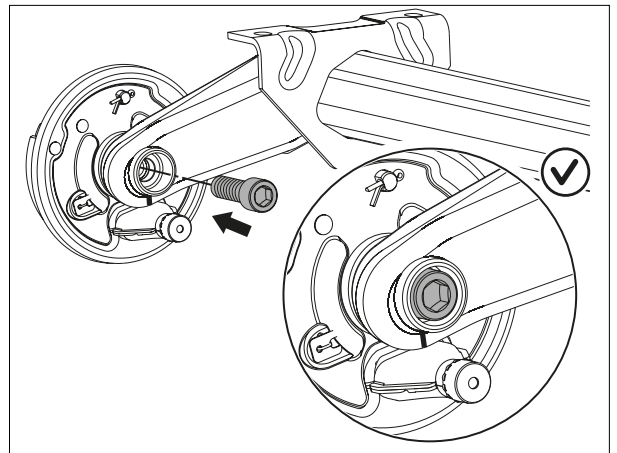
- The thread must be free of oil and grease!
- Maximum processing time 5 minutes!
- Re-tightening the axle stub bolt is then no longer permissible!
- If the new axle stub bolt is subsequently undone, a new bolt must always be used (loss of the adhesive effect)!
- The final strength of the bolted connection is achieved after 24 hours. Articulation of the wheels (e.g. manoeuvring with payload, manoeuvring with a caravan mover, etc.) must always be avoided during this period.
- Drying time according to manufacturer specifications: 6 hours at room temperature

Storage information:

- Storage capability: max. 4 years
- Storage temperature: max. 30°C
- Humidity: max. 65%

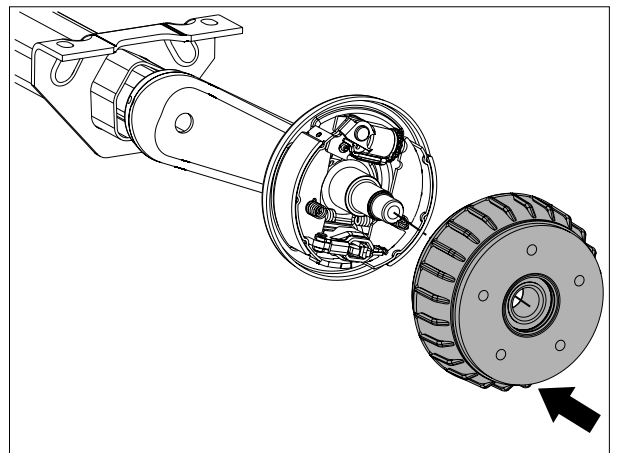
5. Bolt on axle stub and tighten axle stub bolt to tightening torque.

Axle stub bolt M20	370 ±10 Nm
Axle stub bolt M22	640 ±15 Nm

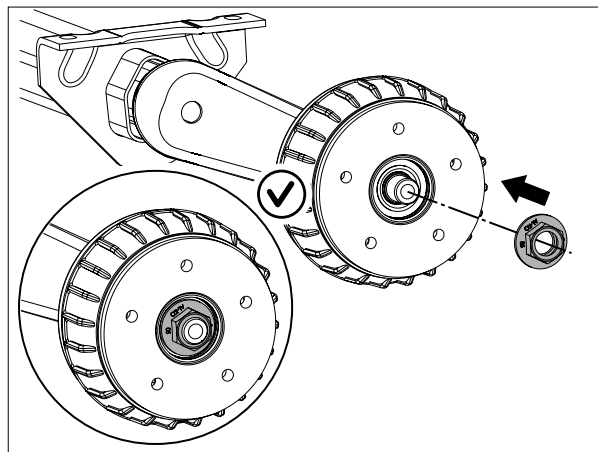


6. Hook the Bowden cable in the wheel brake again (see document 695100 Hooking in the Bowden cable).

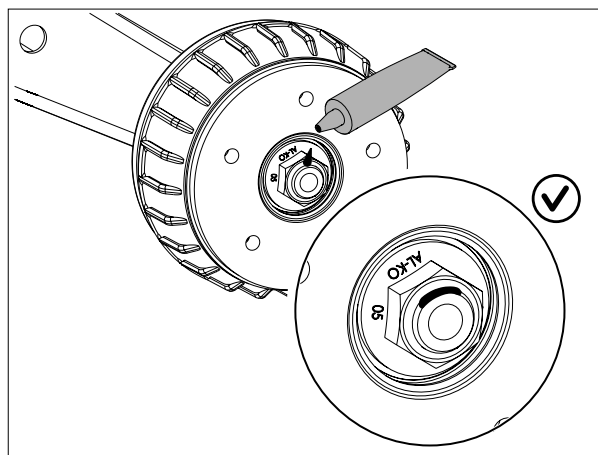
7. Install the brake drum.



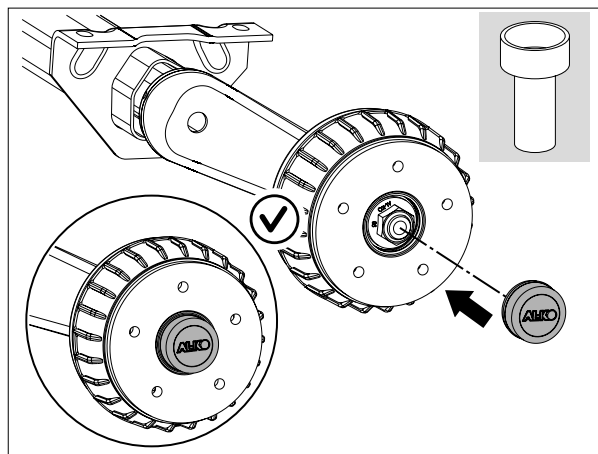
8. Screw on the flange nut and tighten to a tightening torque of 290 ± 10 Nm.



9. Coat flange nut on the axle stub with sealing lacquer.



10. Install the cover cap using the special tool.



11. Adjust the brake system (see document 695101 Adjusting the brake system).

REMOVING AND INSTALLING COMPLETE WHEEL BRAKE 2361 AAA

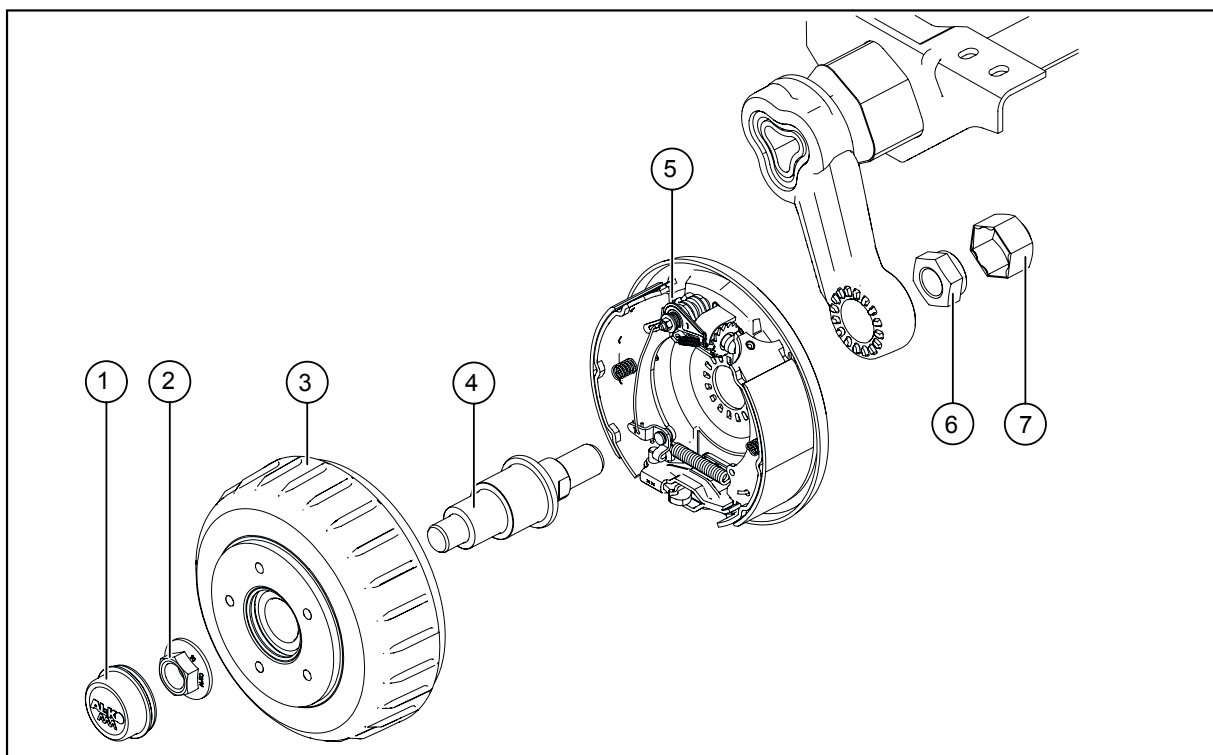
Preparatory work

- Release the handbrake lever
- Lift the trailer using a lifting platform



DANGER!

Always replace the brakes on both sides of an axle, never replace just one brake!



1	Cap	5	Wheel brake 2361 AAA
2	M27x2 flanged nut	6	M30 hexagon nut
3	Brake drum	7	Protective cap
4	Axle stub		

Required tools

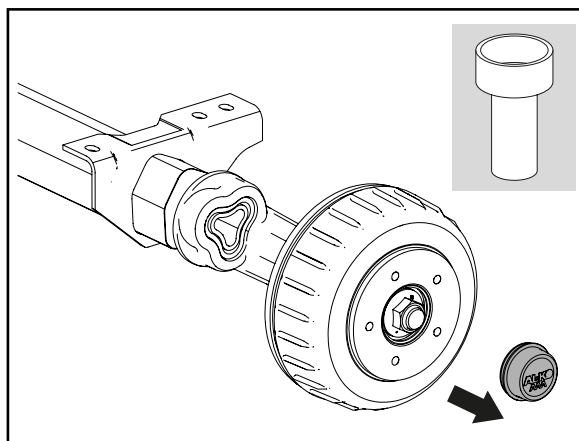
- Special tool for removing the cap (special tool Order No.: 603751)
- Torque wrench
- Allen key
- Screwdriver

Working implements required

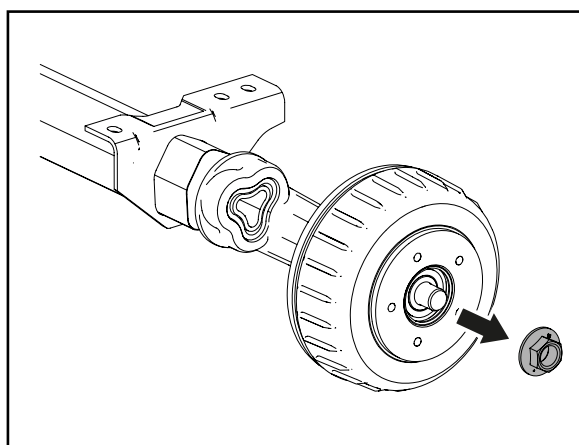
- Sealing lacquer
- Pen for marking

Removing wheel brake 2361 AAA

1. Unhook the Bowden cable from the wheel brake (see Service Manual 695100 Hooking in the Bowden cable).
2. Remove the cap using the special tool.



3. Loosen the flanged nut.



4. Turn the brake drum slightly by hand and pull off.



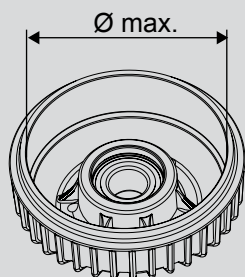
If the brake drum cannot be removed, turn the adjusting nut back (opposite to the direction of the arrow on the brake back plate), see "[Adjust the wheel brake](#)"



CAUTION!

Check the diameter of the brake drum!

Replace the brake drum if the maximum brake drum diameter is reached or exceeded as otherwise brake malfunctions or brake failure may occur!



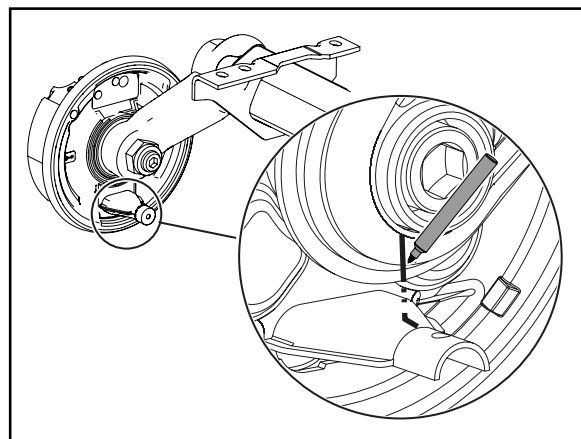
Wheel brake type

Brake drum diameter

1637	Ø max. 161 mm
2051	Ø max. 202 mm
2361	Ø max. 232 mm
3062	Ø max. 303 mm
3081A / 3081B	Ø max. 303 mm

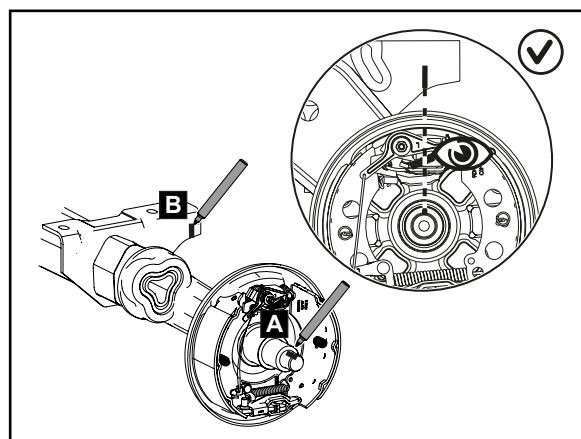
i The position of the new wheel brake must correspond to the position of the old wheel brake. Therefore mark the position of the wheel brake on the swing arm.

5. Mark the position of the wheel brake Bowden cable adapter bracket on the swing arm.



i The axle stub must be installed again in the same position as it was before.

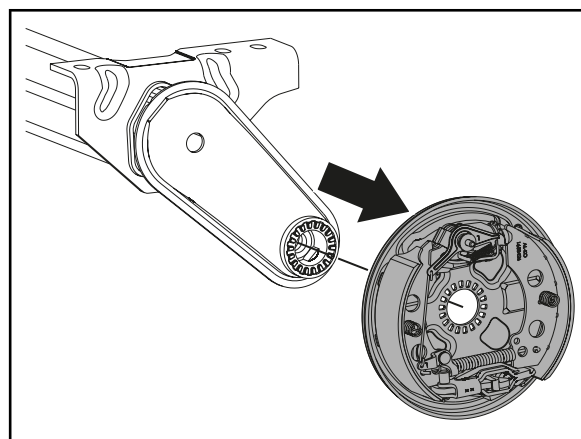
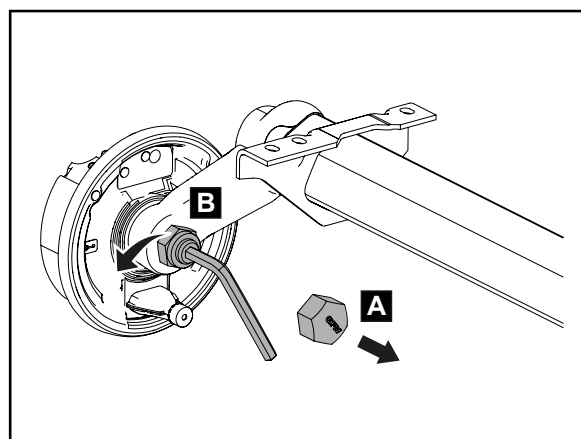
6. In order to be able to install the axle stub in the same position again, make a mark on the axle stub and swing arm (alternatively on the axle bracket, frame, etc.).



CAUTION!
Take care that the wheel brake does not fall down!

After unscrewing the axle stub, the wheel brake is held on the bush of the swing arm only by the splines. Hold the wheel brake to prevent it from falling off!

7. Remove protective cap (A).
8. Counterhold the axle stub with an Allen key and loosen the hexagon nut (B).
9. Remove the wheel brake.

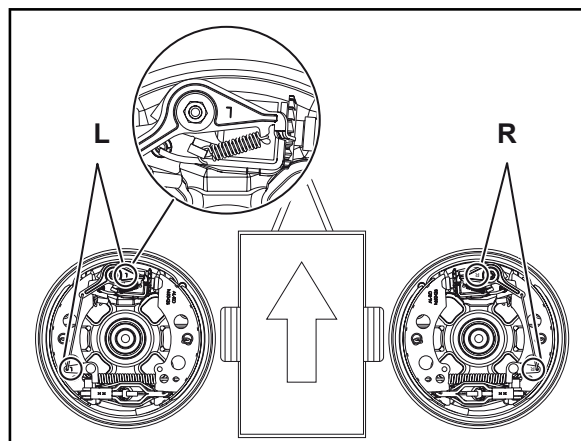


Installing wheel brake 2361 AAA

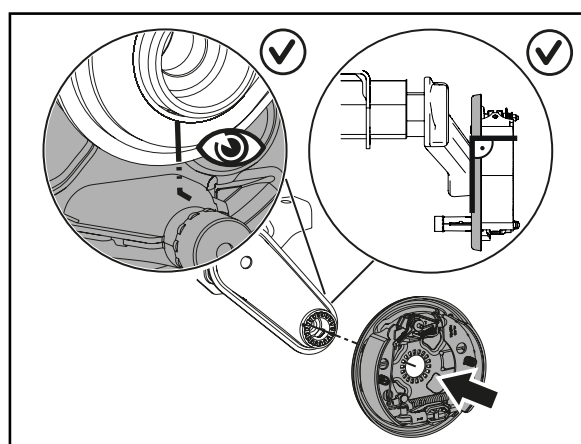
1. Before installing the (new) wheel brake, check that it is the correct wheel brake for the respective side (as seen in driving direction), observe the figure!



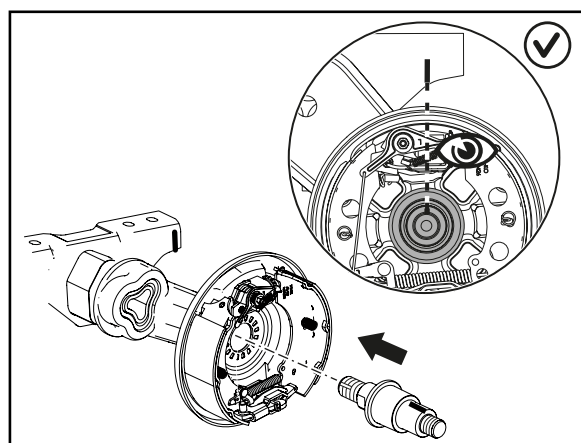
There is a mark on the relay lever and adjustment lever of the respective wheel brake indicating whether the wheel brake is for the left side (L) or the right side (R).



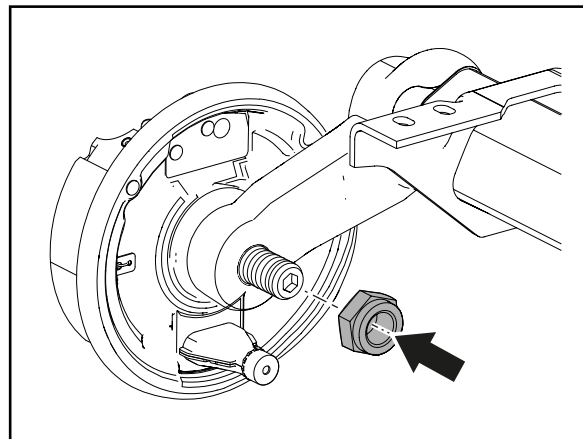
2. Place the wheel brake against the swing arm so that the Bowden cable adapter bracket is aligned with the mark on the swing arm and the brake back plate is on the splines of the swing arm.



3. Install the axle stub so that the marks previously made are aligned and the axle stub is in its original position (see figure).

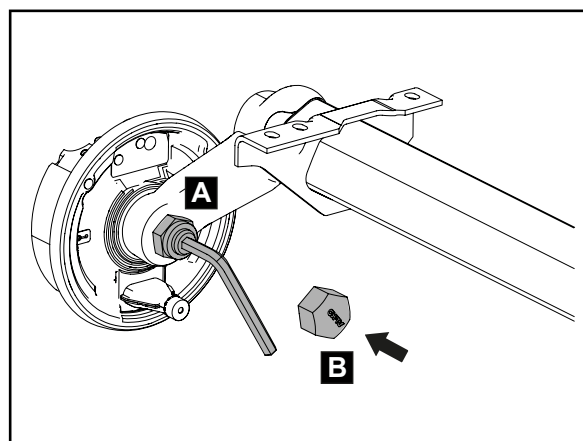


4. Screw on the hexagon nut.

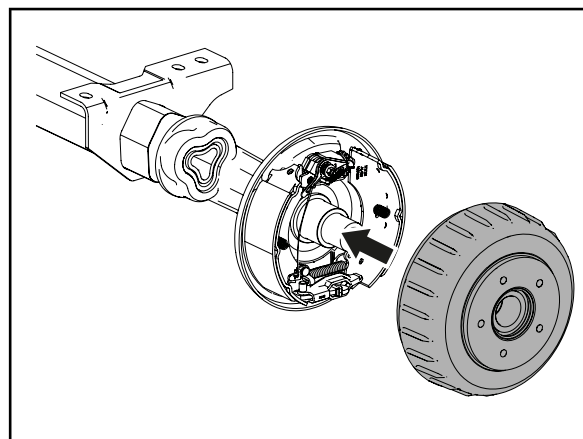


5. Counterhold the axle stub with an Allen key and tighten the hexagon nut to the prescribed torque (see [page 8](#)) (A).

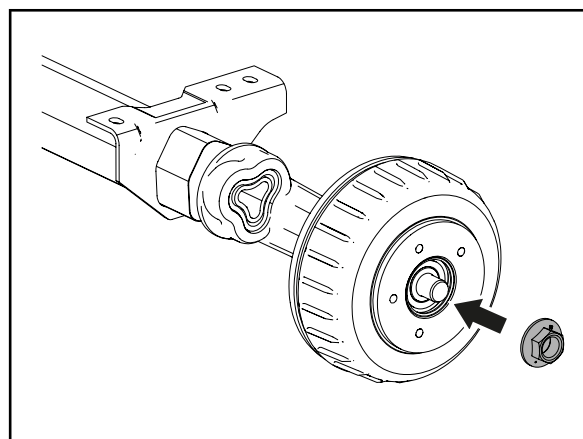
6. Fit the protective cap.



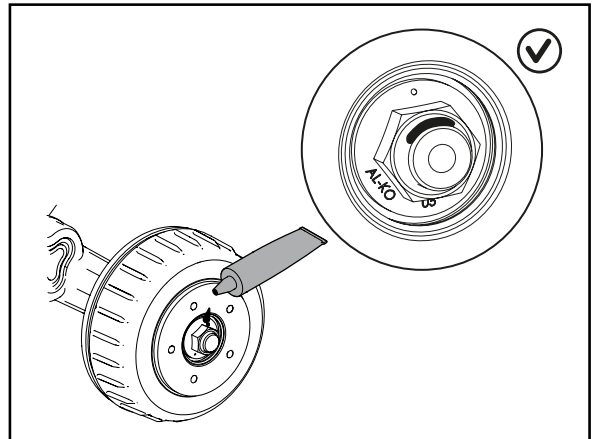
7. Install the brake drum.



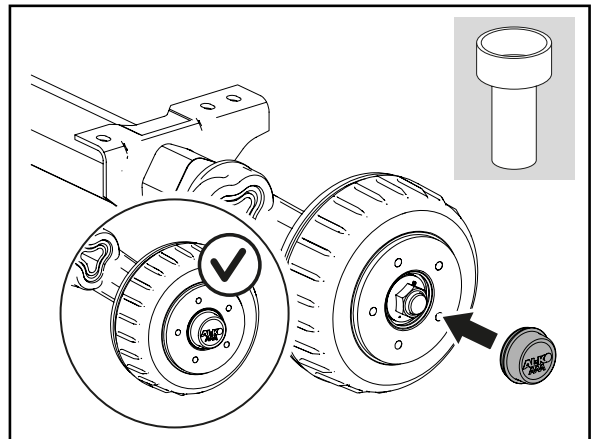
8. Screw on the flanged nut and tighten to the specified torque (see [page 8](#)).



9. Coat flanged nut on the axle stub with sealing lacquer.



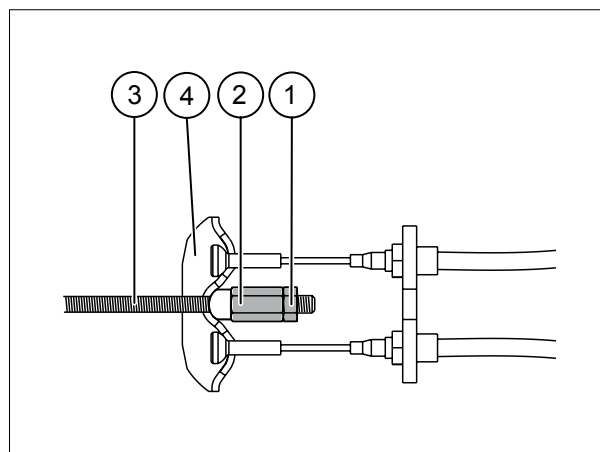
10. Install the cap using the special tool.



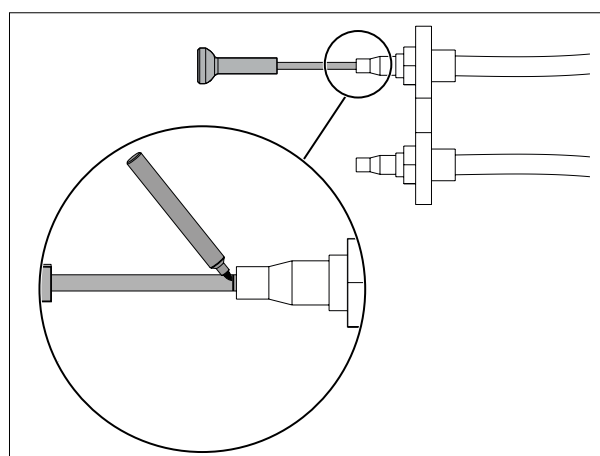
11. Adjust the brake system (see Service Manual 695103 Service – Brake adjustment).

ADJUSTING THE BRAKE SYSTEM

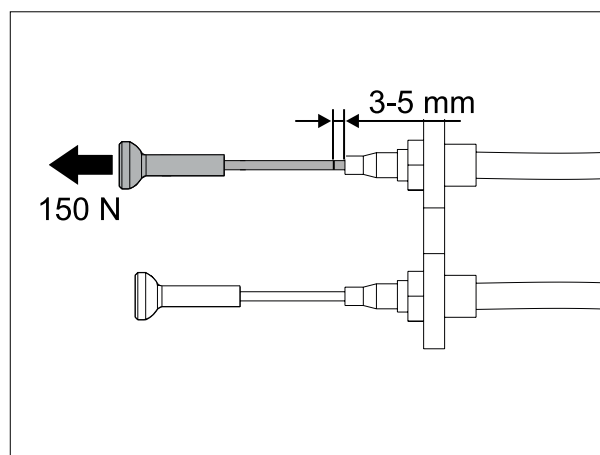
1. Raise the vehicle.
2. Pull the drawbar tube out of the overrun device fully towards the front.
3. Release the handbrake lever completely.
4. Loosen the lock nut (1) and long nut (2) on the pull bar (3) and remove the Bowden cables from the compensation profile (4).



5. Mark the Bowden cable rope with a pen.



6. Check the clearance of the wheel brake on the Bowden cables.



If the clearance needs to be readjusted, see "[Adjust the wheel brake](#)"

7. Hook the Bowden cables into the compensation profile.
8. Tighten the long nut again until the pull bar is connected to the Bowden cables and the compensation profile without clearance.
⇒ *The pull bar must be stretched.*
9. Operate the handbrake lever vigorously 3 times and release it (only necessary when installing new parts).
10. Check the clearance again and readjust if necessary.
11. Check that the trailer wheels run freely.
12. Lock the long nut with the nut and tighten with torque.
 - M10 = 24 Nm
 - M12 = 40 Nm
13. Insert the plug again.

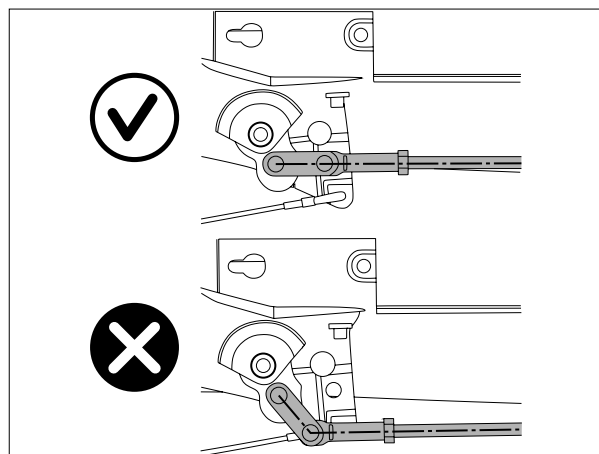
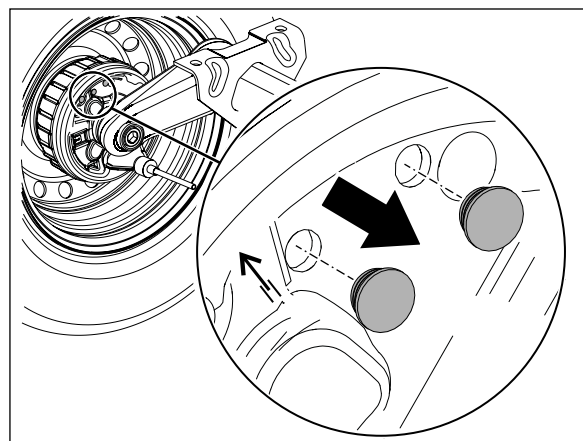


Fig. 1: Overrun device type V

ADJUST THE WHEEL BRAKE

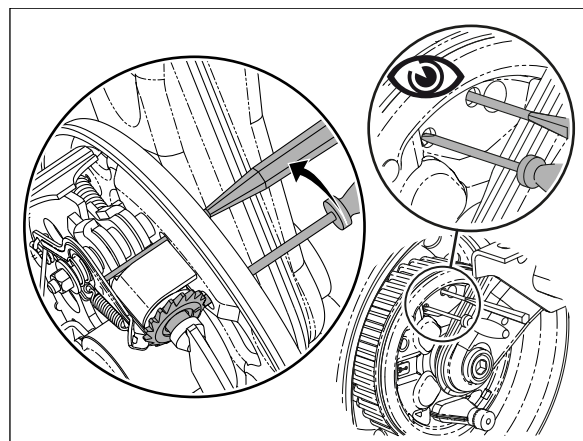
1. Remove the plug



2. Adjust the clearance on the adjusting nut:

Reduce air clearance – "screw closed"

- Turn the adjusting nut with a screwdriver in the direction of the arrow



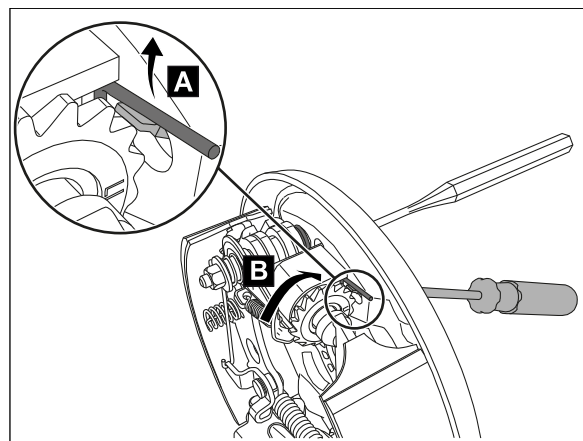
Increase the clearance – "unscrew"

- Lift the adjustment lever out of the gearing using a punch (e.g. a screwdriver)

i Since 2019, wheel brakes have been fitted with an additional centring bracket. The centring bracket must be pressed towards the edge of the brake back plate when unscrewing.

- Turn the adjusting wheel in the opposite direction to the arrow

3. Insert the plug again



Member of **DEXKO**
G L O B A L

ALOIS KOBER GMBH

Ichenhauser Str. 14

89359 Kötz

Germany

Fon +49 8221 97-0

info@alko-tech.com

www.alko-tech.com