

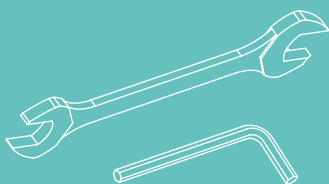


TECHNOLOGY IN MOTION

USE ONLY
FOR CERTIFIED SPECIALISTS!
NOT FOR END USERS!

MACO RUSTICO

SHUTTER HARDWARE



Maintenance and adjustment instructions for
shutter hardware
CERTIFIED SPECIALISTS



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WARNING!

These maintenance instructions are exclusively for certified specialists and their trained staff!

In addition to these maintenance instructions, the end-user operating and maintenance instructions must be followed!

The instructions are also available for download under www.maco.eu, Order Number 759038 and 757772.

Safety and Maintenance Notes



WARNING!

Risk of injury due to improperly performed maintenance work!

Improper maintenance can result in serious personal injury or property damage.

Therefore:

- ensure sufficient freedom of movement before starting the assembly!
- pay attention to order and cleanliness on the assembly site. Components which are loose or lying around can cause accidents. Only use intact tools!
- assembly work, such as hardware adjustments, especially in the area of hinges and shutter pins, as well as replacing parts and hinging/unhinging of shutters, may only be carried out by certified specialists!



WARNING!

Risk of injury due to heavy shutters!

Failure to comply may result in serious personal injury or damage to property.

Therefore:

- before starting work, correctly assess the shutter weight!
- the hinging and unhinging of large or heavy shutters should always be carried out by more than one person. Overloading can lead to severe consequences later on (back injury)!



WARNING!

Shutters with damaged or defective hardware must be secured against any actuation!
Damaged or defective hardware must be replaced immediately!



INFORMATION! When replacing hardware, the corresponding assembly instructions or the corresponding package leaflet must be followed!
The operation of the repaired shutter must be checked!



INFORMATION! Warranty claims can only be asserted if all maintenance work has been carried out in full and demonstrably in accordance with the maintenance intervals (as per the end user's manual).



INFORMATION! Warranty claims can only be asserted if the element has been properly installed by a certified specialist.

Surface preservation measures

Protection against dirt:

- Keep the hardware free of deposits and dirt. During the construction phase, immediately remove dirt from plaster, mortar or similar using water.
- Protect hardware from contamination (dust, dirt, paints, etc.).



ATTENTION! Defective or damaged areas must be repaired and serviced immediately by a certified specialist.

Protection from corrosion:

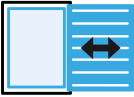
- Do not use vinegar-based or acidic sealants.
- Protect the hardware from damage by angular or sharp tools.
- Only use damp cleaning on the hardware and avoid permanent wetness!

Protection from aggressive, acidic cleaning agents:

- Clean the hardware only with a soft, lint-free cloth and a mild, ph-neutral detergent in diluted form. Never use aggressive, acid or solvent-containing detergents or scouring agents (scrubbing sponges, steel wool etc.) These can lead to damage of the hardware!
- With such damaged hardware, operation and safety-relevant properties may be impaired. This can lead to personal injury. Defective or damaged areas must be repaired and serviced immediately.

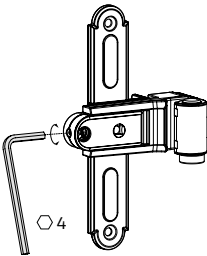
Adjustment with frame installation

1. Side adjustment

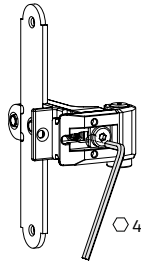


■ on hinges BLR
+ 5 / - 5 mm

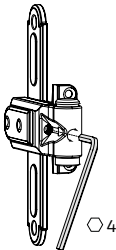
Shutter hinge, Size 0



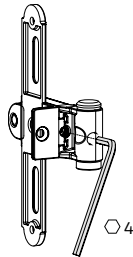
Shutter hinge, Size 1 - 3



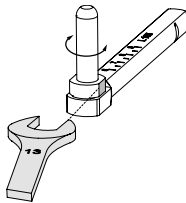
Shutter hinge, straight



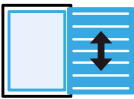
Shutter hinge, flush



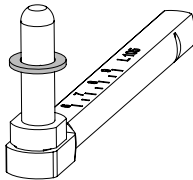
- on the threaded surface mounted frame hinge BLR
+ 2.5 / - 2.5 mm



2. Height adjustment



- with spacer(s)
+ 5 mm

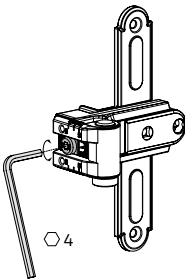


ATTENTION! No more than four spacers may be used, otherwise loadbearing capacity is at risk!

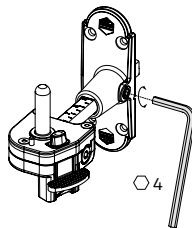
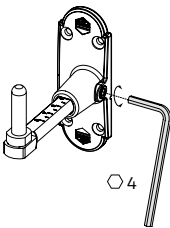
3. Hinge crank and pin distance



■ on the hinge-roll BLR



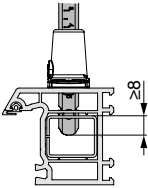
■ on the shutter pin holder - threaded surface mounted frame hinge BLR / snap holder



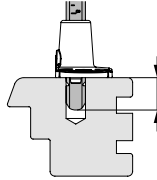
ATTENTION! Tightening Torque 7 Nm!

threaded surface mounted frame hinge

PVC



Timber

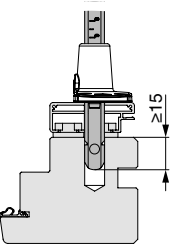


≥ 15 mm
≥ 20 mm
≥ 25 mm

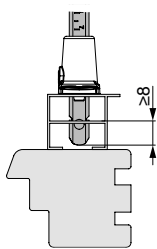


L59 - L135
L150
L165

Timber-Alu



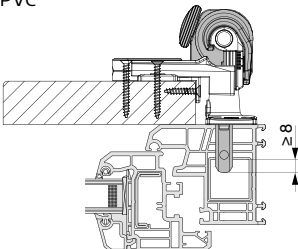
Alu



ATTENTION! Comply with minimum pin depth, otherwise pin strength is insufficient

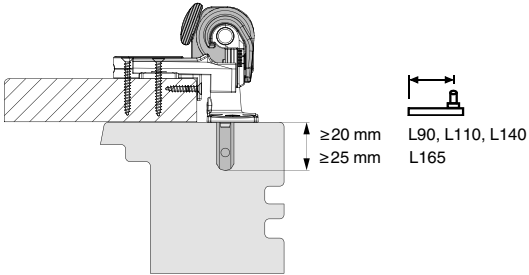
Snap holder

PVC

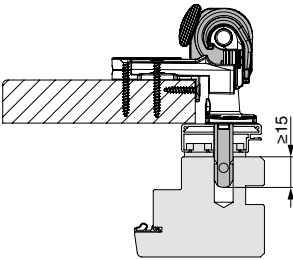


Snap holder

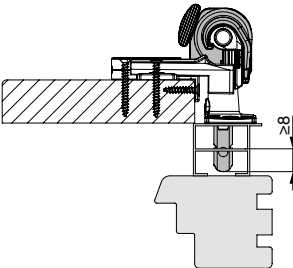
Timber



Timber/Alu

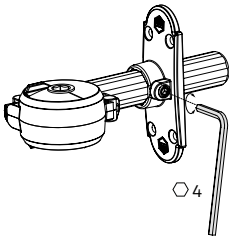


Alu



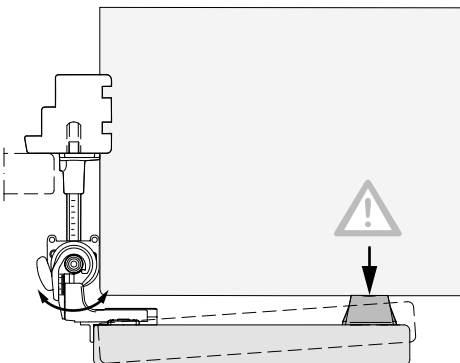
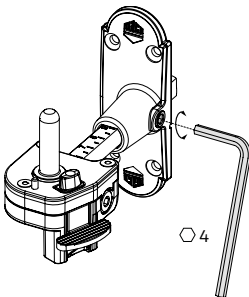
ATTENTION! Comply with minimum pin depth, otherwise pin strength is insufficient

■ on crank opener



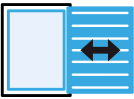
4. Shutter gasket compression

■ on snap holder



Adjustment with wall cladding installation

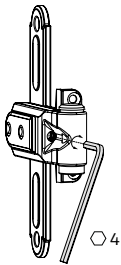
1. Side adjustment



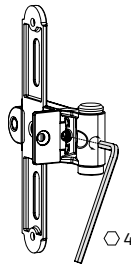
■ on the hinges BLR

+ 5 / - 5 mm

Shutter hinge, straight

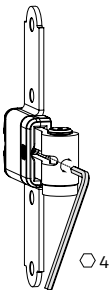


Shutter hinge, flush



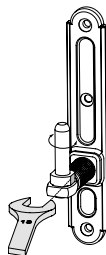
■ on the hinges MMV

+ 4.0 / - 4.0 mm

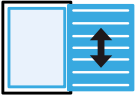


■ on surface mounted frame hinge

+ 2.5 / - 2.5 mm



2. Height adjustment



■ on surface mounted frame hinge with spacer(s)

+ 5 mm

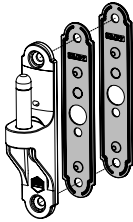


ATTENTION! No more than four spacers may be used, otherwise loadbearing capacity is at risk!

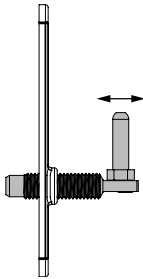
3. Pin distance



- on surface mounted frame hinge with packer

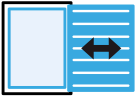


- on surface mounted frame hinge with threaded bush

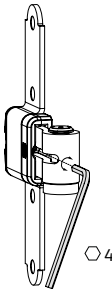


Adjustment with masonry installation

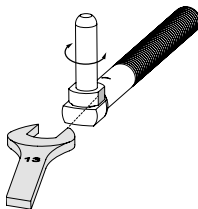
1. Side adjustment



- on the hinges MMV
+ 4.0 / - 4.0 mm



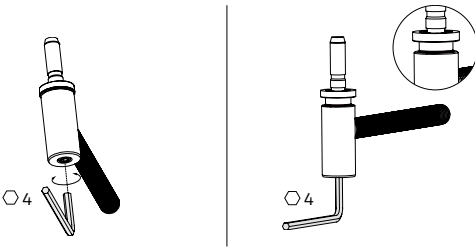
- on universal shutter pin M12
+ 2.5 / - 2.5 mm



2. Height adjustment

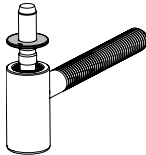


- on masonry pin M12 and M16 with height adjustment
+ 5.0



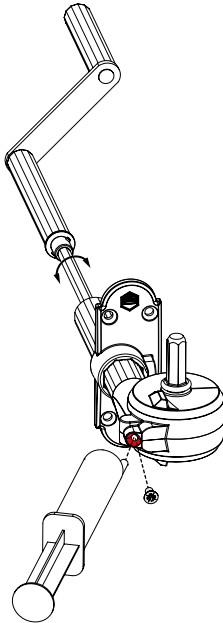
ATTENTION! Maximum 5 mm!

- on masonry pin M12 or universal shutter pin M12 with
spacer(s)
+ 5 mm



ATTENTION! No more than four spacers may be used, otherwise loadbearing capacity is at risk!

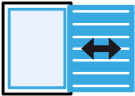
Re-greasing of crank opener



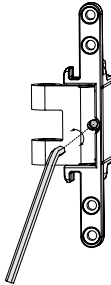
1. Remove the screw.
2. Inject the grease and crank at the same time to distribute equally. Only use MACO grease syringe Art. No. 362833. Unsuitable grease impairs the function!
3. Repeat step 2 several times.
4. Screw the screw back in.

Adjustment with Padovana/Vicentina installation

1. Side adjustment



- on the hinges PAD
+ 4.0 / - 4.0 mm



The disposal of the hardware must be done in accordance with local regulations and laws.

Dear Customer,
If you have comments or suggestions for improvements on our instructions, please send by email to: feedback@maco.eu.



Notes

A large rectangular area filled with a fine grid pattern, intended for taking notes.



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Created: 04/2020

Order No. 759038

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