H201-PRIOR-SP200-400-600

H201-PRIOR-SP200-400-600 is compatible with Queensgate SP200/400/600 Piezo on Prior H117/HLD117 stage.

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1. Components and dimensions

H201-PRIOR-SP200-400-600 includes the following components:

- **Lid.** To place on the chamber body (No screws or tools are necessary).

- **Chamber Riser.** It is a removable frame increasing the height of the chamber from 24 to 30 mm, often required when using multi-well (MW) plates

- **Sample Holder**

- **Spacer**s. To accommodate the chamber into Queensgate SP200/400/600 Piezo on Prior H117/HLD117 stage
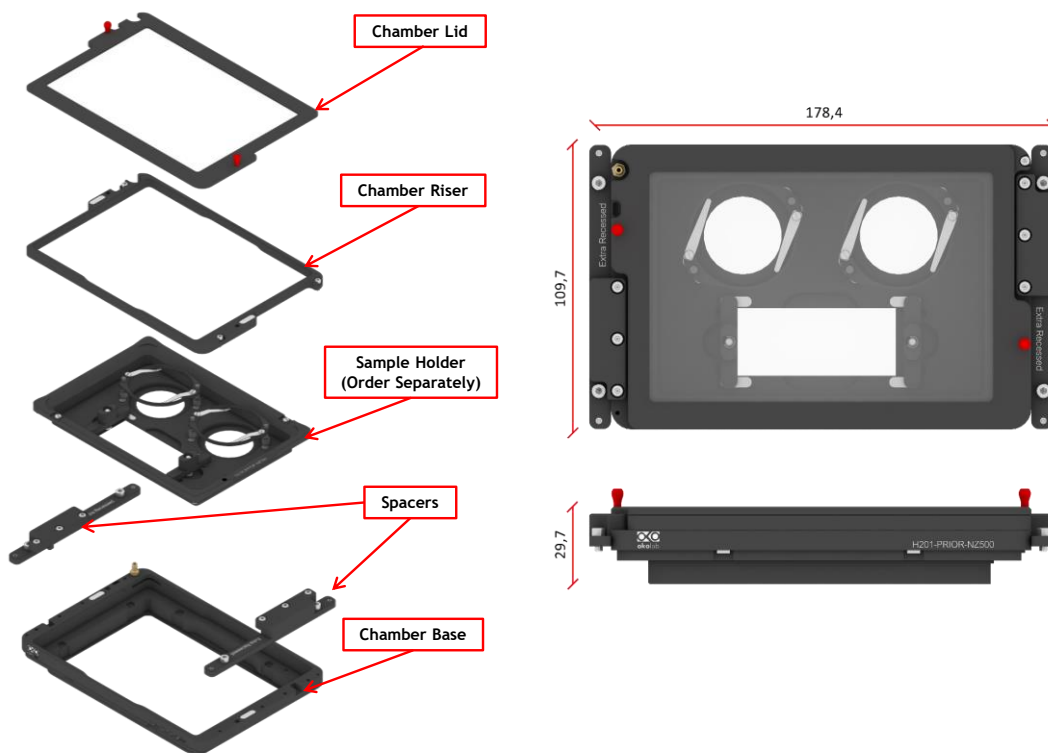
- **Chamber Base**

Figure 1. H201-PRIOR-SP200-400-600 - Components and Dimensions.

2. Available Sample Holders

The following sample holders are available.

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

1x35-PRIOR-NZ500	#1 35mm Petri-dish holder with built-in water reservoirs.
1xGS-PRIOR-NZ500	#1 1"x3" chamber slide holder with built-in water reservoirs.

1xLABTEK-PRIOR-NZ500	#1 Lab-Tek 1"x2" chambered cover glass holder with built-in water reservoirs.
1xLABTEK-II-PRIOR-NZ500	#1 Lab-Tek II 1"x2" chambered cover glass holder with built-in water reservoirs.
1x60-PRIOR-NZ500	#1 50/60mm Petri-dish holder with built-in water reservoirs.
1xT25-PRIOR-NZ500	#1 Nunc and Greiner T25 flask holder. It comes with a thicker chamber riser-
2x35-PRIOR-NZ500	#2 35mm Petri-dish holder
2xGS-PRIOR-NZ500	#2 1"x3" chamber slide holder
2xLABTEK-PRIOR-NZ500	#2 Lab-Tek 1"x2" chambered cover glass holder
2xLABTEK-II-PRIOR-NZ500	#2 Lab-Tek II 1"x2" chambered cover glass holder
2x60-PRIOR-NZ500	#2 50/60mm Petri-dish holder
4x35-PRIOR-NZ500	#4 35mm Petri-dish holder
GS35-PRIOR-NZ500	#1 1"x3" chamber slides and #2 35mm Petri-dish holder
LABTEK-35-PRIOR-NZ500	#1 Lab-Tek 1"x2" chamber slides and #2 35mm Petri-dish holder
LABTEK-II-35-PRIOR-NZ500	#1 Lab-Tek II 1"x2" chamber slides and #2 35mm Petri-dish holder
LABTEK-60-PRIOR-NZ500	#1 Lab-Tek 1"x2" chamber slides and #1 50/60mm Petri-dish holder
LABTEK-II-60-PRIOR-NZ500	#1 Lab-Tek II 1"x2" chamber slides and #1 50/60mm Petri-dish holder
GS60-PRIOR-NZ500	#1 1"x3" chamber slide and #1 50/60mm Petri-dish holder
6035-PRIOR-NZ500	#1 50/60mm Petri-dish and #1 35mm Petri-dish holder
H201-MW-HOLDER-NZ500	Multiwell plates holder

GS35-PRIOR-NZ500
For #1 1"x3"chamber slide and #2 35mm petri dishes

4x35-PRIOR-NZ500
For #4 35 mm petri dishes

2x60-PRIOR-NZ500
For #2 60 mm petri dishes

GS60-PRIOR-NZ500
For #1 60mm petri dish and #1 1"x3"chamber slide

1x60-PRIOR-NZ500
For #1 60 mm petri dish

LABTEK-60-PRIOR-NZ500
For #1 Lab-Tek 1"x2"chambered cover glass and #1 60mm petri dish

1x35-PRIOR-NZ500
For #1 35 mm petri dish

6035-PRIOR-NZ500
For #2 35 mm petri dishes and #1 60mm petri dish

1xGS-PRIOR-NZ500
For #1 1"x3" chamber slide

2xGS-PRIOR-NZ500
For #2 1"x3" chamber slides

1xGS-2xLABTEK-PRIOR-NZ500
For #1 1"x3"chamber slide and #2 Lab-Tek 1"x2" chambered cover glass

1xLABTEK-PRIOR-NZ500
For #1 Lab-Tek 1"x2"chambered cover glass

LABTEK-35-PRIOR-NZ500
For #1 Lab-Tek 1"x2" Chambered cover glass and #2 35mm petri dishes

LABTEK-60-PRIOR-NZ500
For #1 Lab-Tek 1"x2" Chambered cover glass and #1 60mm petri dish

1xLABTEK-PRIOR-NZ500
For #1 Lab-Tek 1"x2" Chambered cover glass

2xLABTEK-PRIOR-NZ500
For #2 Lab-Tek 1"x2"chambered cover glass

LABTEK-II-35-PRIOR-NZ500
For #1 Lab-Tek II 1"x2"chambered cover glass and #2 35mm petri dishes

2xLABTEK-II-PRIOR-NZ500
For #2 Lab-Tek 1"x2"chambered cover glass
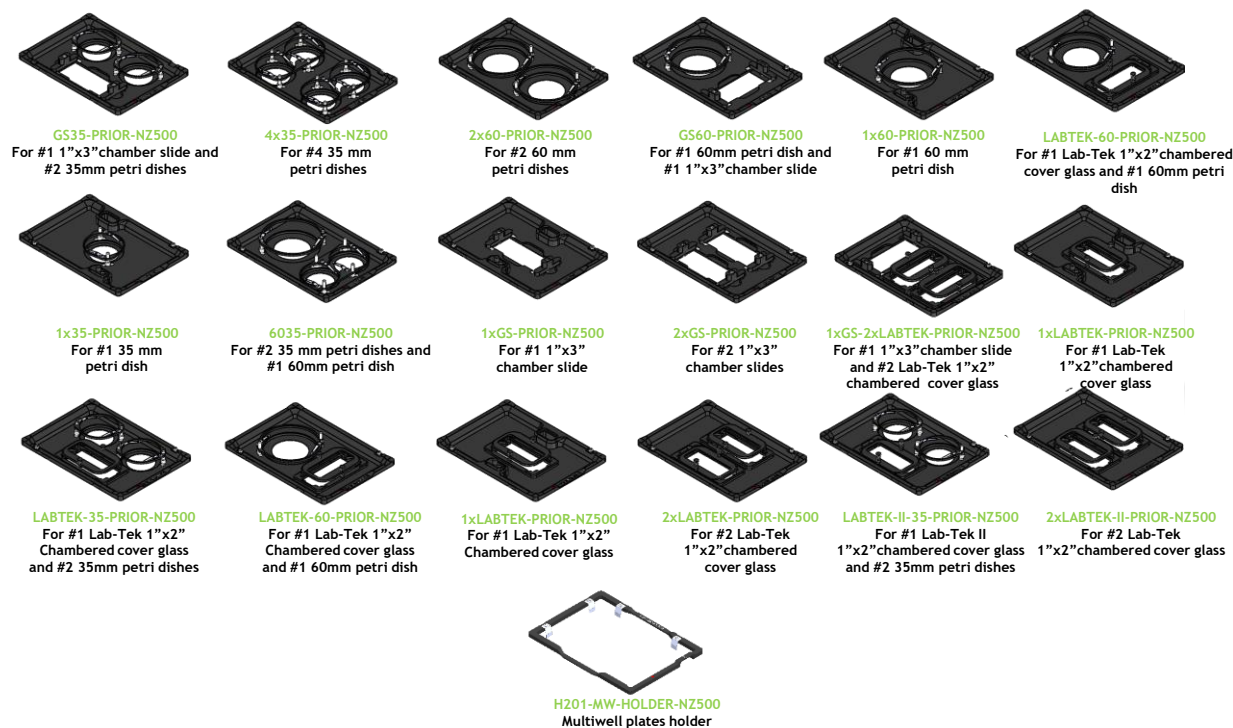
H201-MW-HOLDER-NZ500
Multiwell plates holder

Figure 2.Available sample holders.

3. Installation

Follow the instructions in the following paragraphs to install the Chamber properly.

3.1 Insertion of the Sample Holder into Chamber Base

Sample holders fit into the chamber base and are held in place by magnets embedded within both chamber and holder. To introduce a sample holder with the proper orientation, match the red dot on the holder to the one on the chamber base, as illustrated in Figure 3.
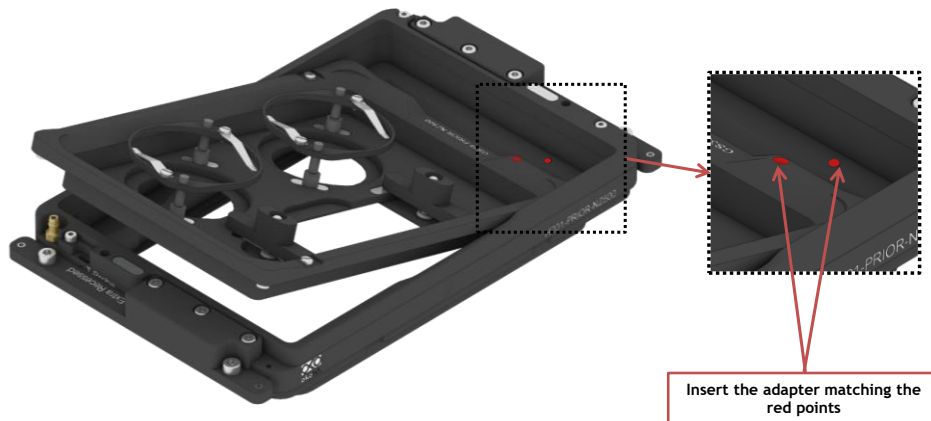

Insert the adapter matching the red points

Figure 3. Introduction of the Sample Holder inside the Chamber Base.

3.2 Installation of the Chamber on the Stage

To fix the H201-PRIOR-SP200-400-600 chamber on the stage, follow the steps shown in Figure 4.

1. Slot the chamber base into the stage, taking care to match the screws position (see 1 in Figure 4).
   NOTE: Check for the chamber base tilting. If necessary, adjust the chamber base on the stage by turning the grub screws (indicated by letter B in 2, Figure 4). Use a 1.5 hexagonal key to lift the grub screws.
2. Fasten the captive screws indicated by letter A using a 2.5 hexagonal key (see 2 Figure 4).
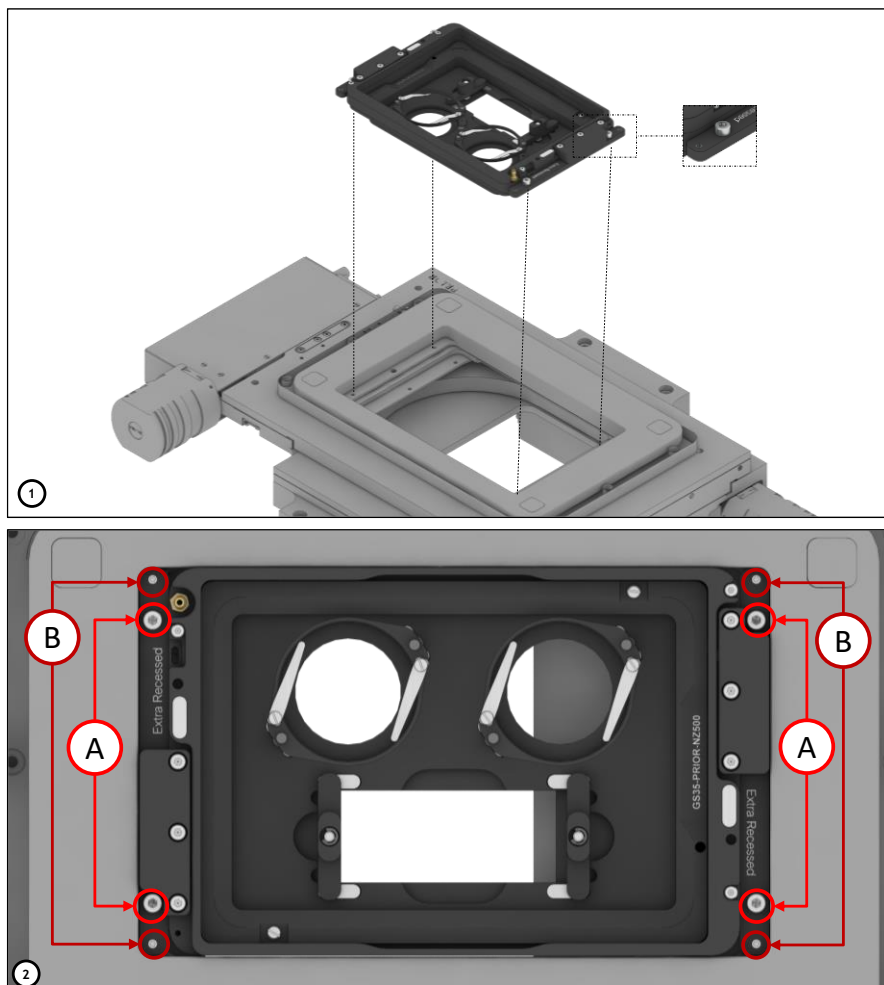
Figure 4. Installation of the Chamber on the Stage

3.3 Working with 35 or 60 mm Petri Dish – Spacing Rings and Magnetic Locks

Magnetic locks prevent movement of 35 and 60 mm dishes inside the sample holder.

Figure 5 illustrates the available magnetic locks for 35 and 60 mm dishes. Threaded magnetic posts allow adjusting holder's height.

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Magnetic Locks for 35 and 60 mm petri dishes.
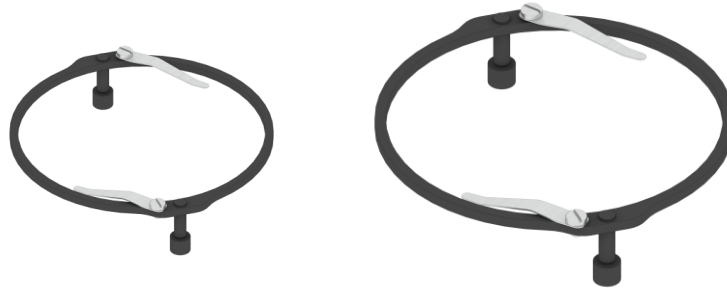**Included in the corresponding sample holder**

Figure 5.Magnetic locks for 35 and 60 mm dish

NOTE: Magnetic locks are included with sample holder.

Spacing rings accounting for variability in dish diameter from one manufacturer to another are also included. Figure 6 shows how to position the ring. Ring selection guide diagrams: rings for 35 and 60 mm dish -Figure 7 and Figure 8, respectively.
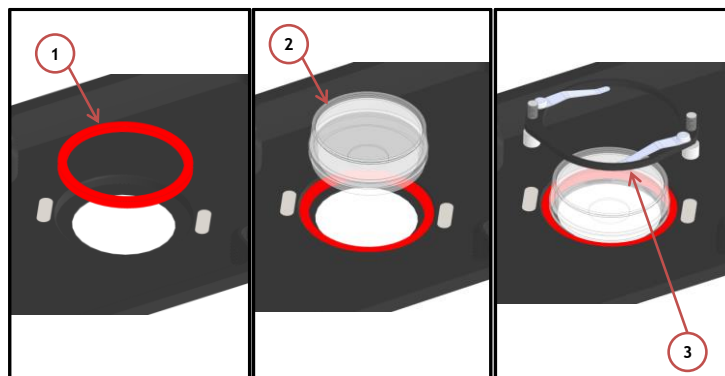
Figure 6. 1) Insertion of the ring, 2) insertion of the 35 mm dish, 3) insertion of the magnetic lock.

NOTE: Spacing rings are included with sample holder.

NOTE: Spacing rings do not block the petri inside its accommodation, but they are designed to center the petri with respect to the observation circular window.

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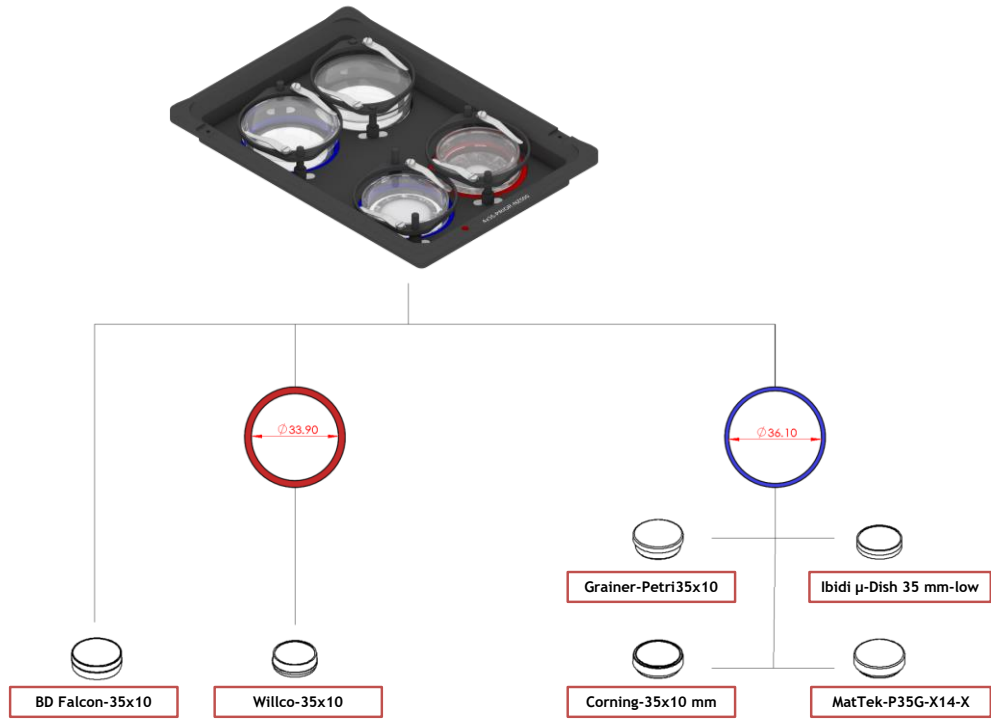
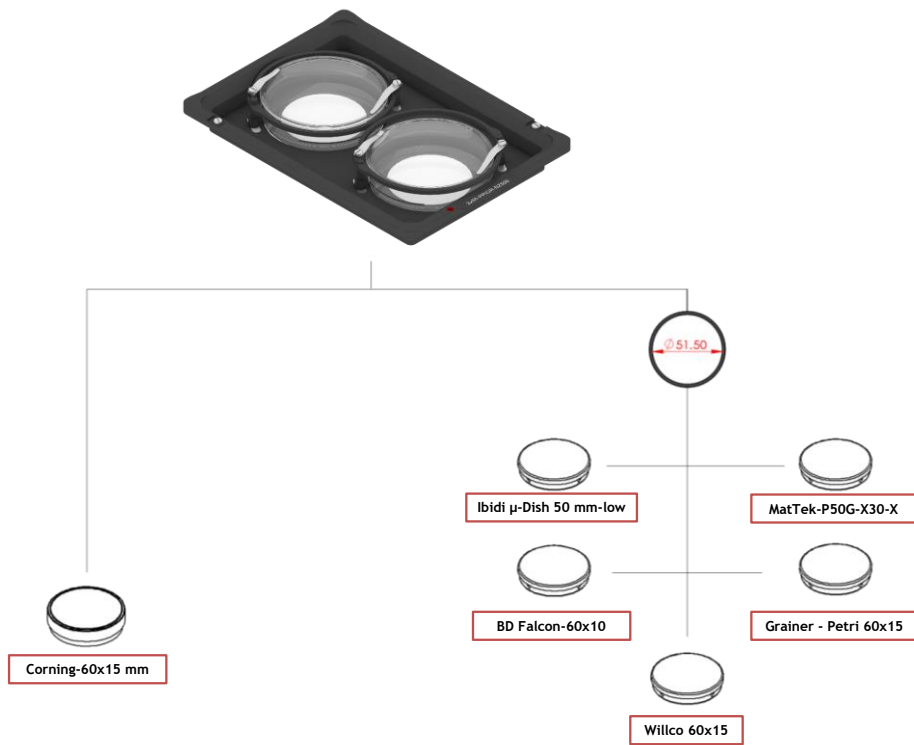*Figure 7.Generic ring selection scheme for 35 mm dish.*

Figure 8. Generic ring selection scheme for 60 mm dish.

3.4   Working with 1x3'' and 1x2'' chamber slides

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

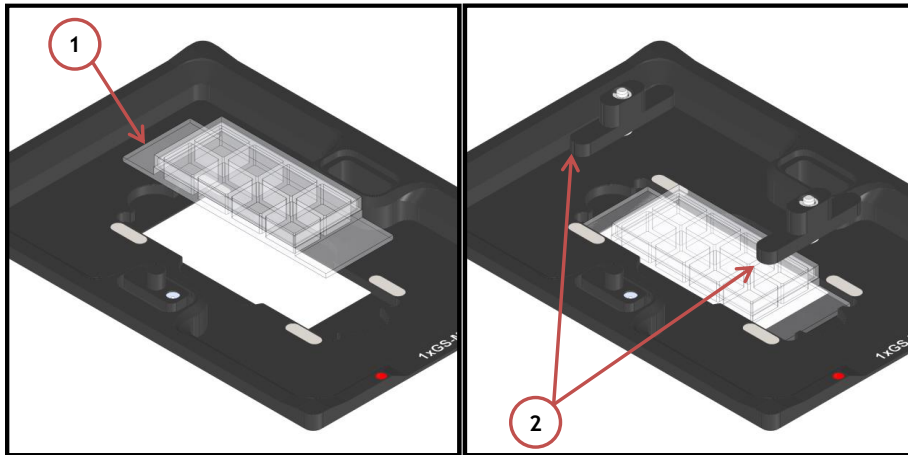**NOTE:** Magnetic locks are included with sample holder.

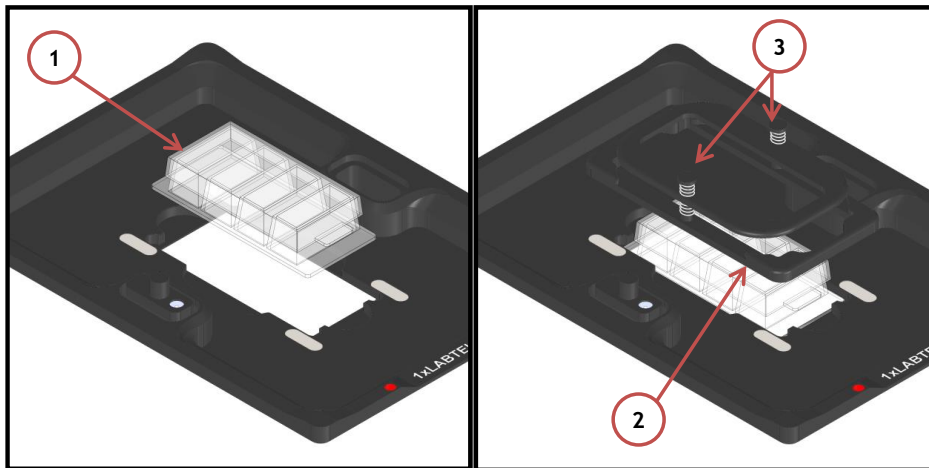*Figure 9. Magnetic lock for 1" x 3" chamber slide.*

Figure 10. Magnetic lock for 1" x 2" chamber slide. To lock the slide, push simultaneously the buttons indicated with (3).

3.5   Working with 1"x3" chamber slides and #2 35mm Petri-dish

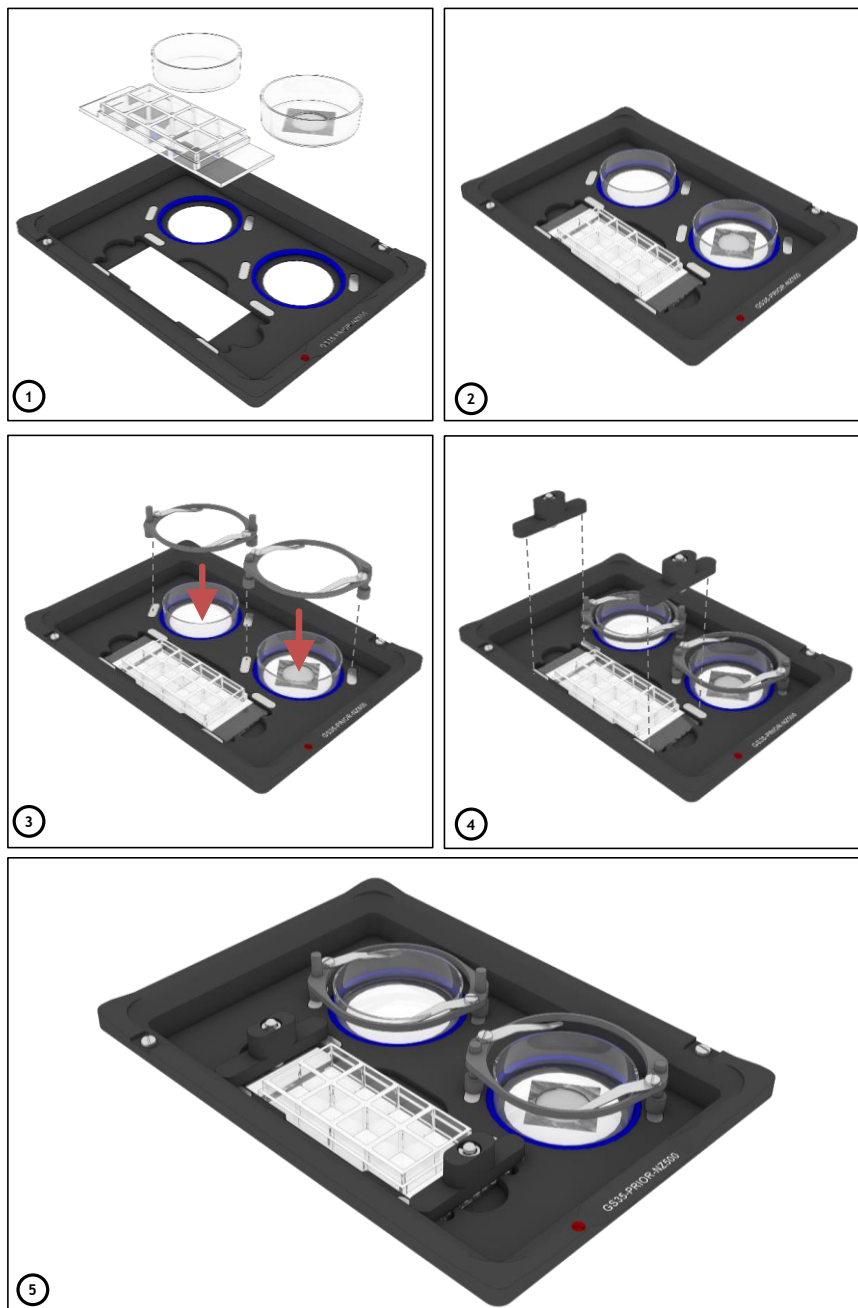Follow the steps in Figure 11 to work with 1"x3" chamber slides and #2 35mm Petri-dish.

Figure 11. Working with 1"x3" chamber slides and #2 35mm Petri-dish.

3.6   Working with MW Plates

MW plates holder (see 2 in Figure 12) holds MW plates in place into chamber base as illustrated in Figure 12.

NOTE: MW plates holder must be ordered separately (NOT INCLUDED). Product code: H201-MW-HOLDER-NZ500.
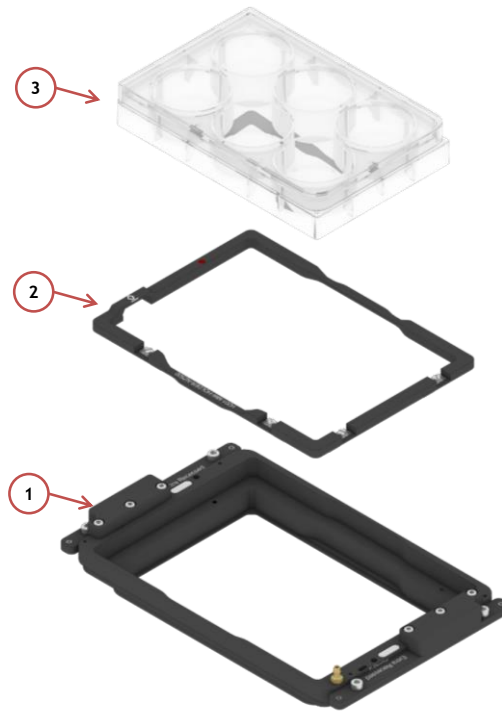

Figure 12. Magnetic locks for MW plates. To be ordered separately.

Chamber Riser increases chamber's height and is REQUIRED with 6, 12, 24, 48 MW plates.

Figure 13 shows how to mount and screw the chamber riser. Fasten the three captive screws clockwise by using
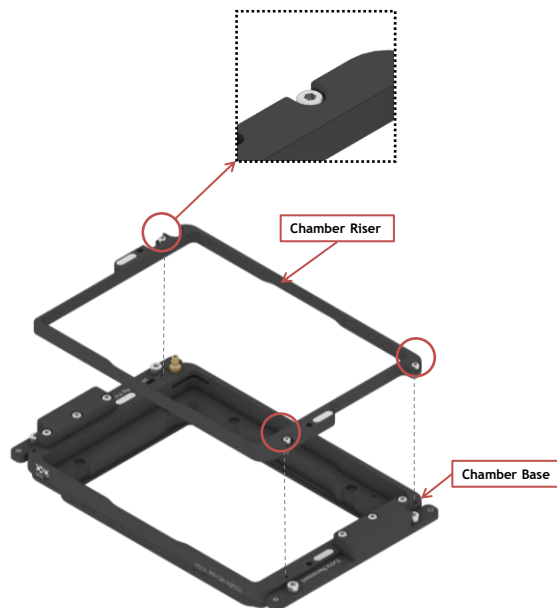
a 1.5 mm hexagonal key.

Chamber Riser

Chamber Base

Figure 13. Riser Assembly.

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3.7 Lid Assembly

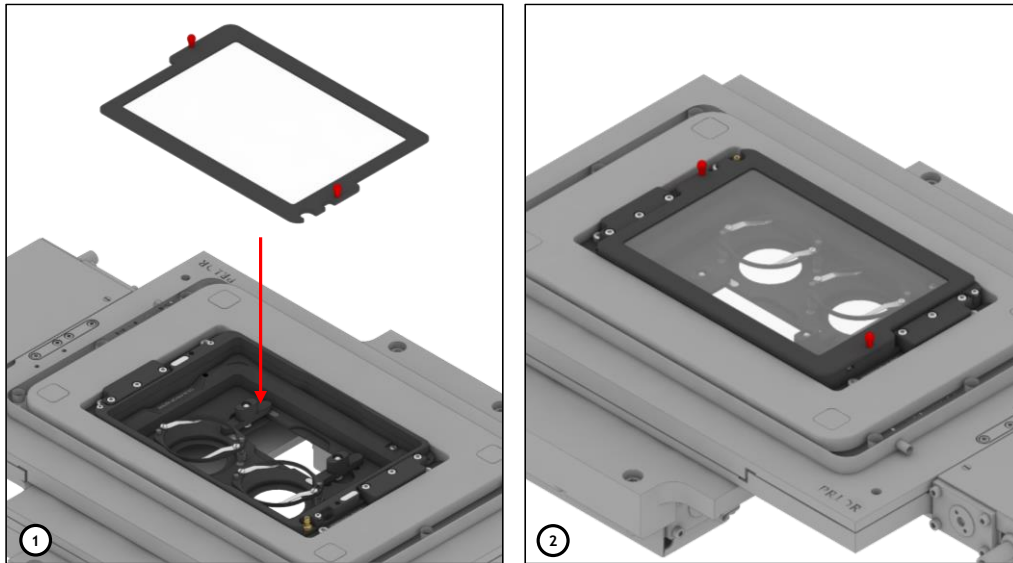Place the Lid on the chamber base (No screws or tools are necessary). See Figure 14.

Figure 14. Lid Assembly

4. Connection of the Gas Supply

A single silicon tubing carries output gas from the Okolab Gas Controller to the H201-PRIOR-SP200-400-600. Silicon tubing connects to a gas input - brass opening - located on a corner of the H201-PRIOR-SP200-400-600. See Figure 15. Connect by gently pushing silicon tubing onto brass opening.

Figure 15.Connection with gas supply.

5. Insertion of the Sample Feedback Temperature Sensor

Insert the Sample Feedback Temperature Sensor through the dedicated opening located in the H201-PRIOR-SP200-400-600 (see Figure 16).

To read the temperature of the culture medium and realize a self-calibration of the chamber, fix the Temperature

Sensor tip with adhesive tape on the bottom of the dish inside the H201-PRIOR-SP200-400-600. For more information about the self-calibration, please refer to the User Manual of the Okolab Controller in use.

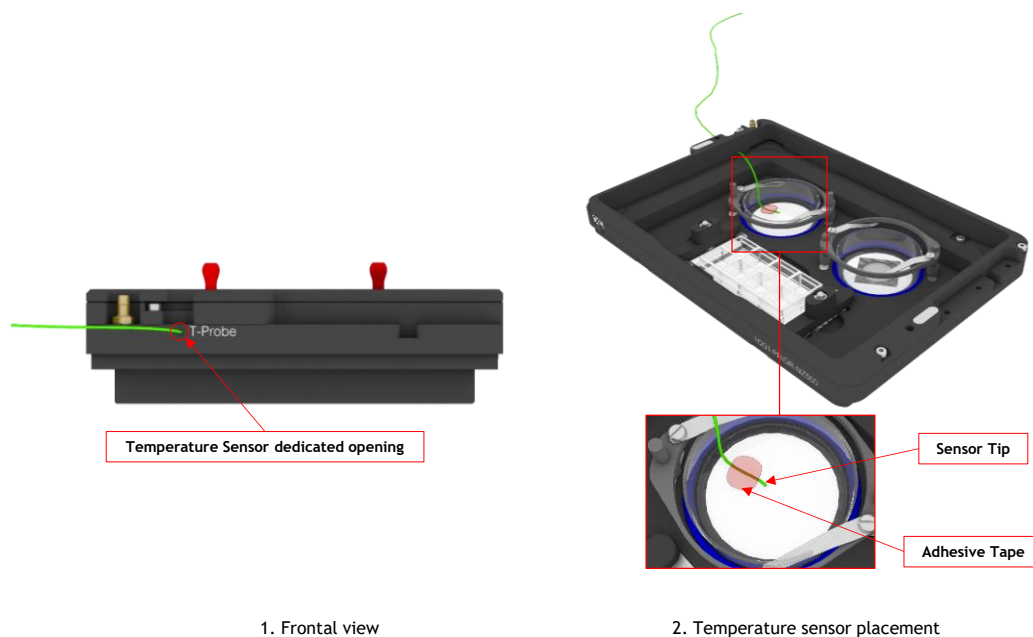1. Frontal view 2. Temperature sensor placement

Figure 16. Insertion of the temperature sensor inside the chamber.