



Unpacking and Installation Manual

Tissue-Tek[®] Glas[™] g2 Glass Coverslipper

6499	Glas g2-JC2	(230VAC)
6500	Glas g2-A1	(115VAC)
6501	Glas g2-J0	(100VAC)
6502	Glas g2-E2	(230VAC)

Revision History

Rev.#	Revision Date	Preparer	Description
-	03/07/2008	-	A draft for the Beta prototype
00	04/21/2021	YOKOMIZU	Issue of the first version <ul style="list-style-type: none">• Added revision history• Added table of contents• Added Sections 1 to 7• Updated procedures in Sections 8 and 10 according to those for the production unit• Added new Sections 9, 11, 12 and 13

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1. Intent of the Document

This manual explains how to unpack and install the Tissue-Tek[®] Glas[™] g2 Automated Glass Coverslipper.

2. Important Information

2-1. Overview

- This unpacking and installation work must be done by personnel who have a complete understanding of this manual before the work and skills to perform the procedure as described in the manual.
- The information contained in the manual is important for securing worker safety during the work and avoiding a complaint from customer after installation.
- Follow the procedure and methods described in the manual to finish the work properly.
- Take care not to damage the instrument during the work. If damage is found or given, contact the instrument distributor or representative to take proper corrective actions.

2-2. Warning symbols and safety precautions

Following are the items special attention must be paid to during installation of the instrument. The cautions accompanying the following symbols provide particularly important information for ensuring worker safety, preventing instrument failures and improving work efficiency. Be sure to check these symbols, before commencing the work, and observe specified instructions.



No Open Flame

- Flammable reagents are used in pathology laboratories. It is strictly prohibited to use tools that may product open flame or sparks (such as an electric screwdriver).



Electric Shock

- Check to be sure that a grounding wire of the power cord is connected to a grounding of power source.
- Check to be sure that the instrument is free from moisture or droplets condensed from humid air before commencing the work. If the instrument is wet, there is a risk of electric shock. Do not touch the instrument with a wet hand. It may also cause electric shock.
- Avoid wearing metallic accessories during a power-on check on the instrument. There is a risk of electric shock caused by the accessory contacting with inner parts of the instrument.



Biohazard

- Pathology laboratories may handle infectious specimens. For infection control, be sure to wear personal protective equipment such as gloves during the work and avoid unnecessary access to components or areas in the instrument. After the work, treat used protective equipment as appropriate and wash hands thoroughly.



Injury and/or Damage by Chemicals

- When transporting the instrument, keep in mind that the instrument weighs approximately **110kgs**. It must be handled by several people to prevent work injury and accident from occurring by dropping the instrument on feet or pinching fingers.
- Pathology laboratories use organic solvents. Since some laboratory rooms may not be ventilated sufficiently, check to be sure that the place where the instrument is installed is well ventilated before the work.
- Wear proper personal protective equipment such as gloves, a mask and goggles during the work if the workplace is under an atmosphere containing organic solvent gas or when the instrument operation is checked.



Pinch Point

- Take care not to pinch your hands or fingers when opening and closing the cover and the door or making access to moving parts.

3. Workflow

Below is the workflow of installation and system setup.

No.	Work Item	Reference (in the manual)
1	Check installation conditions and operating environment	Section 5
2	Check unpacking place	Section 6
3	Transport the packed instrument to the unpacking place	Section 7
4	Unpack the instrument	Section 8
5	Transport the instrument to the installation place	Section 9
6	Remove securing members from the instrument	Section 10
7	Level the instrument	Section 11
8	Check and install the accessories	Section 12
9	Attach optional items	Section 13

4. Tools Required

Following is a list of tools necessary for the work.

Description	Remarks
Hexagonal wrench	Nominal size: 3
Phillips screwdriver	ISO No.2
Steel tape measure	"Convex rule"
Level	Supplied with the instrument
Cutter	—
Carrying handles	Part No. 00001-5206 x 4 pcs
Spanner or box end wrench	Width across flats 14mm · 17mm

5. Installation Conditions and Environmental Requirements

Confirm that the installation place meets all the following conditions from 1) to 4). (See Fig. 5-1 Installation Space.)

1) Installation space

- Confirm in advance that the selected installation place is level, sturdy and wide enough for the instrument's footprint (for the instrument size, see Section 6 in the manual).
- Provide at least 40cm of clearance to the left side of the instrument.
- Provide at least 50cm of clearance above the instrument.
- Provide at least 40cm of clearance in front of the instrument.
- Provide at least 10cm of clearance to the right and back sides of the instrument (the clearance on the right side is for when the instrument is not linked to the slide stainer).
- Install the instrument at where operator can always make easy access to the power inlet of the instrument or a power outlet to which the power cord is connected.
- Confirm that the installation place is free of obstacles that may block the ventilation grill on the instrument (for instance, a towel hung on the instrument to dry).
- Electromagnetic radiating source may hinder the instrument from working properly. Keep away from strong electromagnetic radiating sources (for instance, an unshielded, intentional radio frequency source).

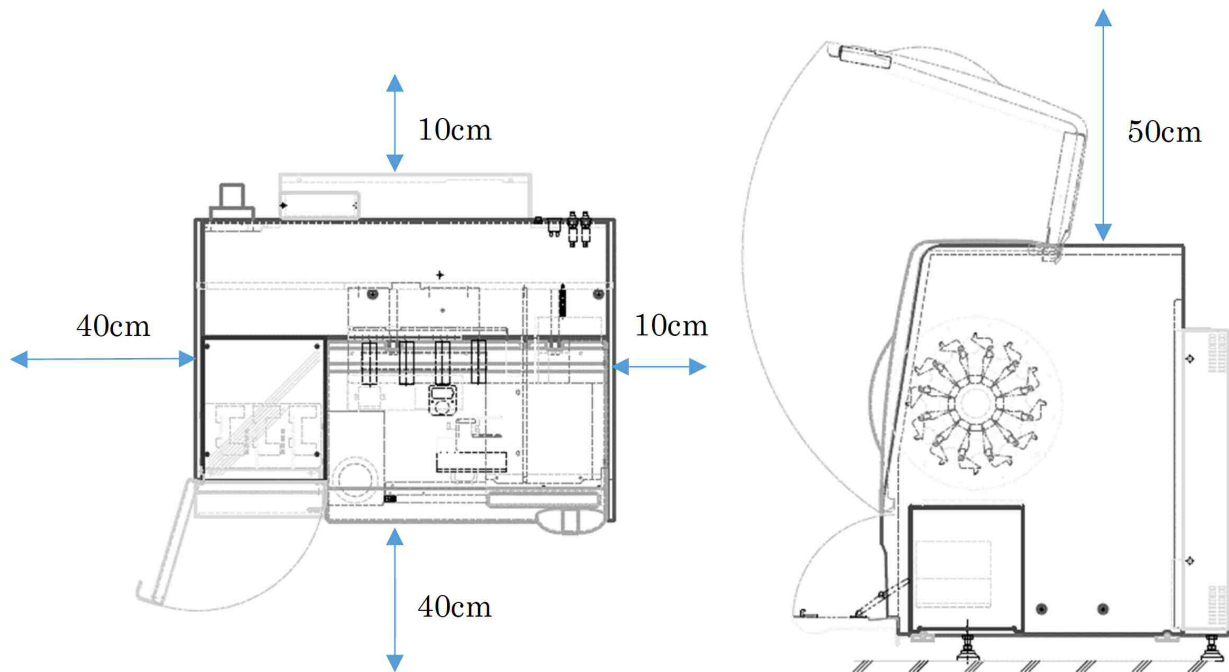


Fig. 5-1 Installation Space

2) Power requirements

Confirm that the power source meets the power requirements below.

- 115VAC \pm 10% 15A 50/60Hz
- 100VAC \pm 10% 15A 50/60Hz
- 230VAC \pm 10% 7A 50/60Hz

* Forbid the instrument to be used with improper power source, such as 200VAC, that does not satisfy the above requirements.

* Connect the instrument to a dedicated power outlet and line (including a circuit breaker on the customer side). If not, the circuit breaker will trip and other electrical equipment may be affected when an abnormal condition occurs in the instrument.

- Grounding

Confirm that the power cord plug is singly connected to a properly-grounded power outlet with a grounding terminal.

- Specifications of the power cord supplied with the instrument

Cord Type	Destination	Standards	Length
For 100/115VAC	SFA, SFJ	UL/CSA, PSE-approved	Approx. 2m
For 230VAC	SFE, SFJ (for China)	Cord: CENELEC HD, VDE-approved Plug: EN, IEC, VDE-approved Connector: EN, VDE-approved	Approx. 2m

* If the instrument is used in regions where above standards are not applicable to, a different power cord appropriate for use in such a region must be prepared separately.

3) Ventilation

Confirm that a customer site provides a ventilation system, a local exhaust system or an exhaust port to discharge treated air to the outdoors.

The concentration of vapors exhausted from the instrument varies depending on reagents to be used and ambient temperature. The discharge concentration is listed below as a reference.

Based on the value below and a cubic capacity of the installation place, check if a ventilation rate in the place meets the workplace environmental exposure level required. If a ventilation system is not provided, use a 38mm or 75mm dia. exhaust duct adapter (option) to connect a duct hose to the exhaust port on the instrument and discharge treated air to the outdoors.

- * Maximum concentration of exhausted gas per 60 processed slides with unexpired activated carbon filters used (Reference)
 - Xylene : 50 ppm

4) Elevation

Confirm that the installation place is 2,000 meters or below in elevation.

The safety of the instrument is guaranteed through electrical safety testing. In the testing, the instrument was tested under assumption that the instrument is used in a place where elevation is 2,000 meters or below

6. Unpacking Workplace

Dimensions and weight of the packed instrument are indicated below. Check in advance if there is enough space for safety transportation, unpacking and installation of the instrument.

- Packed instrument: (W) 902 x (D) 800 x (H) 1,145 mm, approx. 145 kgs.
- Unpacked instrument: (W) 750 x (D) 620 x (H) 750 mm, approx. 110 kgs.
(including the protruded part of the cover: (D) 642 mm)

7. Transportation to Unpacking Workplace

When you use a forklift or hand pallet truck, transport the packed instrument. Check the size of a forklift or hand pallet truck beforehand.

<Precautions>

- * Transport the packed instrument with at least two people to prevent accident or instrument damage caused by being rear-ended or falling over during transportation.
- * When transporting the packed instrument, cover a stepped portion of the floor with thin steel plates or something to smooth the path and avoid making an impact on the instrument.
- * Pay careful attention to safety transportation. Especially, when rolling the instrument down a sloped floor, keep in mind that the hand pallet truck will not be stopped easily once it starts gaining speed as the instrument is very heavy.

8. Unpacking Procedure

Follow the instructions below to unpack the packed instrument after move to the workplace.

<Precautions>

- * Before unpacking, make sure that there are no visible signs of damage to packing materials that might have been caused by an external force during transportation.
- * Take care not to damage or flaw the instrument during unpacking.
- * Carefully remove the accessory box from inside the instrument in a low-impact posture.

(1) Remove plastic bands.



(2) Remove the accessory box.



(3) Remove foam pad from top of the instrument.



(4) Remove retainer foam pads.



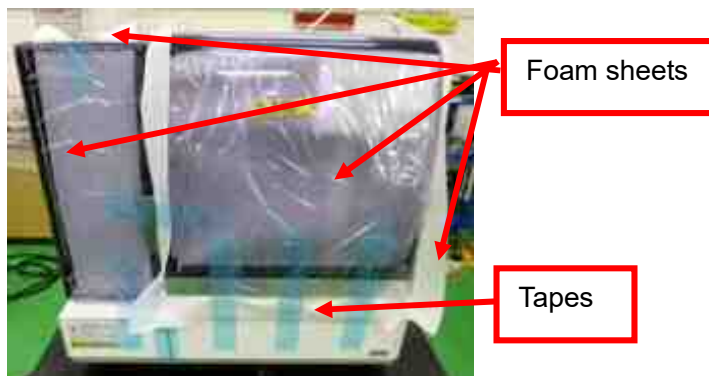
(5) Lift the outer shipper box to remove.



(6) Remove the nylon bag.



(7) Remove foam sheets and tapes.



9. Transportation to Installation Place

- (1) If it is allowed to move the instrument by a hand pallet truck, move the instrument close to the installation place as it is on the pallet.
- (2) Screw the carrying handle into each threaded hole located at the bottom of each side of the instrument. (See Fig. 9-1 for the threaded hole locations and carrying handles.)
- (3) Grip the carrying handles, carefully lift the instrument up and move to the installation place.

<Precautions>

- * Take care not to allow the instrument to fall out of the pallet during transportation by a hand pallet truck.
- * When you push or support the instrument during transportation by a hand pallet truck, be careful about where you put hands on because outer panels might deform or the plastic cover might be damaged. (Hold the installed carrying handles to push or support the instrument.)
- * Pay careful attention to safety transportation. Especially, when rolling the instrument down a sloped floor, keep in mind that the hand pallet truck will not be stopped easily once it starts gaining speed as the instrument is very heavy.
- * Check and clear the transport path for moving the instrument by lifting. Remove in advance obstacles if any.
- * Be sure to lift the instrument up with multiple persons as it is very heavy.

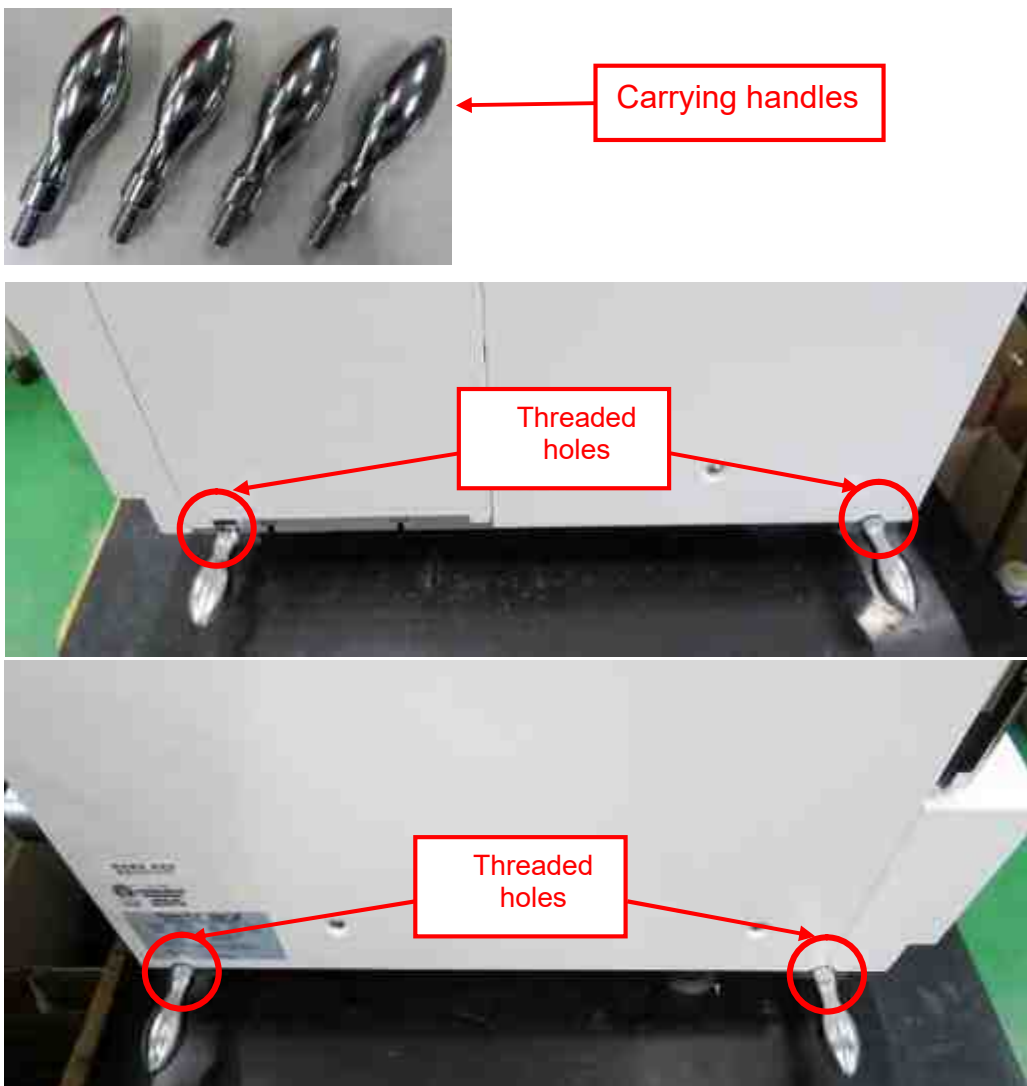


Fig. 9-1 Threaded hole locations and carrying handles

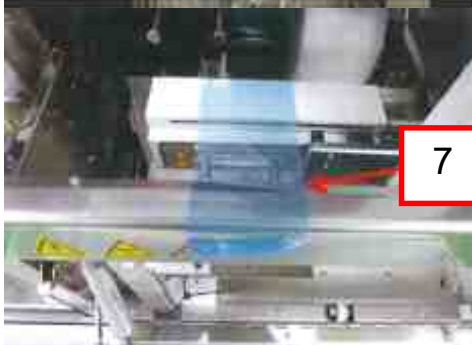
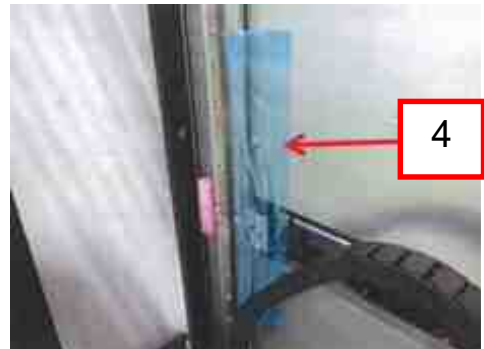
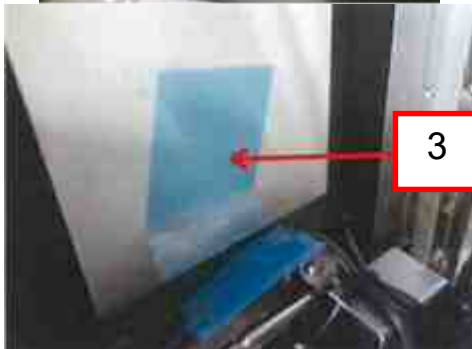
10. Removal of Securing Members from the Instrument

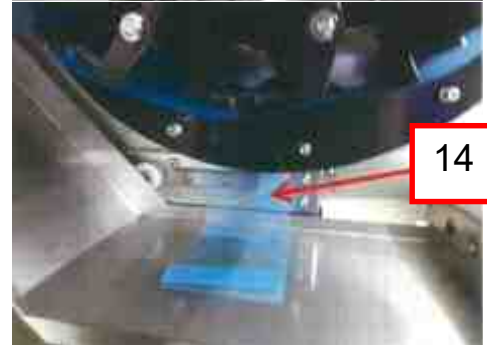
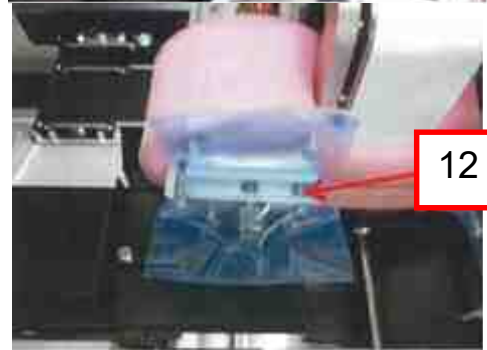
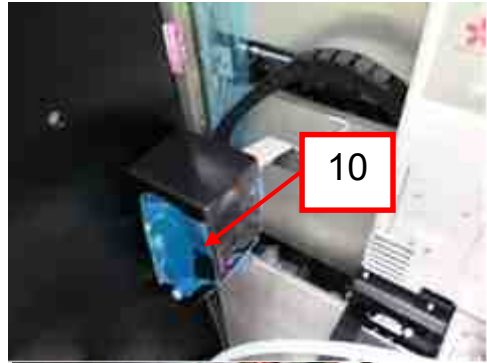
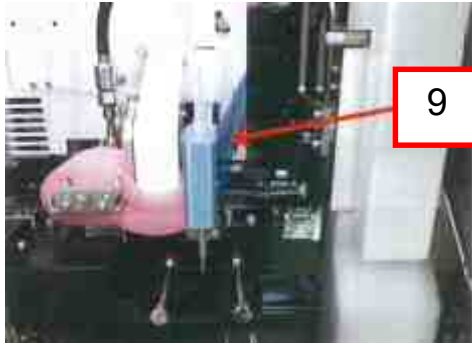
Follow the instructions below to remove securing members from the instrument after transport to the installation place.

<Precautions>

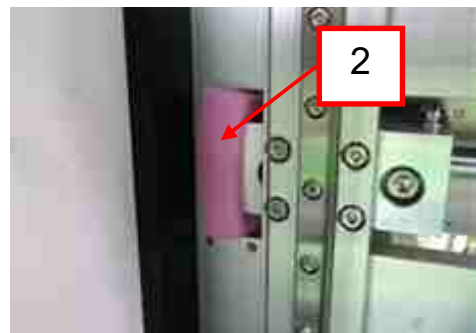
- * Before the work, make sure that there are no visible signs of damage to the instrument that might have been caused by an external force during transportation.
- * Take care not to damage or flaw the instrument during the work.
- * Conduct the work in a comfortable posture.
- * You may remove securing members from the instrument concurrently, not in the following order of the work (1. Remove adhesive tapes, 2. Remove cushion pads).

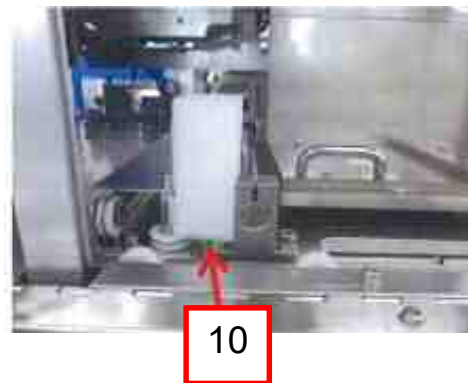
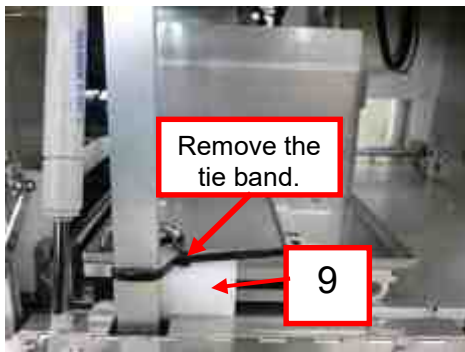
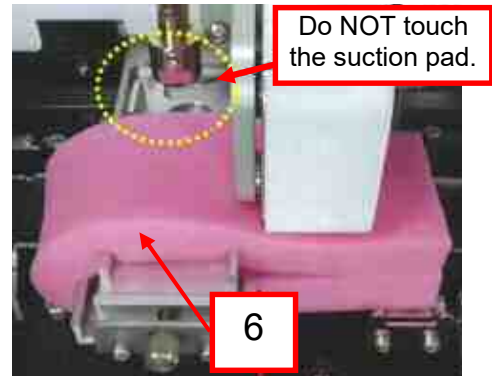
(1) Remove tapes from the instrument (16 places).





(2) Remove cushion pads (11 places).





- (3) Remove the nylon bag from the mounting medium level sensor.

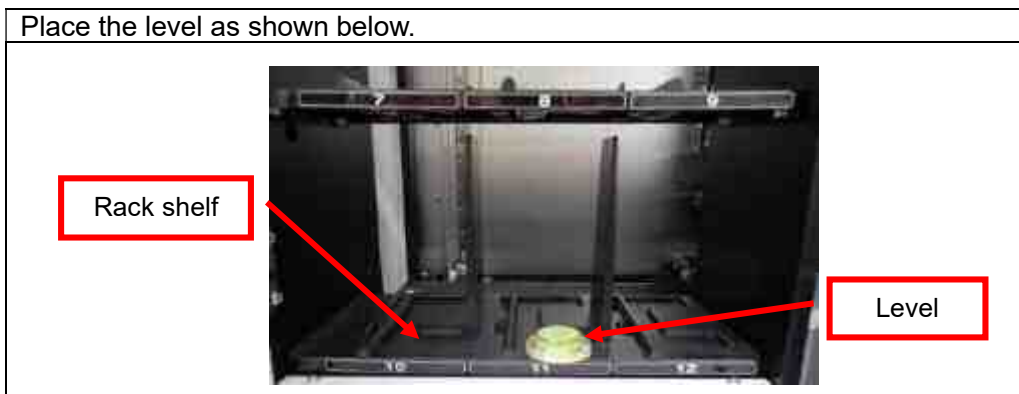


11. Leveling of the Instrument

Place the level on the slide rack shelf and adjust height of the adjustable feet, using a spanner, to level the instrument.

Because the adjustable foot, located on the right side of the back of the instrument (right under the inlet), has been set 2mm lower than the other feet at factory before shipment, it is necessary to make the adjustable foot higher (by loosening the screw).

When the instrument is linked to the Prisma-series slide stainer, perform the height adjustment after the instrument has been linked with the stainer. (See Subsection 13-2 in this manual.)



12. Accessories

12-1. Checking accessories

Check if all accessories (listed below) are not damaged or missing.

Description	Q'ty	Remarks
20-slide basket adapter	10	
20-slide basket	10	
Slide rack	12	
Power cord (for 100V)	1	For J0 (6501) only
Power cord (for 115V)	1	For A1 (6500) only
Power cord (for 230V)	1	For E2 (6502) and JC2 (6499) only
Loading station	1	
Basket receiver, loading station	1	
Lid, loading station	1	
Anti-drying bottle	1	
Waste container	3	
Dispensing tray	1	
Mounting medium bottle tray	1	
Cover glass tray	1	
Slide protect seat	1	
Priming bottle unit	1	
Waste bottle	1	
Wire brush	2	
Level	1	
Activated carbon cartridge filter	2	
Underside panel (skirt)	1	
Cover glass holder (24Lx40)	1	For A1 (6500) only
Cover glass holder (24Lx50)	1	For A1 (6500) only
Cover glass holder (24Lx60)	1	For A1 (6500) only
Cover glass holder (24x40)	1	For E2 (6502) and JC2 (6499) only
Cover glass holder (24x50)	1	For E2 (6502) and JC2 (6499) only
Cover glass holder (24x60)	1	For E2 (6502) and JC2 (6499) only
Operating manual (English)	1	For A1 (6500) and E2 (6502) only
Operating manual (Chinese)	1	For JC2 (6499) only
Hazardous substance name and content identification form (China RoHS)	1	For JC2 (6499) only
Operating manual (Japanese)	1	For J0 (6501) only
Warranty and register card	1	For J0 (6501) only
Medical package insert	1	For J0 (6501) only

12-2. Installing accessories

Refer to the Glas g2 Operating Manual to install the various accessories.

12-3. Installing underside panel (skirt)

Refer to the Glas g2 Service Manual, Paragraph 6-5-20-5, to attach the underside panel (skirt).

13. Optional Items

13-1. Connection of exhaust hose set

Refer to the Glas g2 Service Manual, Subsection 9-1, for how to connect the exhaust hose to the instrument.

13-2. Link with the Prisma-series slide stainer

Refer to the Link Manual [AI0-IF-002(ENG)-**] to link the instrument with the Prisma-series slide stainer.

<Caution> To comply with the Regulation (EU) 2017/746, the slide stainer that can be linked to the instrument in the EU market is Tissue-Tek Prisma® Plus only.

13-3. Installation of barcode reader

Refer to the Barcode Reader Installation and Setup Manual (for installation-ready instruments) [AI0-IF-005(ENG)-**] to install the barcode reader on the instrument.