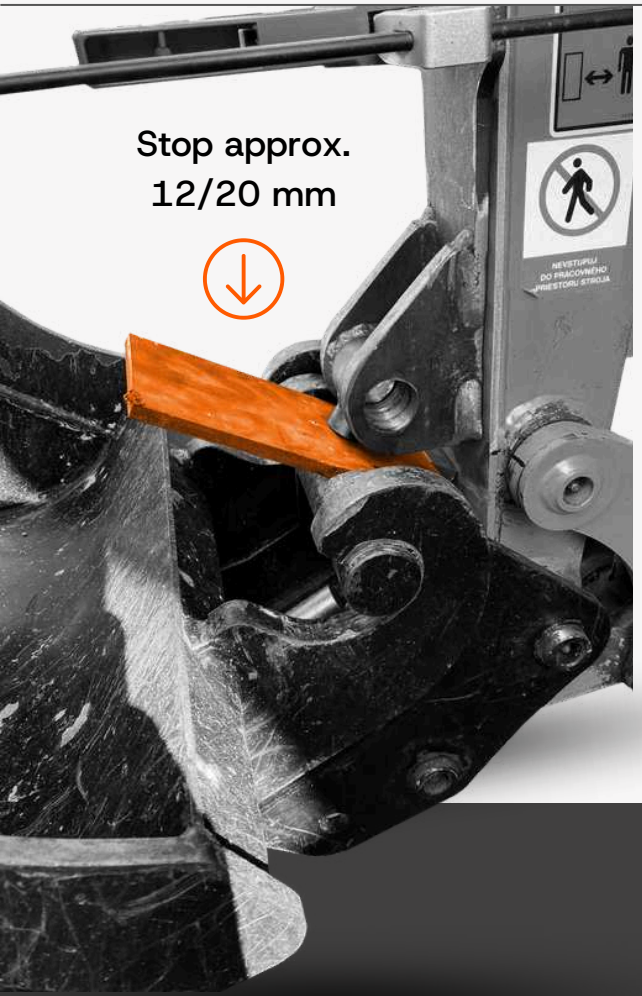
Installation procedure of the hydraulic holding device

A detailed guide for the correct installation and assembly of the hydraulic holding device onto the excavator arm. Step by step, we will guide you through the entire process – from surface preparation to final functionality testing. By following these instructions, you will ensure safe and reliable operation of the device.

Preparation of the bucket and stop

1

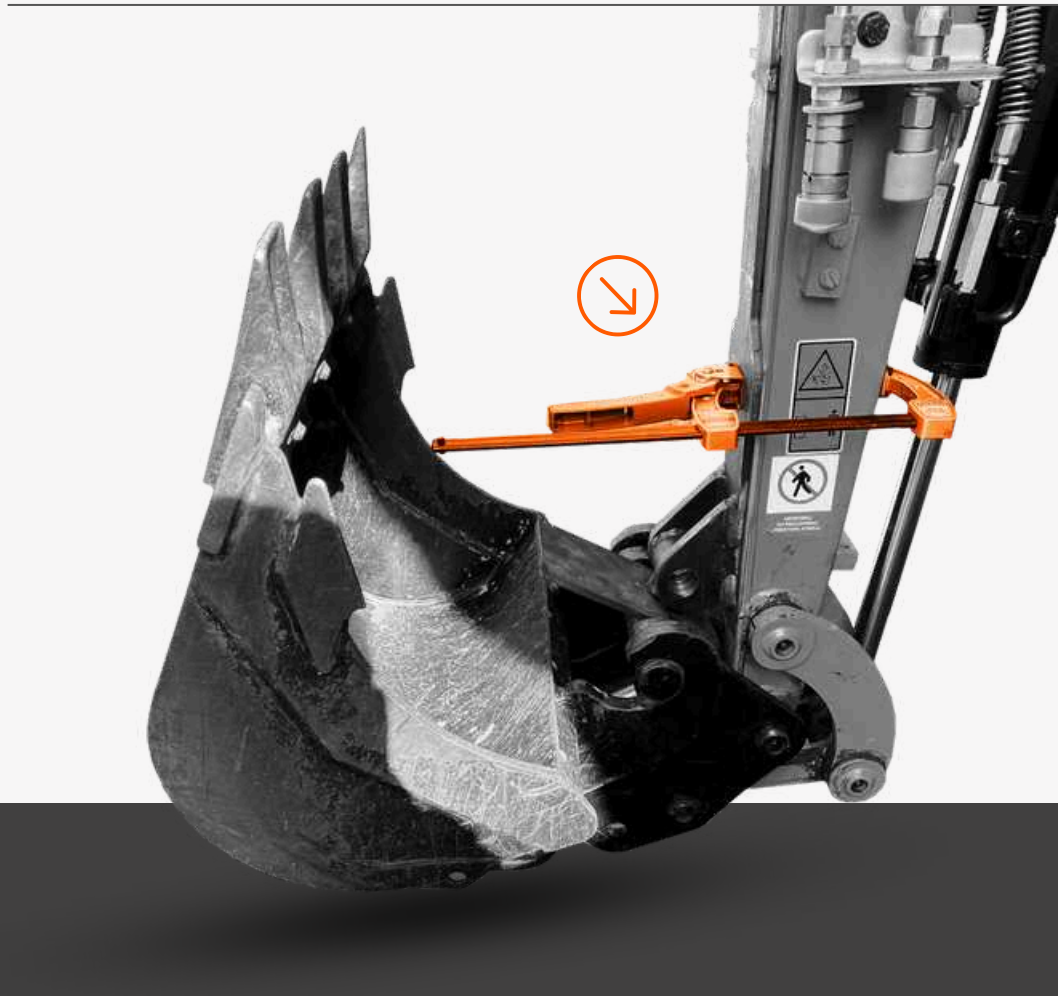
The bucket must be fully closed toward the arm into its end position. Then, use a plate or metal pad with a thickness of 15–20 mm as a stop, place it on the bucket, and then rest the lower part of the platform (grease fitting cover) against it.



Mounting the platform

2

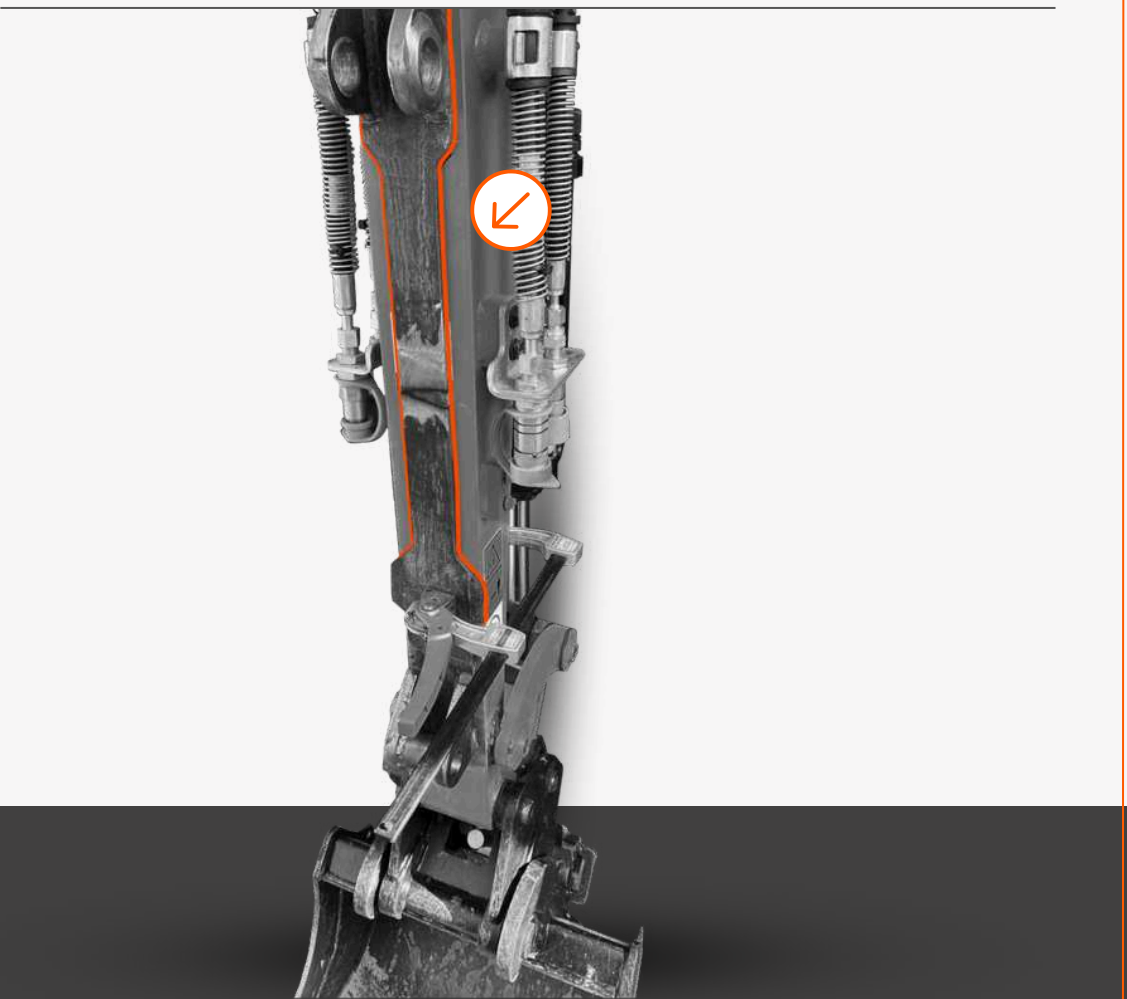
In this step, the platform is secured in the stop position using a clamp on the machine arm.



Tracing the platform onto the arm

3

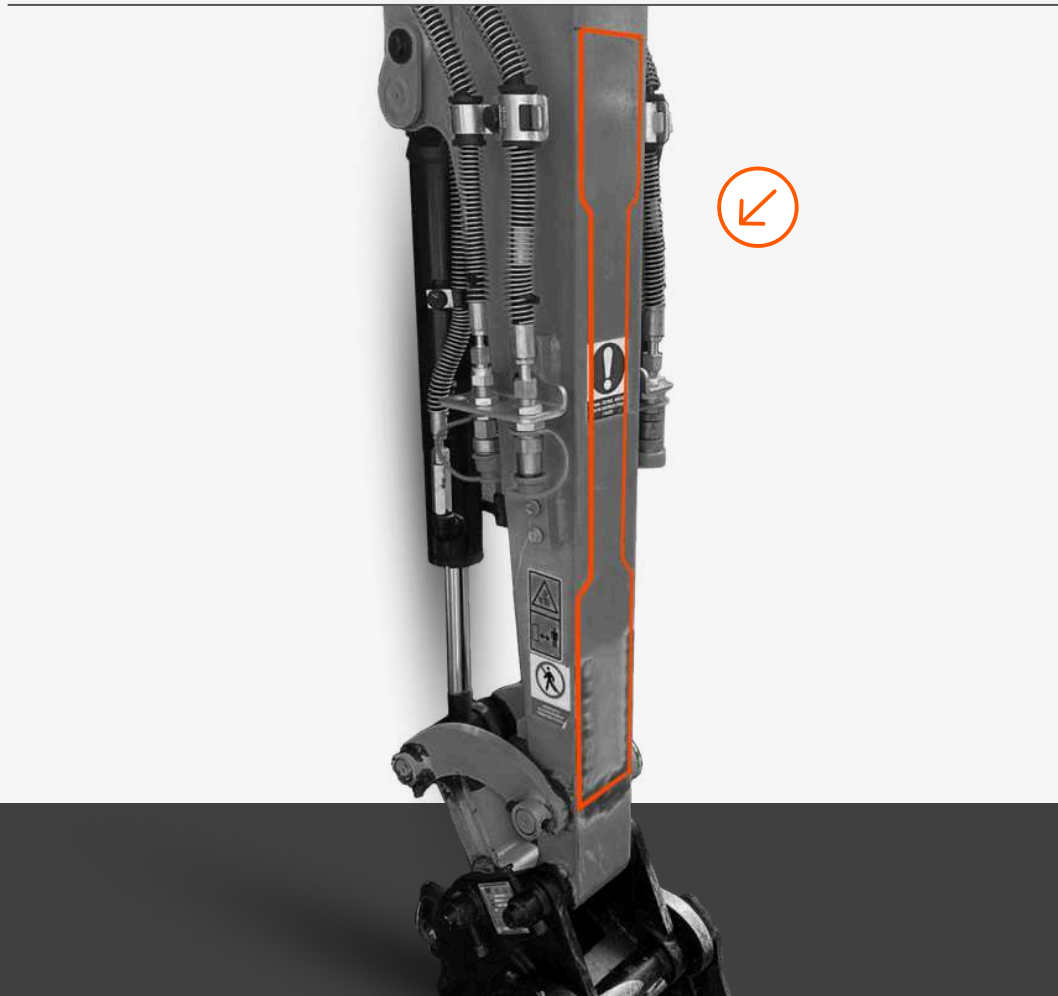
Once the platform is firmly secured, trace its shape onto the arm using a marker.



Inspection of the traced platform

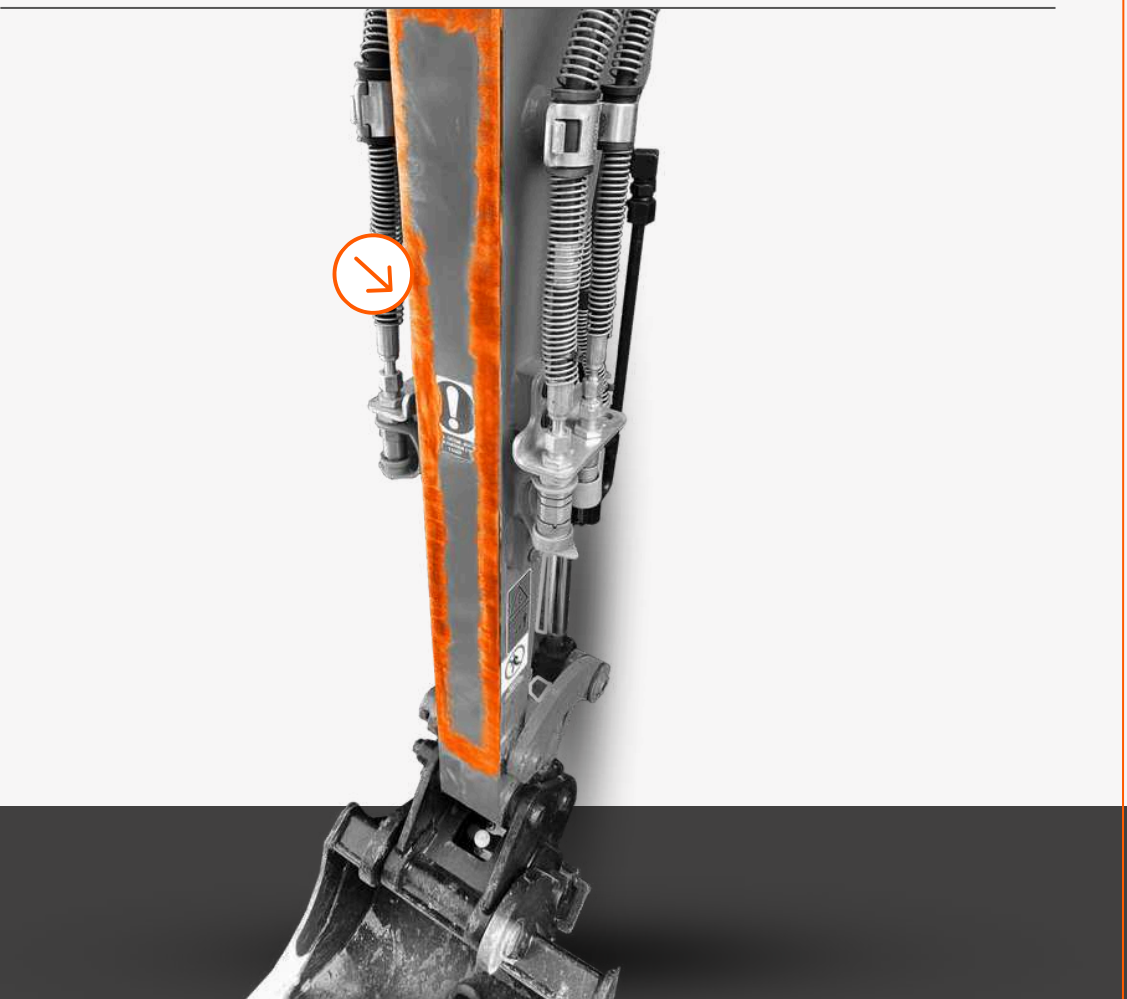
4

Check the accuracy of the traced platform outline on the arm.



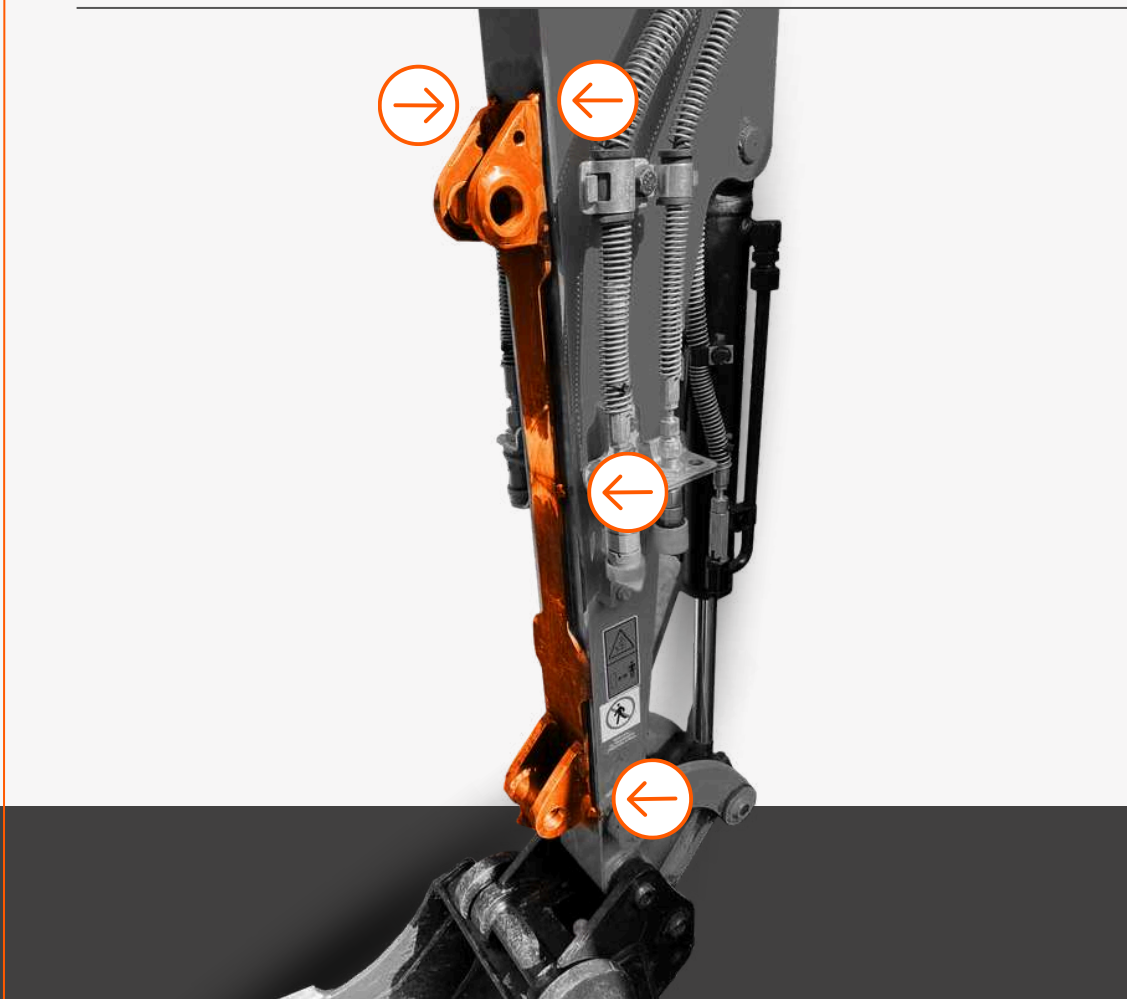
Surface preparation for welding 5

Dismantle the platform and grind off the paint along the traced line on the arm down to bare metal. The most suitable tools are a wire wheel (which does not damage the structure of the arm) on an angle grinder or a flap disc.



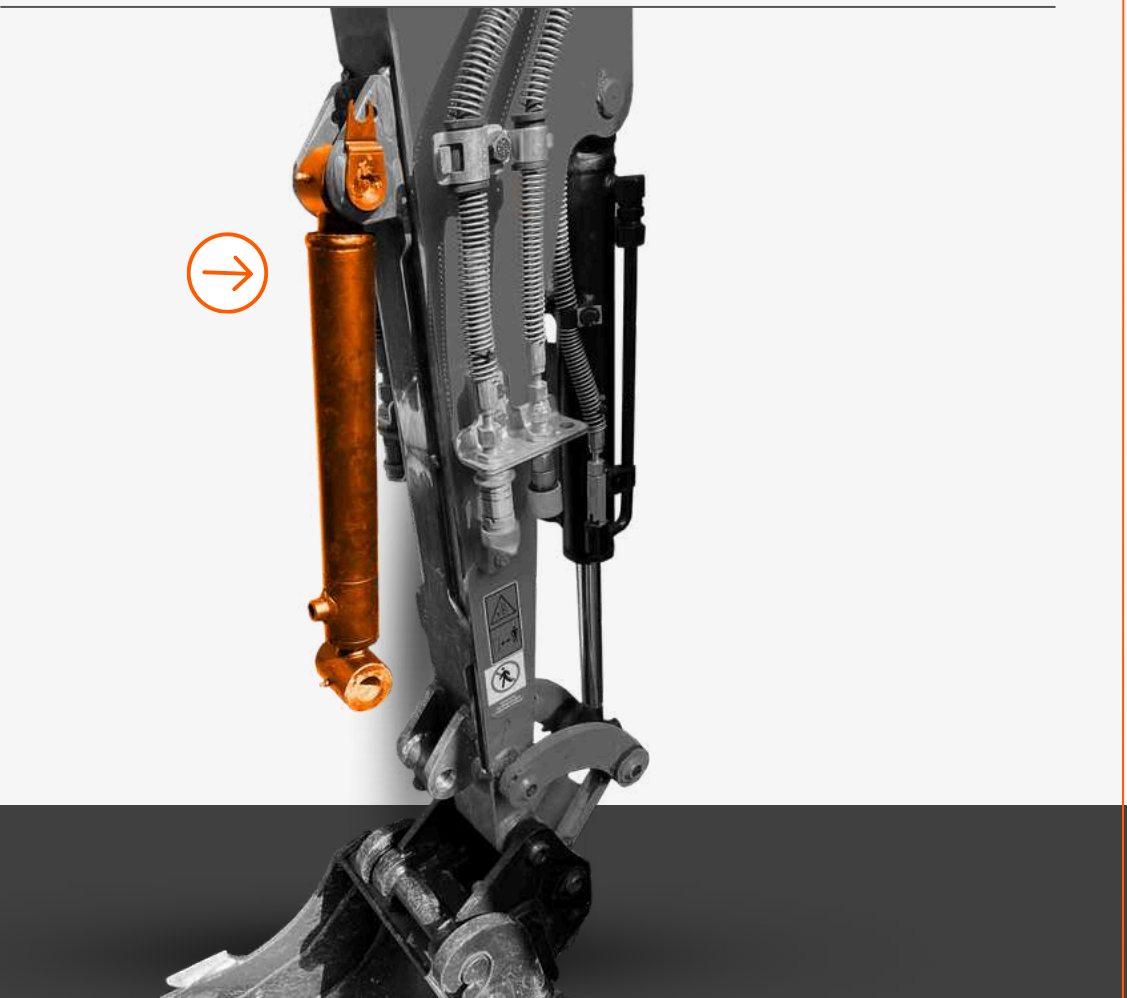
Tack welding the platform 6

Place the platform onto the pre-marked and ground position, and tack weld it at the bottom, middle, and top sections (in the direction of the arrows).



Mounting the hydraulic piston 7

Place the hydraulic piston with the solid side of the cylinder on top of the platform and insert the shortest pin.



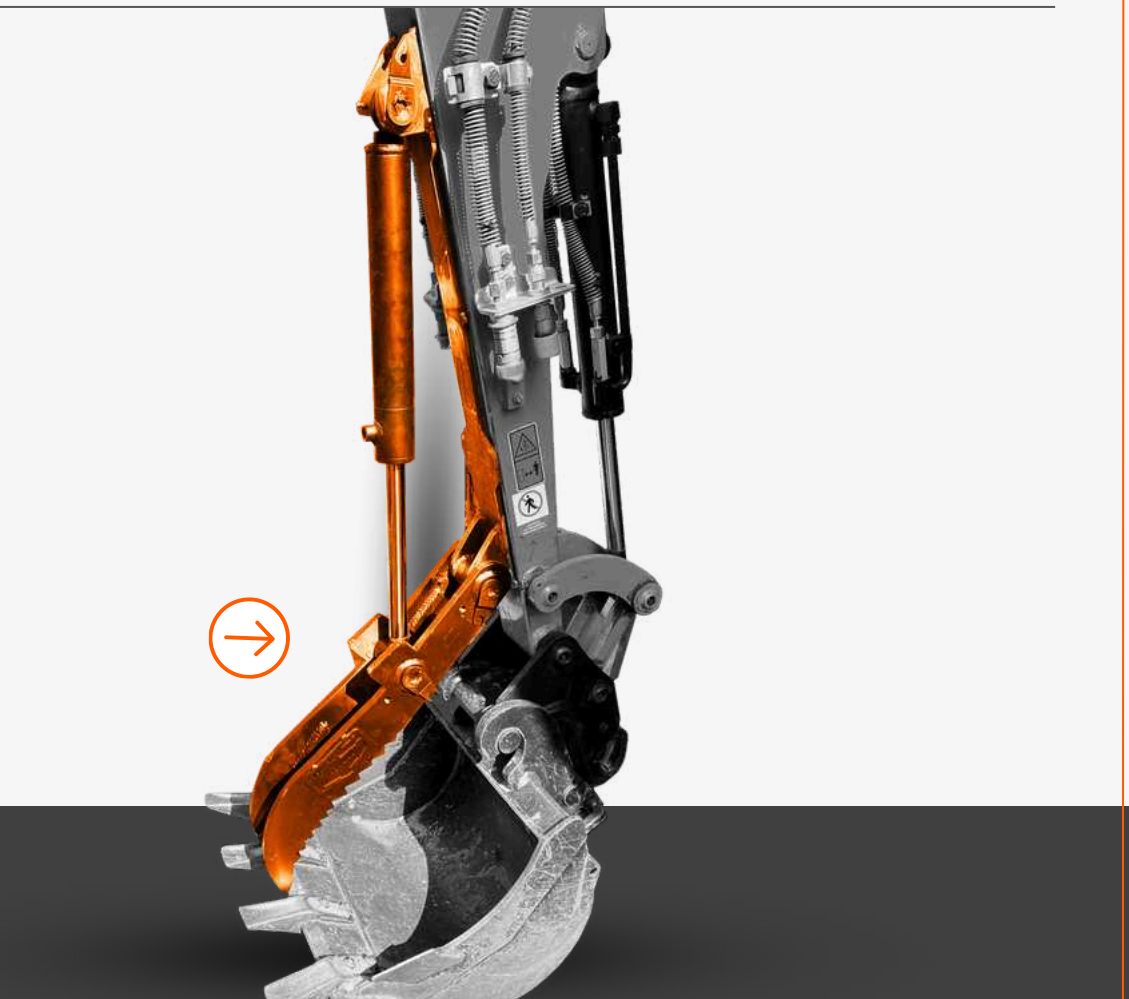
Mounting the blade 8

Place the blade on the bottom side of the platform, where the grease fitting is located, and insert the pin.

Mounting the extending part of the piston

9

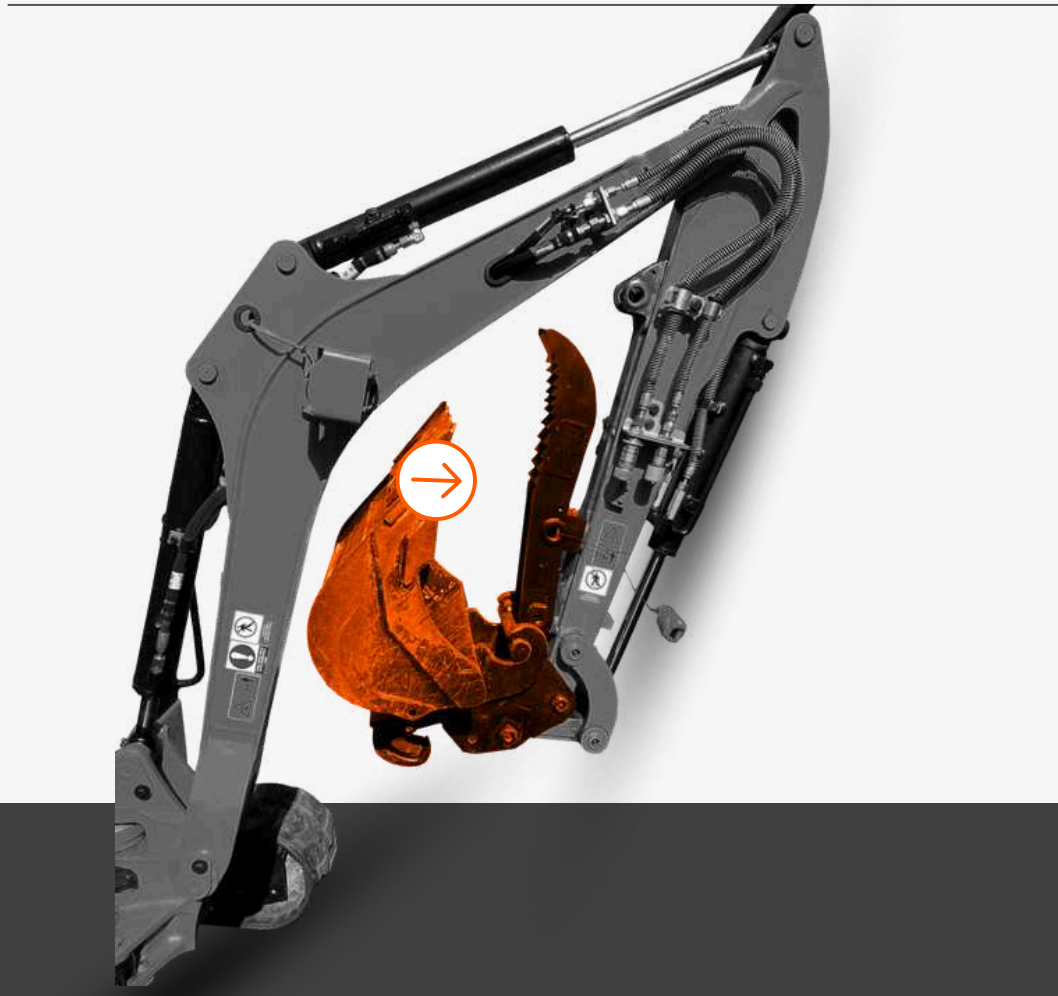
Place the lower eye of the piston (the extending part) into the last hole, approximately 1/3 of the way along the blade.



Verification of the correct position of the holding device

10

Pull the holding device into the retracted position towards the excavator arm. For safety, pass a wire around the arm and the holding device to prevent it from lowering spontaneously during handling (the hydraulic piston is not yet connected to the hydraulics, and the weight of the blade could pull it down).

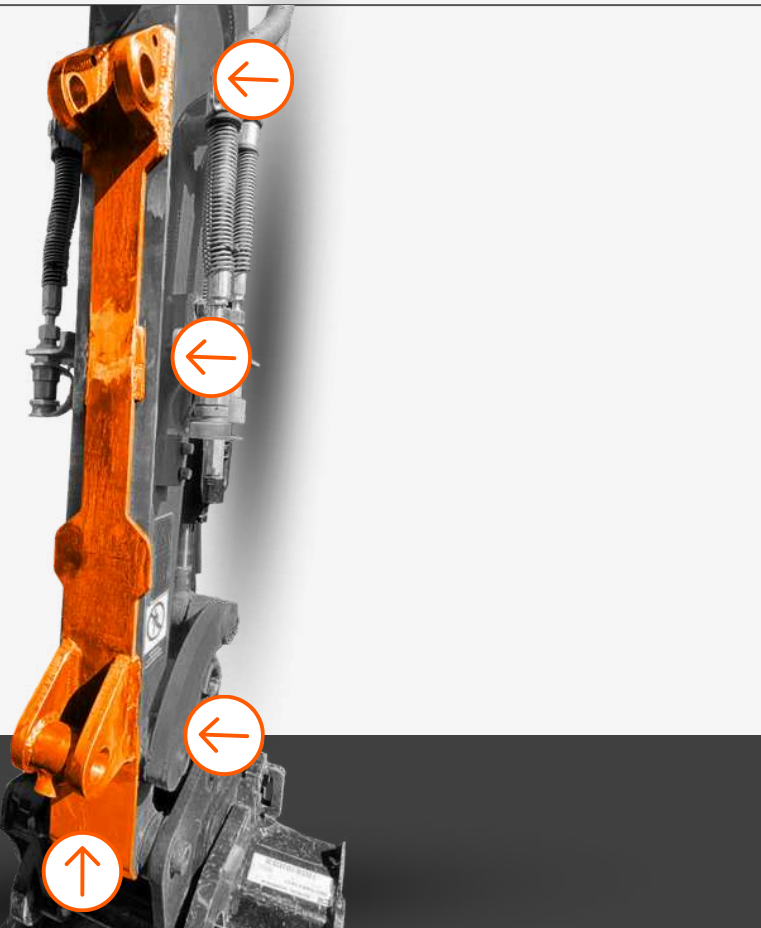


Correct position of the holding device 11

Start the machine and fully close the excavator bucket towards the arm into its end position. This step verifies the correct position of the platform and blade on the arm. If the holding device does not interfere with the bucket in its fully closed position, we can proceed with welding.

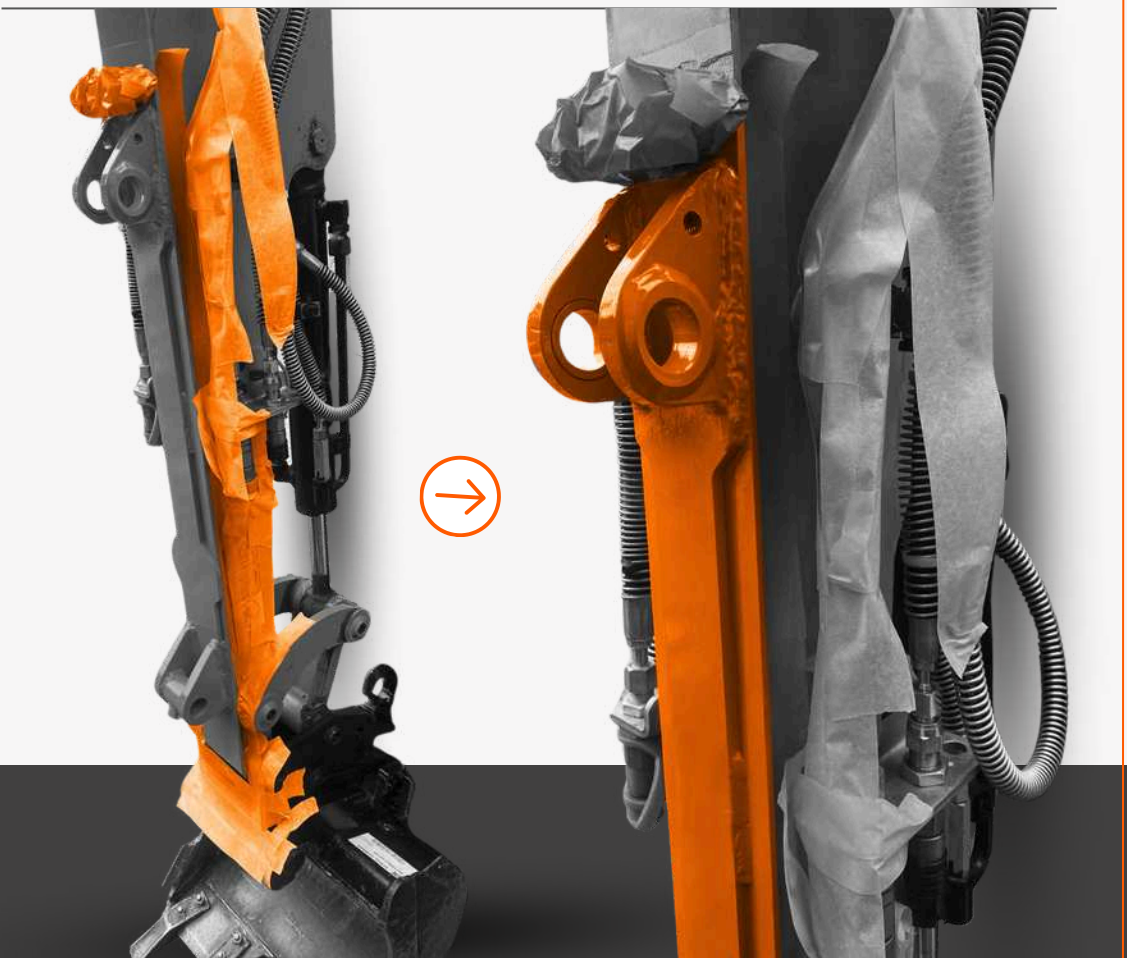
Welding and safety precautions 12

!!! WARNING !!! Before welding, it is necessary to turn off the battery disconnect switch. If the machine does not have one, the battery must be disconnected directly from the wiring. Welding is performed in the following areas: at the bottom near the ears of the blade attachment, along the sides, and at the end of the platform, in the stop area (where the platform is extended), in the center part, and at the upper end near the piston mounts (just like at the bottom).



Cleaning and painting 13

After completing the welding and allowing the structure to cool, thoroughly degrease the arm and platform with technical gasoline. Use masking tape to cover all parts of the arm that should not be sprayed. We recommend choosing a paint in the same shade as the excavator arm.

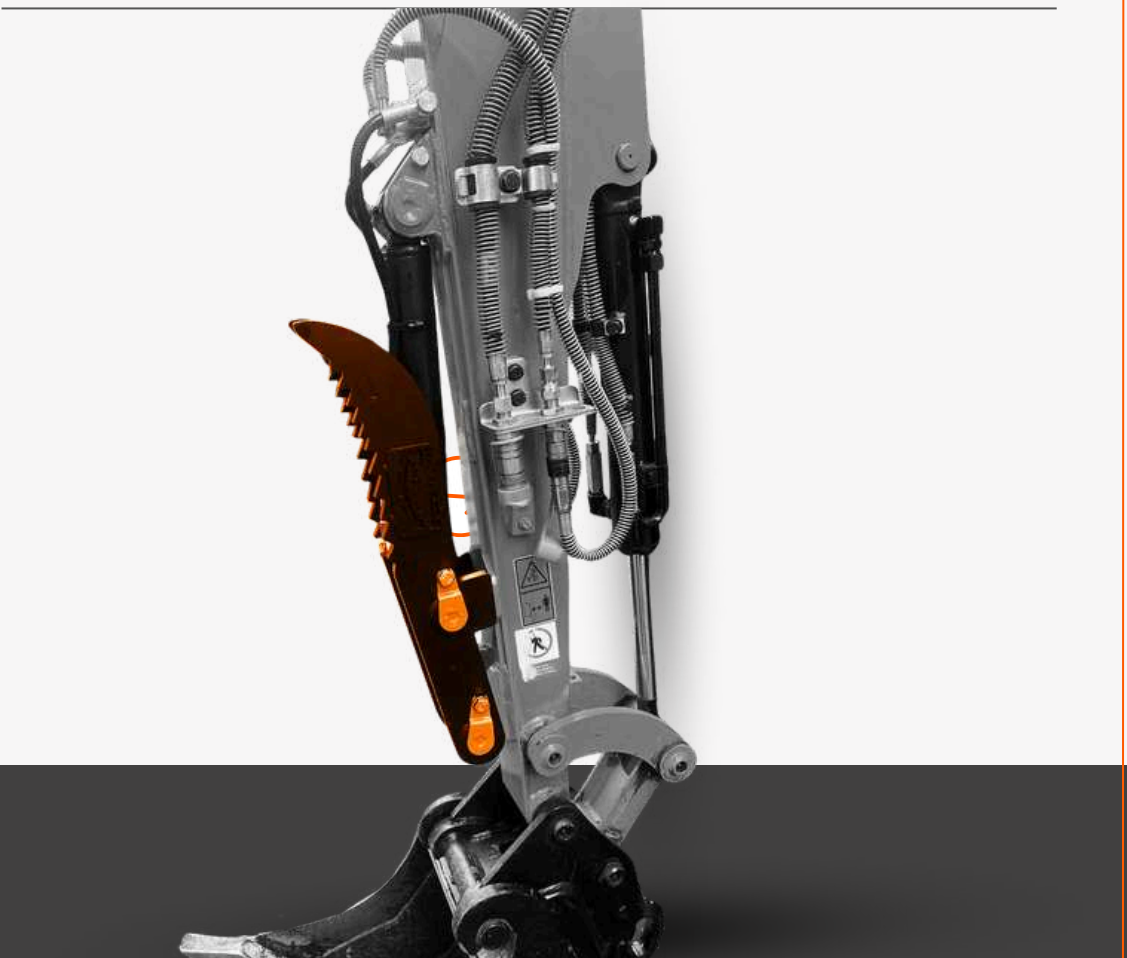


Connecting the hydraulics 14

Connect the hydraulic hoses (or hydraulic lock) to the machine's auxiliary circuit. Use the circuit that is typically used for auxiliary equipment, such as a tilting bucket or auger. Some machines allow switching between circuits directly in the cabin using the AUX button, while others require manual switching on the valve distributor (e.g., Kubota or JCB machines).

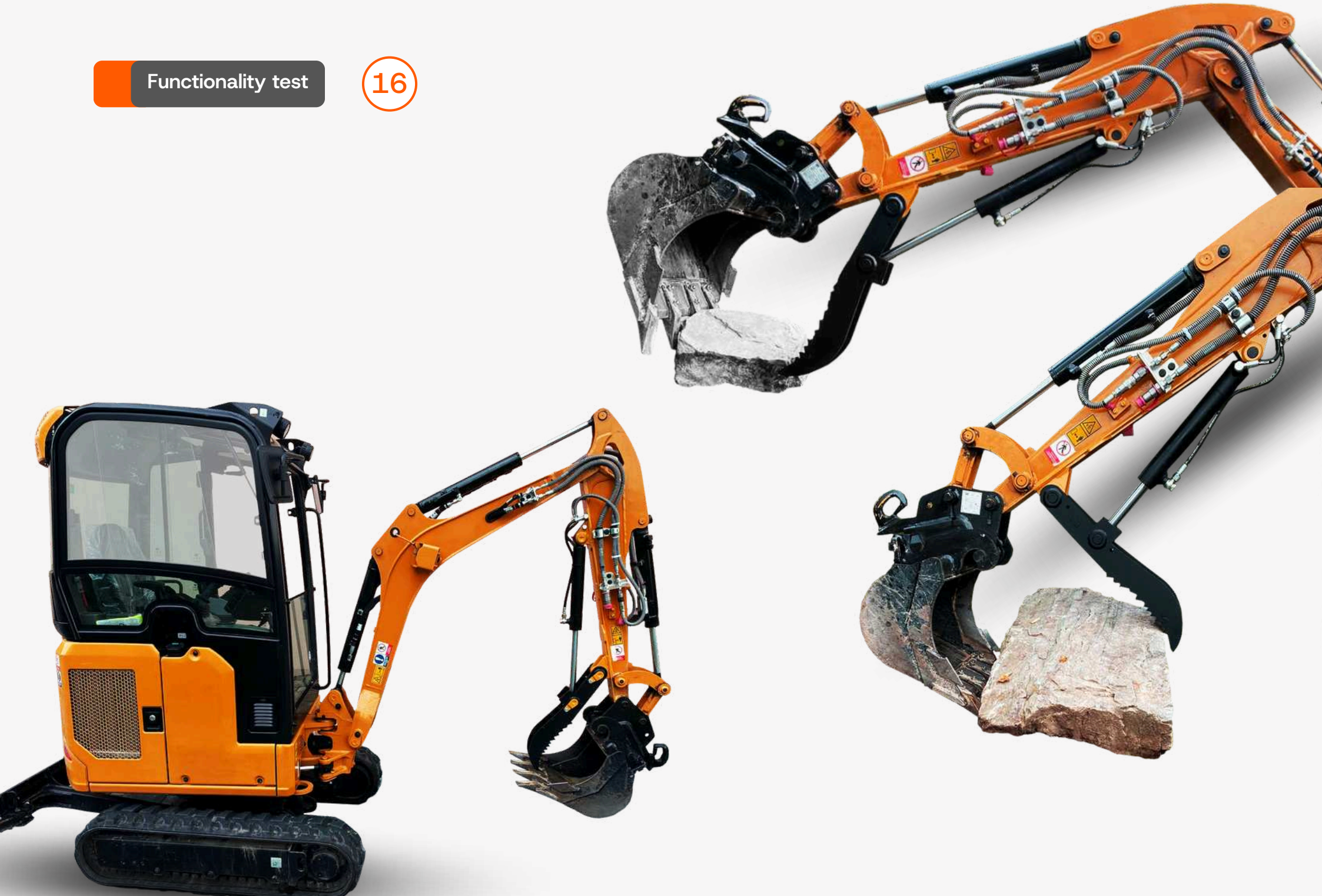
Final assembly and securing the pins 15

After the paint has dried and the hoses are connected, repeat steps 7, 8, and 9, and secure the pins with screws.



Functionality test 16

Perform a test run of the holding device, checking its movement and the proper functioning of the hydraulics.



Final instructions

The MinichThumbs holding thumbs, as the name suggests, are designed for holding materials, irregular objects, stones, roots, branches, and loads in such a way that they allow for convenient handling, loading, or unloading.

They are definitely not intended for uprooting uncut roots, stones, embedded concrete, and similar materials. Only when the object/material is free and can be moved or manipulated, is it appropriate to use the holding thumb.

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