



## *H301-EC-LG-BL*

### Compatible with the following Z-Piezo stages

- LEICA super Z Galvo stage (SP5/SP8)

### Compatible with the following Okolab Controllers

- H301-T-UNIT-BL-PLUS
- UNO-COMBINED-CONTROLLER
- H401-T-DUAL

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## 1. Components and dimensions

H301-EC-LG-BL includes the following components:

- Chamber main body with embedded temperature sensor.
- Heated glass lid with Indium Tin Oxide (ITO) conductive coating and embedded temperature sensor.
- Total chamber weight: about 130 g. For details, see the table at page 4.

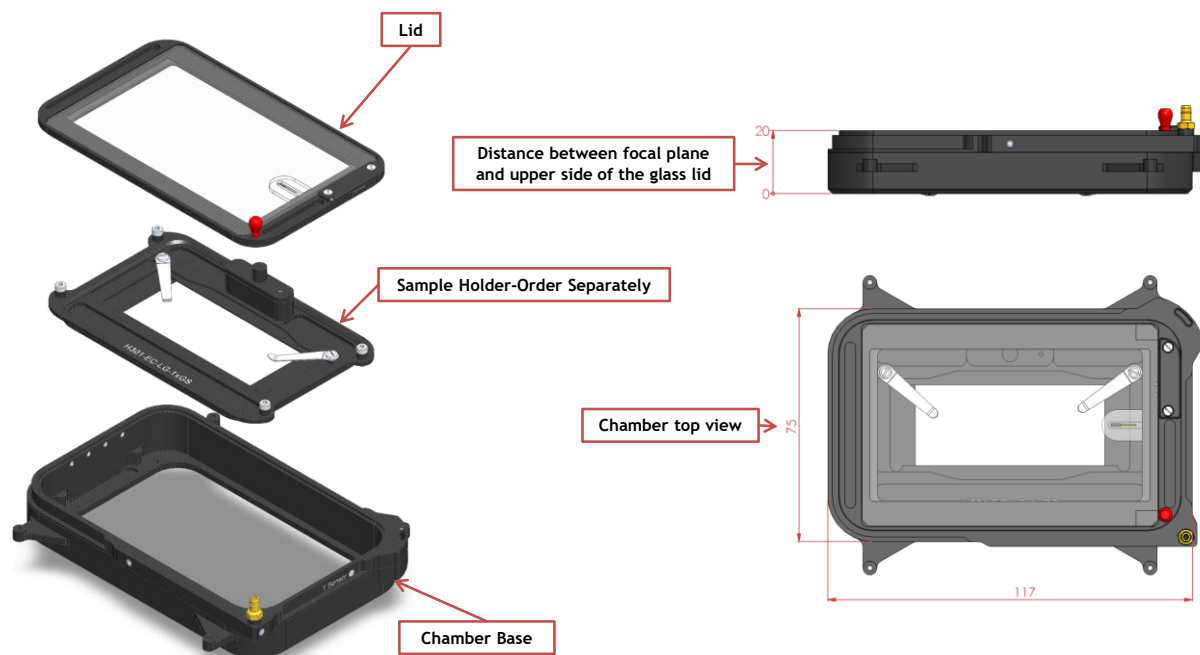


Figure 1. H301- EC-LG-BL - Components and Dimensions.

## 2. Sample Holders

### 2.1 Available Sample Holders

The following sample holders are available.

**NOTE:** Please contact [info@oko-lab.com](mailto:info@oko-lab.com) if you cannot find the sample holder you are looking for. We are constantly adding new inserts to the list.

H301-EC-LG-1x35	#1 35mm Petri-dish holder
H301-EC-LG-1xGS	#1 standard chamber slide holder
H301-EC-LG-1x60	#1 60mm Petri-dish holder
H301-EC-LG-1xLABTEK	#1 Lab-TeK 1"x2" chambered cover glass holder
H301-EC-LG-1xLABTEK-II	#1 Lab-TeK II 1"x2" chambered cover glass holder

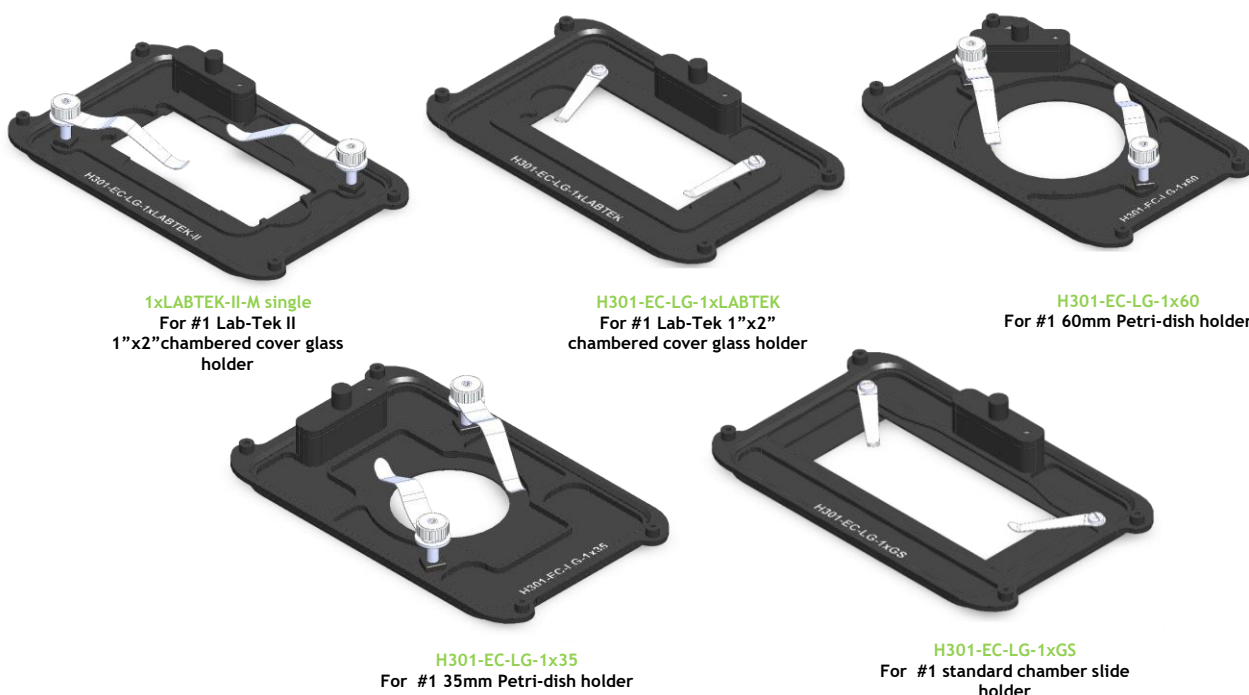


Figure 2. Available sample holders.

H301-EC-LG-BL has a different weight in relation to sample holder used. The following table shows the weight of all possible configurations.

H301-LG-BL+SAMPLE HOLDER	WEIGHT (g)
H301-EC-LG-1x35	130.7
H301-EC-LG-1xGS	127.4
H301-EC-LG-1xLABTEK	125.1
H301-EC-LG-1xLABTEK-II	133.5
H301-EC-LG-1x60	129.5

### 3. Insertion of the Sample Feedback Temperature Sensor

Insert the Sample Feedback Temperature Sensor through the dedicated opening, labeled 'T Sensor', located on the H301-EC-LG-BL base (see Figure 3, Frontal and 3D views).

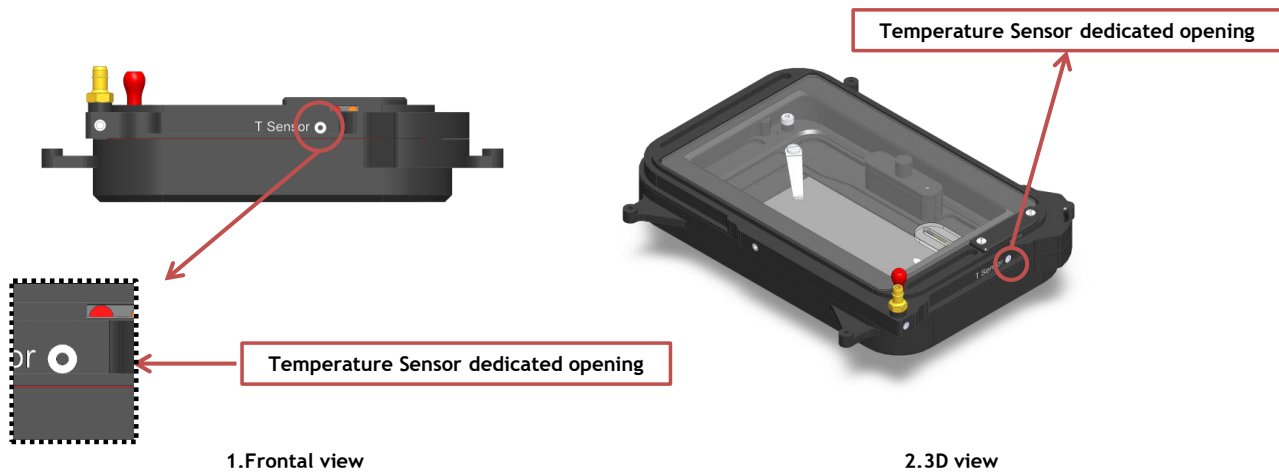


Figure 3. Insertion of the temperature sensor inside the chamber.

### 4. Insertion of Sample Holder into Chamber

Sample holders fit into the chamber base and are held in place by 4 screws (Slotted Pan Head Screw M2x3). To introduce a sample holder with the proper orientation and to screw it to the chamber, see Figure 4.

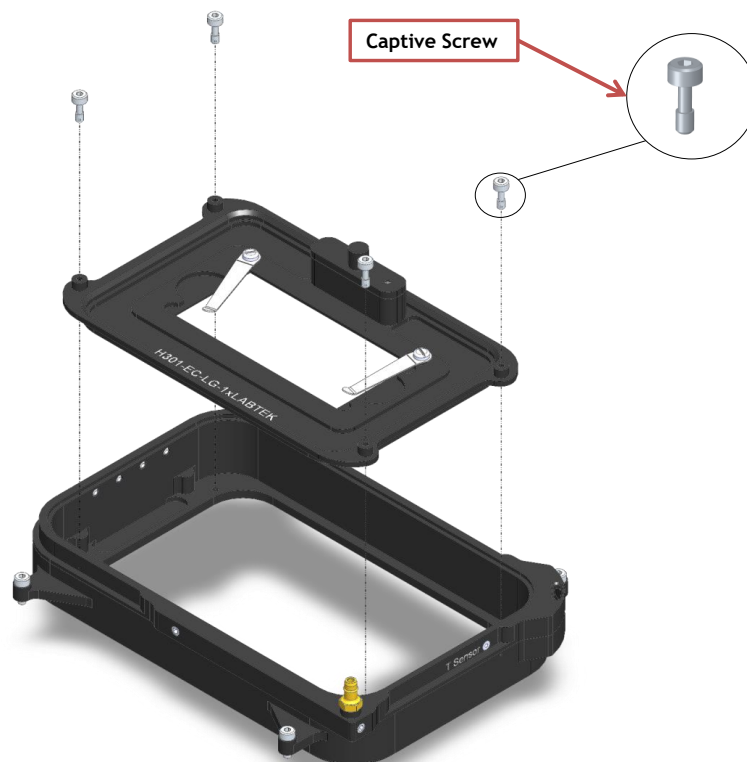


Figure 4. Introduction of the Specimen Holder inside the Chamber Base.

### 5. Working with 35 or 60 mm Petri Dish

Flat springs prevent movement of 35 and 60 mm dishes inside the sample holder (See Figure 5 and Figure 6).

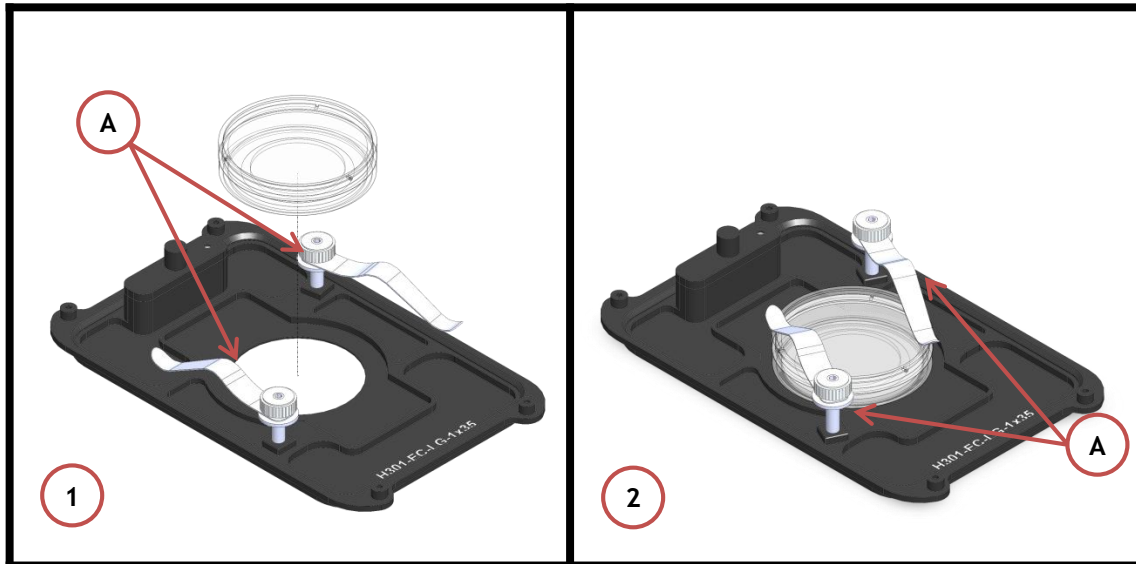


Figure 5. Plate adapter for 35mm Petri-dish.

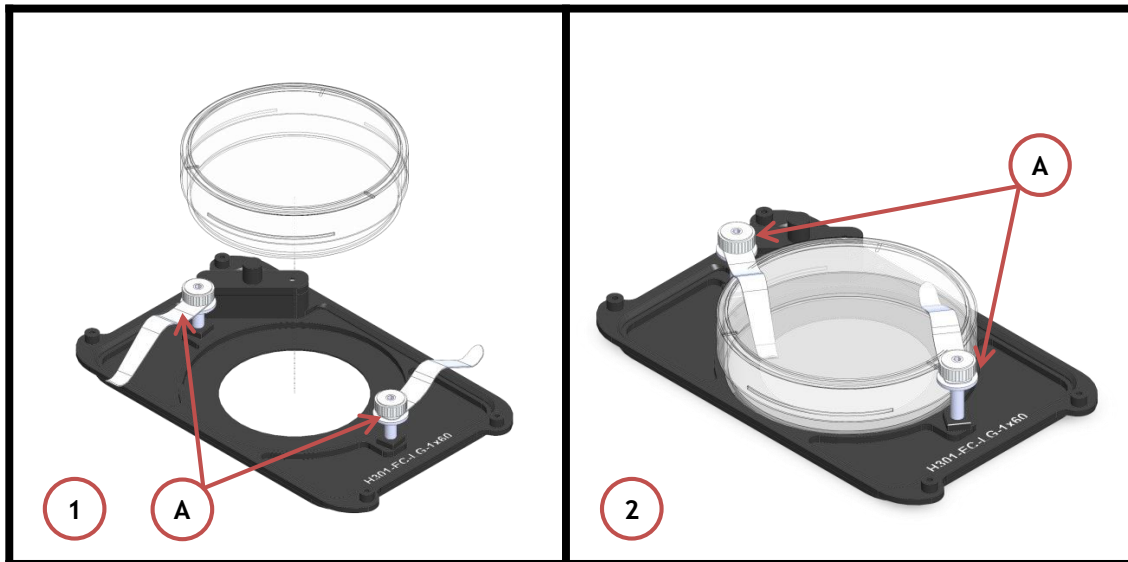


Figure 6. Plate adapter for 60 mm Petri-dish.

## 6. Working with 1x3'' and 1x2'' chamber slides

Flat springs prevent movement of 1''x 3'' and 1''x 2'' chamber slides inside of the sample holder.

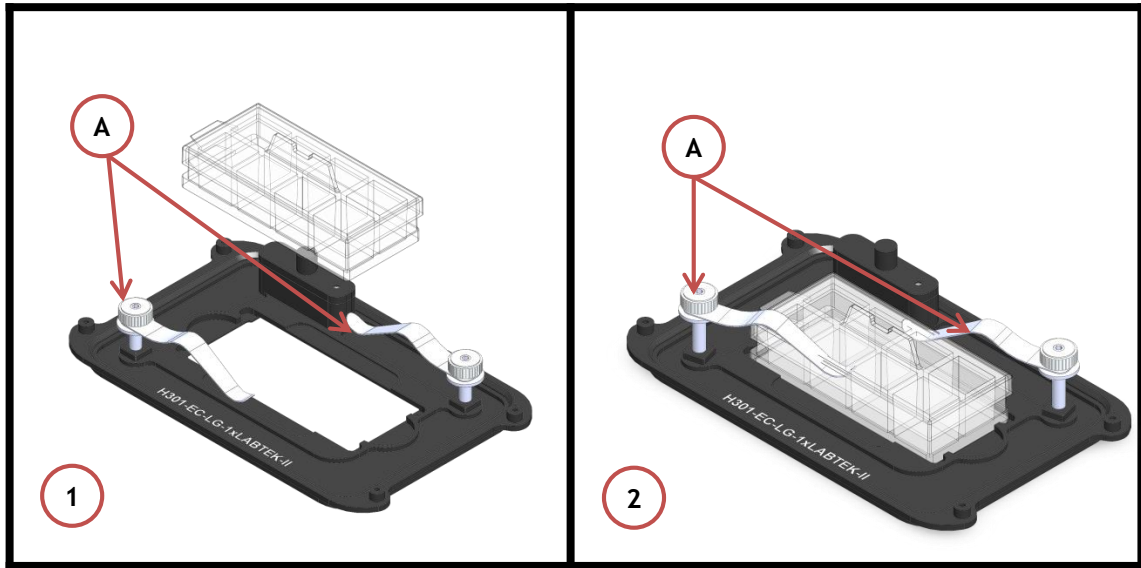


Figure 7. Plate adapter for Lab-TeK 1''x2'' chambered cover glass.

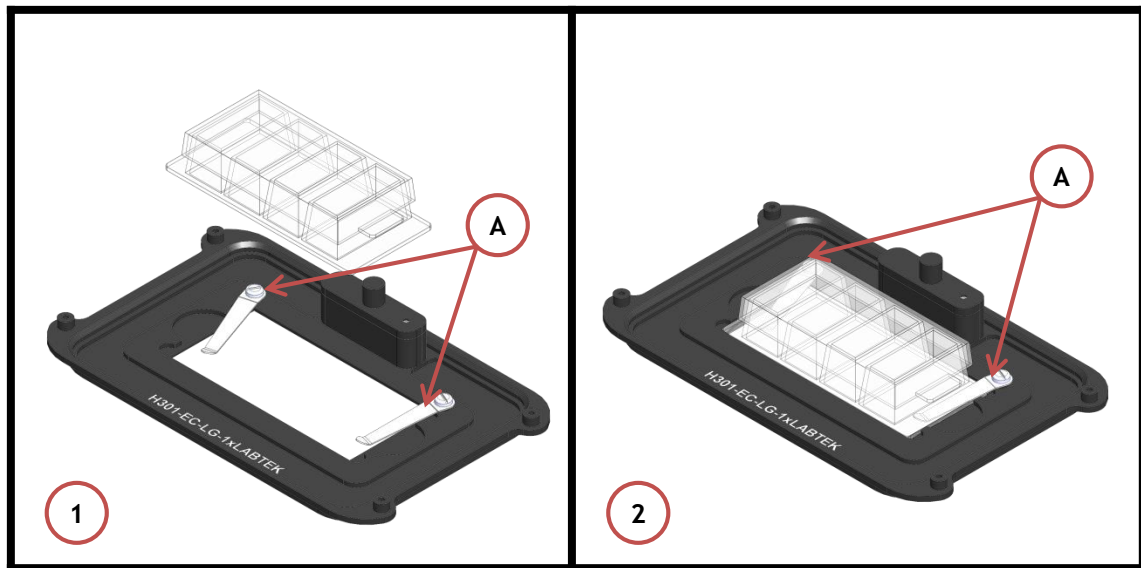


Figure 8. #1 Plate adapter for Lab-TeK II 1''x2'' chambered cover glass.

## 7. Connecting the Gas Supply

A single silicon tubing carries output gas from the Okolab Gas Controller to the H301-EC-LG-BL. Silicon tubing connects to a gas input - brass opening - located on a corner of the H301- EC-LG-BL. See Figure 9. Connect by gently pushing silicon tubing onto brass opening.

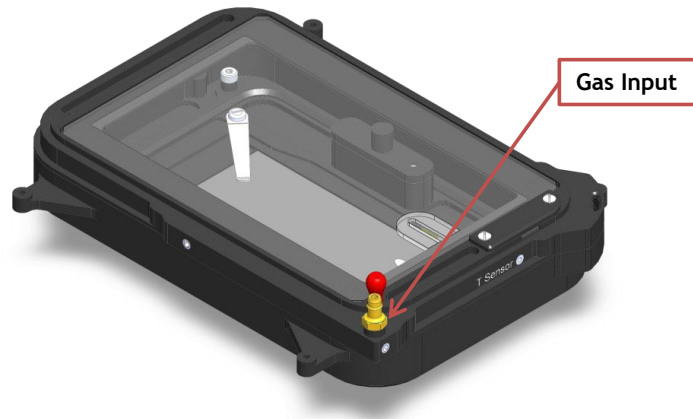


Figure 9. Connection with gas supply.

## 8. Working with Perfusion

The H301-EC-LG-BL features 4 perfusion holes on the side for the insertion of perfusion tubing up to 2.0 mm in outer diameter. Small screws plug the perfusion holes when not in use. (Grub screws M2.5x3). Remove small screws as necessary before introducing perfusion tubing.

Figure 10 shows the location of perfusion holes.

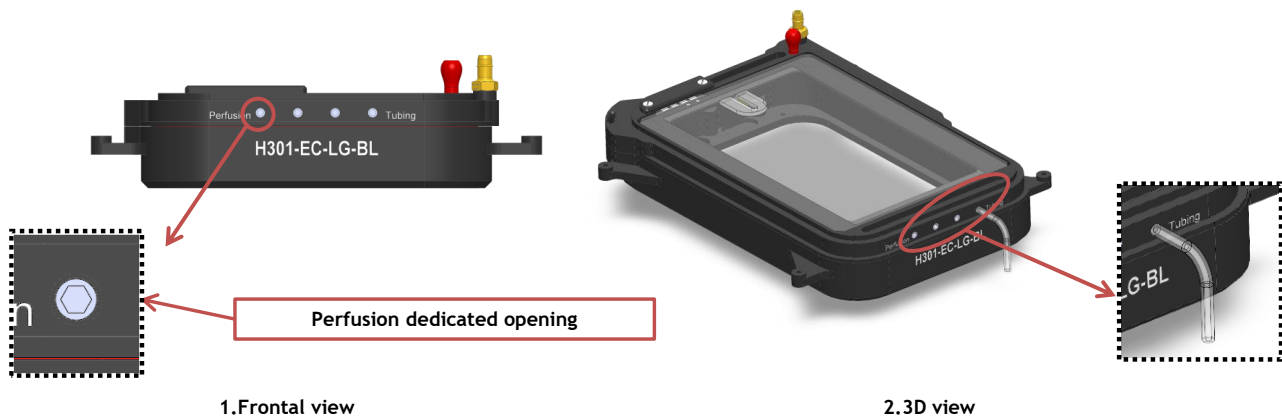


Figure 10. Perfusion



## 9. Connecting the Chamber with Super Z-Galvo stage

H301-EC-LG-BL fits on the Super Z-Galvo stage. It can be screwed on the Galvo Stage as shown in Figure 11; place the chamber on the stage and screw the four slotted head pan screws. Screws housings are indicated with letter A in Figure 11.

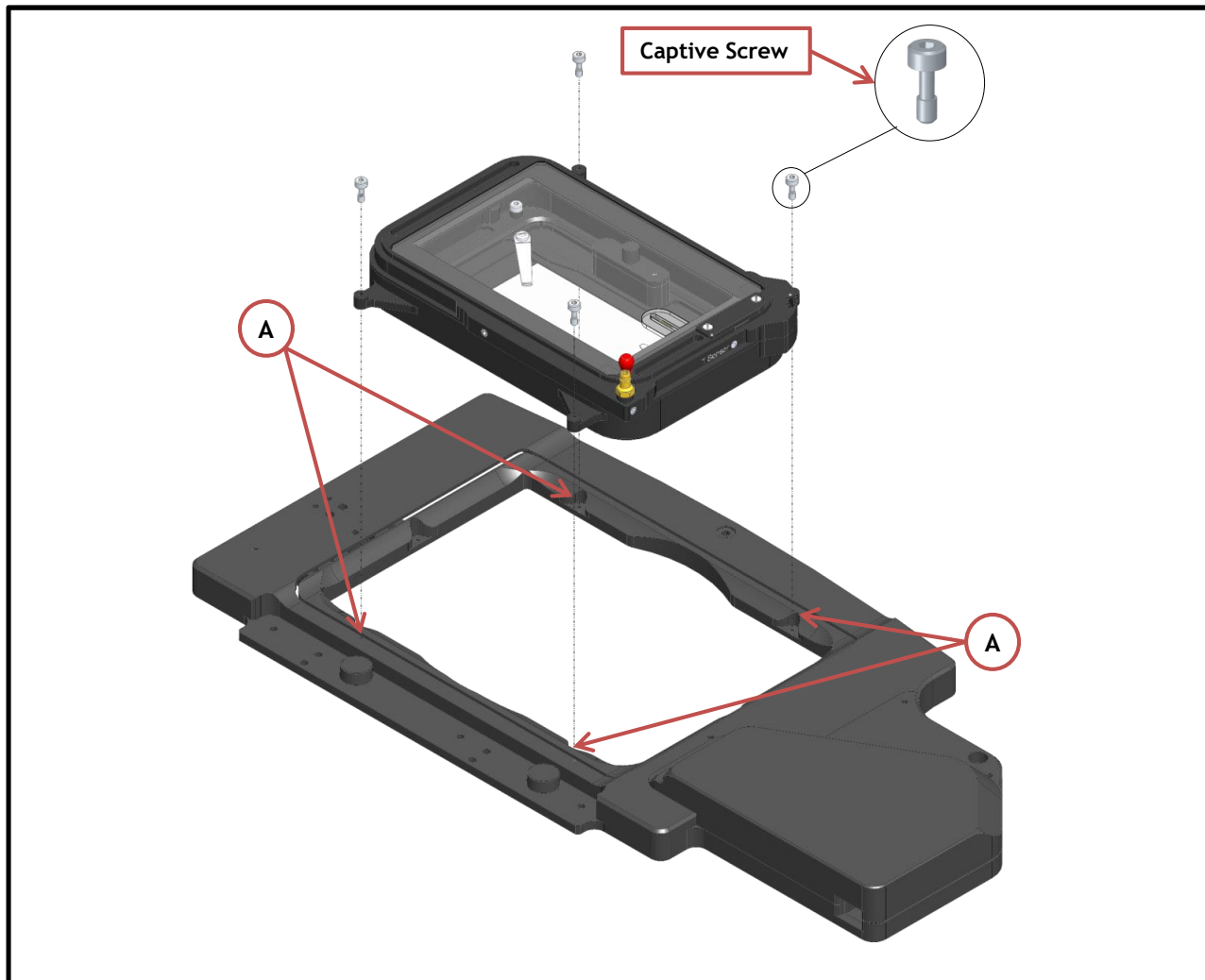


Figure 11. How to fix the H301-EC-LG-BL on the Super Z Galvo stage

## 10. Cleaning

- Turn the system off and pull the mains plug out the socket
- Remove the lid from the chamber main body, and keep it separate from the chamber main body while the chamber cools down.
- To clean the body and the glass lid of the chamber, wipe with a soft micro-fiber cloth. For stubborn smudges, you can damp the soft micro-fiber cloth with ethyl alcohol (product code UN1170). Do not put any liquid directly on the chamber. While cleaning the glass lid, do not apply strong force to the surface of the glass lid because it can be damaged.