

Ophthalmic Unit Operations Manual

INS-11100



Product introduction

Thank you for purchasing and using the series of INS-11100 ophthalmic unit manufactured by our company. Our company is the professional manufacturer of ophthalmic unit. The company adhere to the business philosophy of "Honesty is foundation, quality is life, and service is soul of the enterprise", we persist in providing the quality remarkable product for the customer's success, and pursue more professional, standardized and humanized service.

INS-11100 series ophthalmic unit is a mature product developed by our company based on the production technology of similar foreign products and according to the needs of domestic users. It has a multifunctional design with European style, and stable is performance , the machine is elegant and graceful in shape, reasonable in structure and convenient in operation.

The INS-11100 adopts square steel frame structure to ensure the overall equipment to be placed firmly. Surface electrostatic spray paint treatment durable; waterproof, moisture-proof, and never deformation.

1. The table-board can be up or down in range of 300mm and rotate horizontally in 360 °, mechanical performance is good and bearing is strong; the table-board can be moved at any point within the semicircle with a radius of 824mm. The size of the table-board can be customized according to the needs of customers. Combination function of the table-board are increased, convenient and agile, Beautiful and durable.
2. The phoropter swing arm can swing up and down in range of $\pm 30^\circ$, the arm can be locked quickly by rotating the handle in range of $20^\circ - 60^\circ$, the operation is convenient and quick.
3. The keratometer arm (client options) can swing up and down in range of $\pm 40^\circ$, the arm can be locked quickly by rotating the handle, the operation is convenient and quick. It has advanced fashion functions.

The INS-11100 series ophthalmic unit is popular among the users because of its unique product performance, Once the product comes out, it has been widely recognized by the society, and now it has been widely used in hospitals and large and medium-sized glasses shops.

Safety warning

△Attention:

1. Before installation and use, please read this manual carefully and install and use the equipment in strict accordance with the operating specifications.
2. Before using the equipment, the grounding wire of the mains socket shall be installed reliably.
3. When installing, moving or disassembling the device, it must be handled with care. Hammering and impact are strictly prohibited. The fasteners should be installed with even and gentle force.
4. The whole machine must be placed smoothly and firmly and avoided load bearing, shaking and other situations. The equipment should be installed in a ventilated, dry and clean place as far as possible.

-
5. In case of equipment failure, please refer to this manual and carry out maintenance under the guidance of professionals. The adjustment of circuit must be carried out by professionals after power failure.
 6. The fuse and working lamp must be replaced according to the original specification and model.
 7. Make sure to use the specified power supply voltage, If too high or too low, will be easy to cause equipment damage.
 8. When the work is finished, the main power supply should be turned off. If the machine is stopped for a long time, the power plug should be pulled out and a dustproof cloth should be put on.
 9. Do not use organic solvent to clean the surface of the equipment, or it will damage the appearance of the equipment.
 10. The chair load can not exceed the maximum bearing value.

Table of Contents

Technical Specifications.....	1
Product parts Description.....	3
Packing List.....	3
Installation Description.....	4
Using Method.....	7
Common Trouble And Solution.....	15
Maintenance service.....	16
Repair guide.....	16
Company product series.....	17

This document is provided as existing products. The company reserves the right to amend or withdraw this document from time to time without prior notice.

Technical Specifications

1. Mechanical Parameters

1. Phoropter swing arm: Swing angle (up and down) $\pm 30^\circ$;
Rotary arm: rotation angle 0° - 300° (Attention! Prevent the end of the slide bar from colliding with the rocker arm);
Up and down moving range: 900mm-1500mm, as shown in figure 01;
Max load: 30kgs.
2. Auto keratometer arm: Swing angle (up and down) $\pm 40^\circ$;
The first rotary arm rotates at an angle 360° ;
The second rotary arm rotates at an angle 0° - 300° (Attention! Prevent the tray from colliding with the rocker arm.);
The tray can be 360° rotation;
Up and down moving range: 780mm-1380mm, as shown in figure 01;
Max load: 30kgs.
3. Projection arm: Angle of rotation for rotary arm 360° ;
The tray can be 360° rotation;
Up and down moving range: 1030mm-1530mm, as shown in figure 01;
Max load: 10kgs.
4. Table size: 350mm x 200mm x 25mm (Can be customized, maximum size is 700mm x 400mm x 40mm);
Max load: 50kg.
5. Table rotational angle: The first rotary arm rotates at an angle 0° - 180° ;
The second rotary arm rotates at an angle 0° - 360° ;
The third rotary arm rotates at an angle 0° - 180° ;
Table-board rotational angle: 360° .
6. Table movement range : Within a semicircle with a radius of 824mm; as shown in figure 02.
Height adjustment range: 716mm-1016mm, as shown in figure 03.

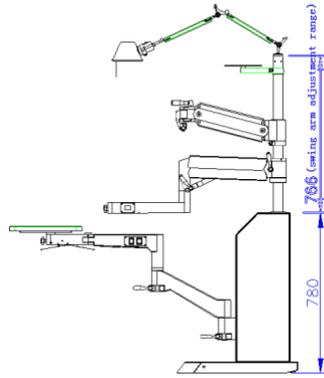


Fig. 01

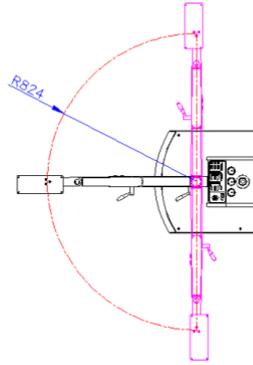


Fig.02

2.Electrical Parameters

- 1.In voltage: 100-120V AC 50Hz/60Hz,
200-240V AC 50Hz/60Hz;
- 2.Output voltage: 100-120V AC 50Hz/60Hz,
200-240V AC 50Hz/60Hz;
2.5V 3.5V 4.5V 5.5V 6.5V 7.5V 12V AC
- 3.Charging voltage: 5V DC;
- 4.Engine power: 28V 1.5A DC;
- 5.Light luminary: 5/16W 24V DC;
- 6.Fuse: 5A 130/250V AC;
- 7.No load power: 1W;
- 8.Pressure test: 2KV;
- 9.Working mode: S1;
- 10.Main wire: 10A 120V/250V;
- 11.Working temperature: - 10^o~ + 40^oC;
- 12.Relative humidity: less than 90%;

3.Installation Dimension

Figure size: 1348mm x 1274mm x 1556mm (No contain table top or lighting) as shown in figure 03

Weight:125kgs

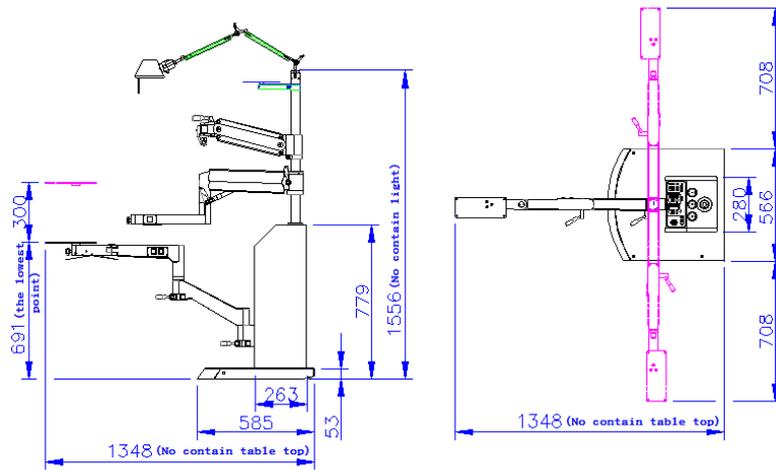
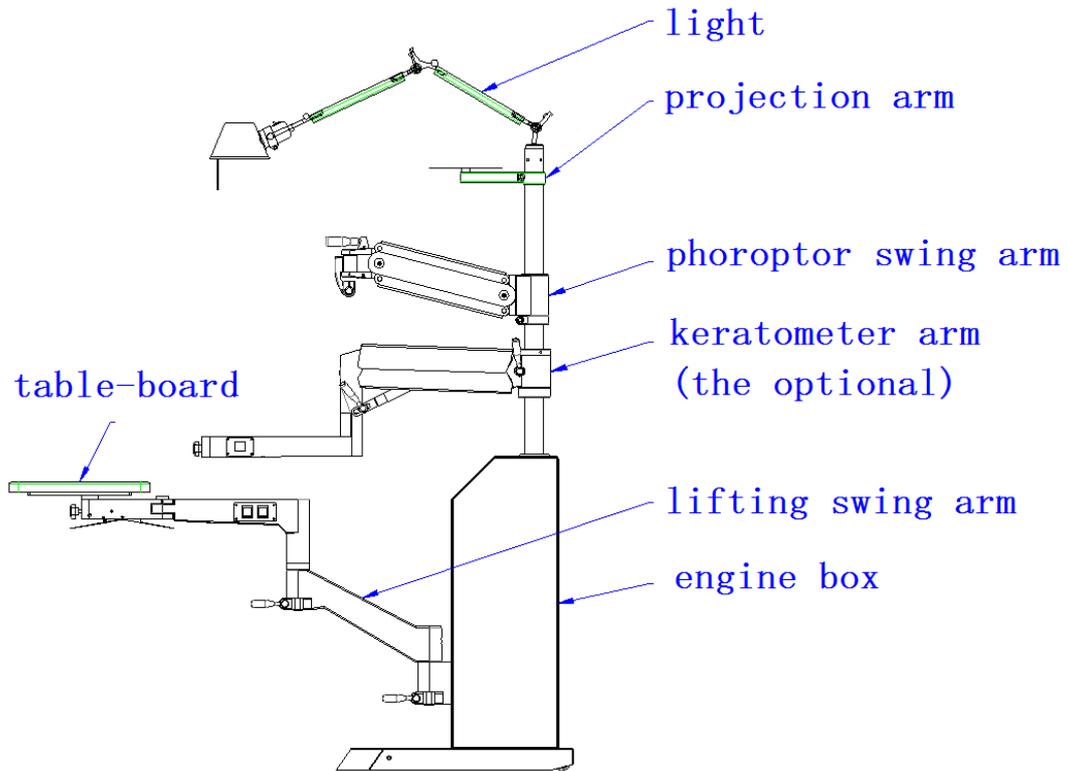


Fig.03

Product parts Description



Packing List

Package of the whole machine: 1pc

Including: Main engine: 1pc

Column assembly: 1pc

Package of the light: 1 boxful (including LED bulbs);

Package of the table-board: 1 pack (customized, optional);

Package of the keratometer arm: 1 boxful (optional)
 Package of the phoropter swing arm: 1 boxful
 (including: phoropter swing arm: 1pc ;
 projection arm: 1 pc;
 power cord: 1 pc
 tool kit: 1 pc
 decorative cover of the column: 1 pc
 user manual: 1 pc)

Note: the tool kit include: one set of Allen wrench, dual-purpose screwdriver, two fuses, four decorative covers for the base, two decorative bolts for the lifting rings and two spare lifting switch.

Name	Packing List		
Package of the whole machine	Package of the phoropter swing arm: 1 boxful	tool kit	Allen wrench: 1 set
		dual-purpose screwdriver	
		decorative cover for the base: 4pcs	
		decorative bolt for the lifting ring: 2pcs	
		fuse: 2pcs	
		spare lifting switch: 2pcs	
	phoropter swing arm: 1pc	projection arm: 1 pc	
	power cord: 1 pc	decorative cover of the column: 1 pc	
	user manual: 1 pc		
	Main engine: 1pc	Column assembly: 1pc	
	Package of the light:1 boxful (including LED bulbs)	Package of the table-board: 1 pack (customized, optional)	
	Package of the keratometer arm: 1 boxful (optional)		

Installation Description

01. Move whole machine packing box to the desired location before opening the packing box.

02. Open the packing box, first read the using manual in detail and check whether the parts, random tools and chair are complete according to the packing list.

Breakage.

03. Remove the protective film and tear down the eight self-tapping bolts of the fixing block on the base of the main engine with a Phillips screwdriver (as shown in

figure 04); two persons stand on either side of the main engine, respectively pull the lifting rope and the back of the base, they apply force evenly together (Attention! Main engine is very heavy). Lift main engine and remove the wood pallets (as shown in figure 05). Carry with care! The engine box is non-load-bearing connection that not to be moved or rely on the box, lifting arm must be the locking state when carried (as shown in figure 06).



Fig.04



Fig.05



Fig.06

04.Remove the eight fixing bolts on the back board of the main engine (as shown in figure 07) with a Phillips screwdriver, and loosen the four bolts on the column assembly (as shown in figure 08). Then insert the column from the column hole on the engine box into the mounting hole of the machine frame (as shown in figure 09), insert four bolts upward from the machine frame and screw the bolts tightly with a Size 6 Allen wrench (as shown in figure 10), then set into the decorative cover of the column from the top of the column (as shown in figure 11).



Fig.07



Fig.08



Fig.09



Fig.10



Fig.11

05.Make the connection wire of the light threading into the hole at the top of the frame (as shown in figure 12) then out from the top of the column and fixed (as shown in figure 13). Install the backboard of the main engine and fix it with the eight countersunk head screws.



Fig.12



Fig.13

06.Engine box carried: stand at the back of the engine box, lightly touch the end of the base with one foot, hold the column with both hands and tilt the engine box 15-30 ° (as shown in figure 14), then the engine box can be easily pushed to the position. Attention!!!! Don't hit your foot.



Fig.14

07. Take out the keratometer arm and put the tail lock sleeve through the upper end of the column (attention! Direction of go through) (as shown in figure 15), and use a size 8 Allen wrench to tighten the bolt (as shown in figure 16); Loosen the nuts on the two handle, install the locking handle and tighten it (as shown in figure 17); Take out the tray from the package, then insert the tray into the axle hole of the forearm (as shown in figure 18); Insert the power plug into the ACC jack at the upper left back of the engine box (as shown in figure 19).



Fig.05



Fig.16



Fig.17



Fig.18



Fig.19

08. Take out the phoropter arm and put the tail lock sleeve through the upper end of the column (Attention! Direction of go through) (as shown in figure 20), and use a size 6 Allen wrench to tighten the locking bolt (as shown in figure 21); Loosen the two bolts of the head, take out the rotary arm shaft assembly of the box and assemble to the head, and use a size 5 Allen wrench to tighten the locking bolt (as shown in figure 22).



Fig.20



Fig.21



Fig.22



09. Insert the projector arm tail lock sleeve through the upper end of the column (Attention! Direction of go through) (As shown in figure 23) and tighten the locking bolt with a Allen wrench (as shown in figure 24); Take out the tray of the box and insert it into the axle hole of the forearm (as shown in figure 25).



Fig.23



Fig.24



Fig.25

10. Remove the packaging of the light, connect the light cable at the top of the column with the light (as shown in figure 26), and then insert the light holder at the top of the column and screw the top wire tightly with a size 3 Allen wrench (as shown in figure 27).



Fig.26



Fig.27

11. Place the level rule on the base and adjust the leveling bolts at the four corners of the base of the main engine with a Phillips screwdriver to level it (as shown in figure 28); Adjustment direction is that clockwise rotation is down, counterclockwise rotation is up; After adjustment, fasten the four decorative buttons in the tool kit (as shown in figure 29).

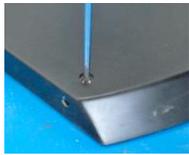


Fig.28



Fig.29

12. After installation and debugging the main engine, insert a screwdriver into the inner hole of the lifting ring and turn it counterclockwise (as shown in figure 30) to remove the lifting ring and the drawstring; Screw in the two decorative buttons in the tool kit (as shown in figure 31).



Fig.30



Fig.31

13. Install the projector on the tray and fixed with prepared screws and connect it to the power supply.

14. Connect the phoroptor to the horizontal slide bar, lock the rotary knob, and then adjust the position of the phoroptor.

15. Put the computer optometry or other related instruments on the workbench surface, and connect the prepared power cord to the socket under the table-board.

16. Power on for trial operation, and test the key functions of the control panel, including chair lifting function, noise, working lamp, computer and projector operation. After no error, install the front cover of the control cabinet of the ophthalmic unit table.

Using Method

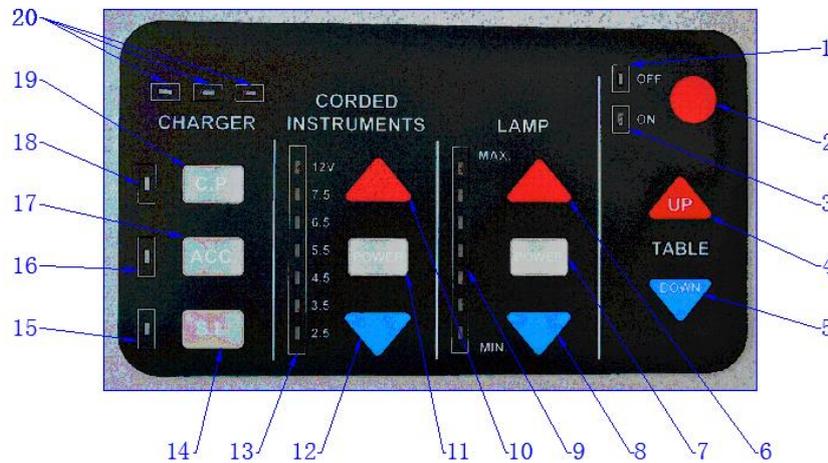
1. Power On And Power Off

01. Power on: after plugging the power cord into the power input socket, connect to the external power (attention! Whether the external power supply is in line with the chair identification power supply). Turn on the main power switch of the main engine (then the power switch indicator light will be on) , then turn on the start switch on the control panel, the ON indicator light is up, and the power will be started.

02. Power off: first, turn off the start switch on the control panel (the OFF indicator

is on), then turn off the main power switch (the power switch indicator is off after turning off); Unplug the power cord when not in use for a long time.

2. Control Panel



Function keys description

- | | | |
|----------------------------------|------------------------------------|----------------------------------|
| 01. Standby indicator light; | 02. Start switch; | 03. Start indicator light; |
| 04. Table arm up; | 05. Table arm down; | 06. Light enhanced; |
| 07. Light switch; | 08. Light weakened; | 09. Strength indicator; |
| 10. Voltage increases; | 11. Voltage switch; | 12. Voltage reduction; |
| 13. Voltage indicator light; | 14. Slit lamp switch; | 15. Electrified indicator light; |
| 16. Electrified indicator light; | 17. Keratometer switch; | 18. Electrified indicator; |
| 19. Projector arm switch; | 20. Charging pile indicator light. | |

3. Power Supply Board

01. Power Supply Board Description

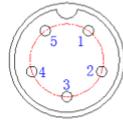


- | | |
|----------------------------------|-------------------------------|
| 01. Power input socket and fuse; | 02. Seat cable socket; |
| 03. Main power switch; | 04. Output power binding post |

02. Chair Socket Description

Reference diagram of five-core aviation plug wiring

DC: 24V



- 1 red motor positive +
- 2 green motor negative -
- 3 black motor falling
- 4 yellow motor collineation
- 5 blue motor raising rising

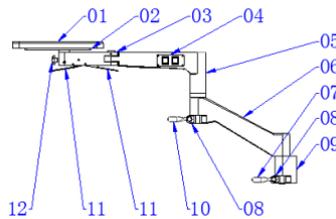
03. Description of output power terminal:

If you need to use the ophthalmofundoscope or ophthalmoscope, insert it into the corresponding socket. When the switch is placed in the middle position, neither socket is powered. When the switch is switched to the power socket of the ophthalmofundoscope, the power socket of the ophthalmofundoscope is powered. When the switch is switched to the power socket of the ophthalmoscope, the power socket of the ophthalmoscope is powered. Optional output voltages respectively are 2.5v, 3.5v, 4.5v, 5.5v, 6.5v, 7.5v, 12V, AC.



4. Lifting Swing Arm Using Method

01. Lifting Swing Arm Parts Description



- 01. Table-board panel;
- 02. Table-board tray;
- 03. Third rotation arm;
- 04. Control panel;
- 05. Second rotation arm;
- 06. First rotation arm;
- 07. Locking handle;
- 08. Locking block;
- 09. rotation arm holder;
- 10. Rotation arm locking handle;
- 11. Anti-pinch contact plate;
- 12. Table-board panel locking handle.

02. Lifting Swing Arm Control Panel Description



The left side of the lifting swing arm control panel is the (TABLE) lifting switch, and

the right side is the (CHAIR) lifting switch. Pressing (-) key is up(UP), and pressing (=) key is down(DOWN).

03. Lifting Swing Arm Using Description

1) The axial rotation of the first swing arm on the arm holder will be locked by rotating the locking handle clockwise, the axial rotation of the first swing arm on the arm holder will be unlocked by rotating the locking handle counterclockwise. The arm can do axial rotation on the swing holder (0 ° to 180 °).

2) The axial rotation of the second swing arm on the first arm will be locked by rotating the locking handle clockwise, the axial rotation of the second swing arm on the first arm will be unlocked by rotating the locking handle counterclockwise. (0 ° to 360 ° and don't spin, so as not to damage the internal cable).

3) The right side installation of the lifting swing arm control panel can be changed to the left side according to customer requirements; The specific operation is to remove the eight fixing screws on the control board and the decorative board on the other side with a Phillips screwdriver (as shown in figure 30), remove the connecting plug on back of the control panel, turn around the control panel to install on the other side of the second swing arm (UP is upward) and insert the removed plug, and install the control panel and the decorative board with the fixing bolt.

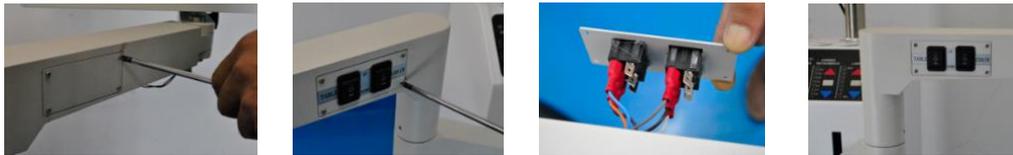


Fig.30

4) There is a power socket(S.L) under the second swing arm near the third swing arm, remove the four fixing screws on the power decorative panel with a Phillips screwdriver (as shown in figure 31) and you will see it. After that the power plug of the slip lamp is inserted into the power socket, install the removed decorative panel again.



Fig.31

5) After the third swing arm is adjusted to a proper height, lock the locking top wire on the second swing arm by clockwise rotation with a size 3 Allen wrench (it can be tightened appropriately according to the practical usage habits of users to increase certain damping effect). (as shown in figure 32)



Fig.32

6) Turn the table-board panel to do axial rotation, turn the panel to the corresponding position and then turn the locking handle of the table-board panel clockwise to tighten it. Rotating the locking handle of the table-board panel counterclockwise can unlock it.

7) The table-board can do 360 °axial rotation, and can be increased the spacing device according to the customer's demand.

04.Lifting Swing Arm Trouble And Solution

1) The lifting swing arm cannot be up or down:

- a. Whether the power supply and the start switch of the control panel is switched on;
- b. Check whether the fuse is in good condition;
- c. Whether the lifting switch on the control panel is working;
- d. Check whether the clamping contact plate is stuck or the micro switch is damaged;
- e. Check whether the connection-peg on the back of the control panel switch of the lifting swing arm is loose or the lifting switch is damaged;
- f. Check whether the connection-peg between the lifting motor and the main circuit board is loose;
- g. Check whether the lifting motor works normally;
- h. Check whether the main circuit board is damaged.

2) The chair cannot be up or down:

- a. Whether the power supply is switched on and whether the starting switch of the control panel is switched on;
- b. Check whether the fuse is in good condition;
- c. Check whether the chair cable is plugged in properly;
- d. Check whether the clamping contact plate is stuck or the micro switch is damaged;
- e. Check whether the connection-peg behind the control panel switch of the lifting swing arm is loose or the lifting switch is damaged;

- f. Check whether the connection-peg between the chair motor and the main circuit board is loose;
- g. Check whether the motor works normally;

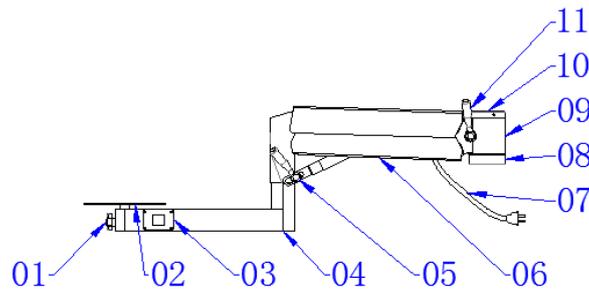
h. Check whether the main circuit board is damaged.

3). Maintenance: when the locking handle and locking handle of swing arm are not turned smoothly, unscrew the handle counterclockwise, clean the thread with alcohol or kerosene and then apply a layer of grease on the locking holder.

Attention! When adjusting the second swing arm of the lifting swing arm, don't spin it in order to avoid damaging the internal cable.

5.Keratometer Swing Arm Using Method(The Optional)

01. Keratometer Swing Arm Parts Description



- | | | |
|---------------------------|-----------------------------|----------------------|
| 01. Table locking handle; | 02. Table tray; | 03. Power socket; |
| 04. Second swing arm; | 05. Locking handle; | 06. First swing arm; |
| 07. Power cord; | 08. Locking sleeve; | 09. Spindle sleeve; |
| 10. Adjustment nut; | 11. Spindle locking handle; | |

02. Keratometer Swing Arm Using Description

1) Hold keratometer swing arm by hands, and loosen the locking bolt of the spindle by counterclockwise rotation with a Allen wrench, and hold it to a proper position and then tighten the bolt clockwise.

2) Adjust the force of the swing arm of the keratometer swing arm in the axial rotation of the column, and loosen the two top threads of the adjusting nut by counterclockwise rotation with a size2 Allen wrench; Clockwise rotation adjusting nut is locked, axial rotation force becomes heavy; Counterclockwise rotation adjusting nut is loosened, axial rotation force becomes light; Customers can adjust according to their own use, and then tighten the two top threads of the adjusting nut again.

3) Turn the spindle locking handle clockwise to lock the axial rotation of the keratometer swing arm in the column, and turn the spindle locking handle counterclockwise to unlock the axial rotation of the keratometer swing arm in the column.

12

4) Turn the locking handle counterclockwise to unlock, can make the keratometer swing arm swinging downward between 0 ° to 60 ° to adjust to a suitable location, turn the locking handle clockwise to lock (20 ° to 60 ° rotation can lock) bobbing up and down is locked.

5) put the keratometer on the tray and fix it with bolts.

6) Rotate the tray to adjust the Angle of the keratometer, and then rotate the locking handle of the table clockwise to lock, and rotate the locking handle of the table counterclockwise to unlock; Insert the power cord of the keratometer into the power socket on the second arm.

03.Keratometer Swing Arm Trouble And Solution

1)The keratometer is out of power:

- a. Whether the power supply and the start switch of the control panel is switched on;
- b. Check whether the fuse is in good condition;
- c. Whether the ACC switch on the control panel is on;
- d. Whether the ACC plug at the back of the engine box is loose;
- e. Whether the plug on the second swing arm is loose;
- f. Open the power board on the second swing arm with a screwdriver to check whether the plug wiring is loose after the socket;
- g. Check whether the main circuit board is damaged.

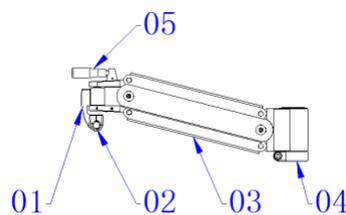
2) If the swing arm of the keratometer is drooping, the black access cover on the rocker arm can be turned up with a slotted screwdriver, drill the slotted screwdriver into the access port and adjust the bolts, turn it clockwise can raise the arm, and counterclockwise can make it down.

3) Maintenance: when the locking handle and locking handle of swing arm are not turned smoothly, unscrew the handle counterclockwise, clean the thread with alcohol or kerosene and then apply a layer of grease on the locking holder.

Attention! When adjusting the height of the keratometer swing arm, first remove the keratometer and hold the swing arm, and loosen the locking bolt of the spindle for 4/5 circle to slowly adjust, and avoid the damage of personnel and equipment caused by sudden slide.

6.Phoroceptor Arm Using Method

01.Phoroceptor Arm Parts Description



13

- | | | |
|---------------------|-----------------------------|----------------|
| 01. Rotation arm; | 02. Horizontal sliding rod; | 03. Swing arm; |
| 04. Locking sleeve; | 05. Locking handle; | |

02.Phoroceptor Swing Arm Using Description

1) Hold the phoroceptor swing arm by hand, and use a size 6 Allen wrench to loosen the locking bolt of the spindle by counterclockwise rotation. Hold it to a proper position

and then screw the bolt tightly clockwise. (Attention! The anti-release bolt on the lock sleeve cannot be loosened to avoid the damage of personnel and equipment caused by the sliding of the lock sleeve.

2) remove the bolts on the horizontal slide bar, install the removed bolts again and fix the phoroceptor.

3) Loosen the top wire of the horizontal slide bar behind the rotation arm by counterclockwise rotation of a size2 Allen wrench, and then adjust the protrusive length of the horizontal slide bar. After adjustment, tighten the top wire clockwise to lock the horizontal slide bar.

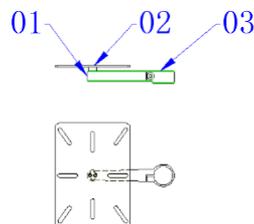
4) Turn the locking handle counterclockwise to unlock (Attention! When turn the locking handle , it may collide with swing arm, avoid clamping hands), pressing down the locking handle can make phoroceptor swing arm turning down between 0 ° to 60 ° , or along the column axial rotation. After adjusted to a suitable location, turn the locking handle clockwise to lock (20 ° to 60 ° rotation can lock) ,swinging up and down and axial rotation all can be locked up.

03. Phoroceptor Swing Arm Trouble And Solution

Attention! When adjusting the height of the phoroceptor swing arm, first remove the phoroceptor and hold the swing arm, and loosen the locking bolt of the spindle for 4/5 circle to slowly adjust, and avoid the damage of personnel and equipment caused by sudden slide.

7.Projector Arm Using Method

01.Projector Arm Parts Description



01.Tray locking top thread

02.Tray

03. Projector arm

02. Projector Arm Using Description

1) Hold the projection arm by hands, and loosen the locking bolt of the spindle by counterclockwise rotation of a size 5 Allen wrench. Hold it to a proper position and then tighten the bolt clockwise.

14

2) Put the projector on the tray and fix it with bolts.

3) Rotate the tray to adjust the Angle of the projector, and then use a size 2 Allen wrench to turn it clockwise to tighten the locking top thread.

Attention! When adjusting the height of the projector arm, must hold the arm, and loosen the locking bolt of the spindle for 4/5 circle to slowly adjust, and avoid the damage of personnel and equipment caused by sudden slide.

Trouble And Solution

Trouble Phenomenon	Trouble Cause	Maintenance And Repair Method
The indicator light doesn't work after starting up.	Fuse blow	Check and change
	The plug is not properly plugged in	Insert the plug
	Socket without power (no mains power)	Test confirmed
The indicator light is on after starting up(power on), but doesn't work	Bad contact of plug	Check circuit and solution
The machine is powered on (power supply, control panel), but doesn't work.	Control panel is broken	Check and change
	The voltage does not conform to the regulations	Test confirmed
The projector is out of power	The power cord of the projector is wrongly connected	Check circuit and solution
	The power cord of the projector is short-circuited	Change the power cord
The working table is out of power	Circuit connection error	Check circuit and solution
	Interface is loose	Plug again
The limit switch of the chair under the working table is powerless.	Switch is broken	Change the switch
	Circuit connection error	Check circuit and solution
The chair only goes down not up.	The chair rising limit switch under the countertop is broken.	Change
The light doesn't work.	The lamp tube burnt out	Change the lamp tube
	Circuit connection error	Check circuit and solution

Check the above phenomenon, if still unable to work, please contact the factory or the Repair service store, please let professional personnel to maintenance equipment or change parts.

Maintenance service

Do not try to repair the machine by yourself, after the cover is opened, you will face electric shock and other dangers!!! Please let professional maintenance personnel to repair.

Under the following circumstances, please unplug the power plug from the power socket, and please professional maintenance personnel for repair.

1. Damaged power cord or plug.
2. Liquid splashes on the fuselage or foreign objects fall into the aircraft.
3. The machine is exposed to rain or water.
4. The machine is dropped or damaged.
5. In case of abnormal conditions of the machine.

Repair guide

Repair telephone: 0316-6067208

Step 1: make a call detailing the problem

Step 2: mail the defective machine to our company

Step 3: repair and send it back to the user

Step 4: call back

Ophthalmic Chair

Model: INS-11102



Features

- High quality cushion & superior furnishing of chair gives maximum comfort to patient during examination
- Fully motorize chair operated by Foot switch for Up, Down movement. And it can smoothly lift up and down with low noise and able to bear big force.

Specification

Angle of rotation for chair: $\pm 60^\circ$

Lifting height for chair: 150~200mm

Loading for chair: 150kgs (electric)

Lifting height for pillow: +150mm (52---67cm)

Backrest obliquity: $90^\circ \sim 135^\circ$ or 140°

Figure size: 700mm×900mm×1400mm

Weight: EC-100 / 60kgs