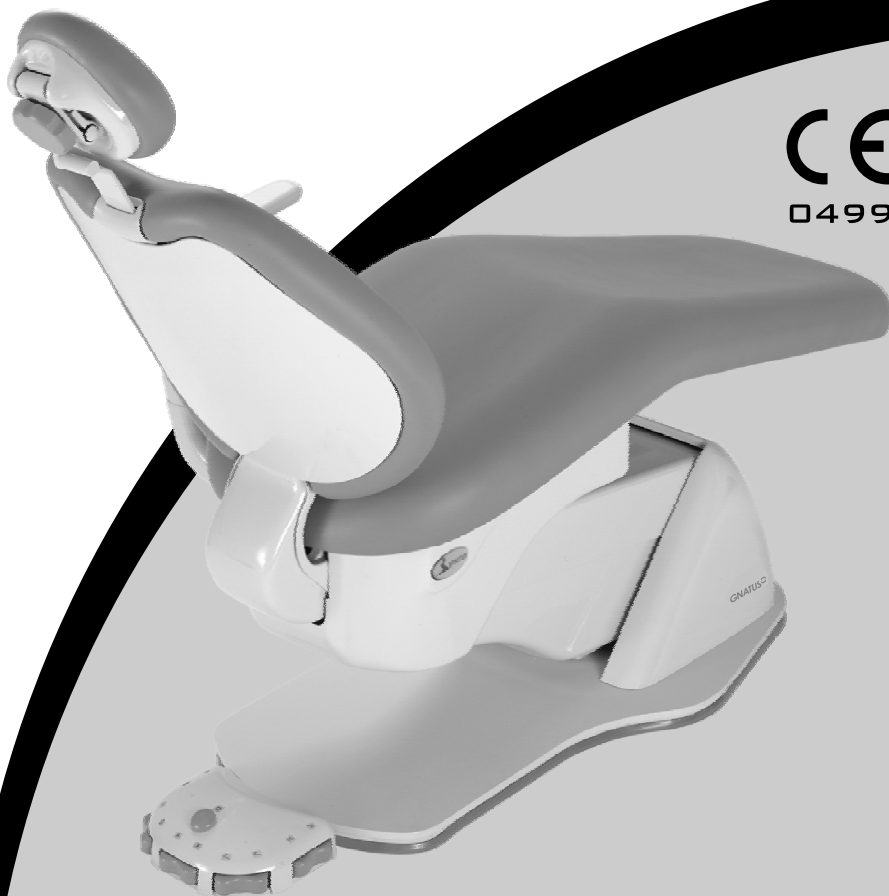


Manual do Proprietário

Owner's Manual

Manual del Propietario



CE
0499

Cadeira Syncrus GLX
Syncrus GLX Dental Chair
Sillón Syncrus GLX
Cód.: 300043670 Rev. 06

GNATUS 

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DEAR CUSTOMER

Congratulations. You have made a good choice when you decided to buy a GNATUS QUALITY product comparable to the best products available in the World. This manual is a general presentation of your product and it will give you important details to help you to solve possible problems.

Please, read it and keep this with you.

PRODUCT DESCRIPTION

Dental chair to accept patient during treatments odontological, with automatic movements, used to work with – position left and right-handed professionals, it starting by a motor DC with soft start.

Operated by foot control (this component may be mobile or fixed to base), which many function in the controls and it work with dental light intensity, seat and backrest movements, return to initial position, emergency stopping, return to last position, spitting position and two programmable work positions which are set by the dentist.

It is innovative and modern round-edged design. It curved of the backrest, which improves for patient with high comfort but produce also approach of the doctor.

The movements are synchronized about the seat and backrest, improving patient high comfort. When the stopped movement in the backrest descent course, the patient will be in the Trendeleburg position (legs and pelvis are located in a higher position than thorax and head).

This equipment is accept of the safety component for preventing security device in the foot.

Ergonomically designed steel base, protected by an anti-slip material.

Steel-built structure with a resistant, smooth, high-shine, round-edged coating.

It High-shine smooth epoxy coating, polymerized in stove at 250°C, with phosphate process resistant to rust and cleaning products.

The headrest is Bi-articulated anatomic removable with height adjustment, featuring front, rear and longitudinal movements. Optional cervical rest, which improves high patient comfort.

Round edged fixed armrest, designed to ease the patient access and improve the dentist productivity, avoiding unnecessary movements and making cleaning and disinfections much easier.

Optional second armrest, with side opening, designed to ease the patient's access.

Ample seamless upholstery, with lumbar rest, mounted on a rigid structure covered with a high-resistant polyurethane cover, this coverage use material plastic and seamless upholstery. Removable Backrest, easy operating the Easy-Fix system, which allows easy removal, cleaning and disinfections.

The seat fixed in the tubular structure, it is easy maintenance and cleaning .

ISO 9001/2000 and ISO 13485/2003 Quality System, assuryng the products are manufactured under standart procedures.

Products manufactured in agreement with RDC 59 - ANVISA - (Sanitary Surveillance National Agency) - with guarantees accomplishment hole to the sanitary legislation and according to BPF - (Good Manufacturing Procedures), requested by Mercosul Sanitary authorities.

In order to comply with directive 93/42/EEC for CE Mark purpose, it is defined that the working life of metallic structure this product is estimated in 10 years (life-cycle) provided that the end-user follows the requirements and instructions of this manual.

IMPORTANT:

- This equipment is for dental use use only. It must be operated and utilized by specialized professional (certified professional, according to the legislation of the country) and following the instructions of the manual. The operation of the equipment required, for the professional, the utilization of correct instruments and it should to be in perfect conditions of the use, and to protect the professional, the patients and others, in the eventual danger situation.

- This equipment can't be used in the presence of inflammable anesthetics or products that may cause explosion.

- After finish life-cycle of the equipment, this equipment is throw way, so it should to be destroyed in appropriate area (according to the legislation of the country).

- To guarantee the safe functioning of your equipment, use only the assemble configurations (Dental Chair, Dental and Water Units and Dental Light) supplied by Gnatus authorized Dealers / Technical Assistance.

WARRANTY OF THE EQUIPMENT

This warranty covers product's manufacturing faults for the warranty period and standards specified on the Warranty Certificate. The Warranty Certificate is attached to product, and must be completed by the authorized technician when equipment is installed.

Doubts and information: GNATUS Call center (55-16) 2102-5000.

GENERAL DATA

Removable foot control

Chair features a removable foot control, which can be used loose or fixed to the chair base.

When the equipment is installed in your office, you can choose the most suitable position, and if you change your mind, you have only to call the Gnatus authorized technician.

Chair for left and right-handed dentists use

Chair was designed for easy installation for left and right handed users, without losing its features.

When the Gnatus authorized technician installs the equipment, tell him whether position you want, and he will make the necessary adjustments. Among the advantages of this design, pedal functions stand out, which easily adapts to the chosen position (see page 19).

Soft start

The chair features a soft start device for seat and backrest up-down movements. These device provides comfort to the patient, because equipment is set in motion slowly and it also increases the motor's life.

Emergency stop

An "emergency stop" key is provided. When pressed, all functions and movements are automatically interrupted. When pressed again, unit returns to operation, keeping the programming and positions previously preset (see page 19).

Bump preventing device

Always having in mind the dentist's security, we developed the leg bump preventing device. When the chair were descending, any obstruction below the chair would trigger this device, interrupting all functions and preventing further complications (see page 20)

Electronic board with reversion of voltage

The board of electronic circuit allows the connection in any tension of entry 127V~ or 220V~ 50/60Hz through the reversion of the internal key.

Current surge protection

Equipment is protected from current surge by 2 fuses of 8 amperes each and it also features internal current surge protection for equipment attached to chair.

Electronic system

Chair features a low-voltage electronic system (24 volts) which allows complete interface with Gnatus reflectors, equipment and electronic water units, not only providing security to both patient and dentist but also extending the components life.

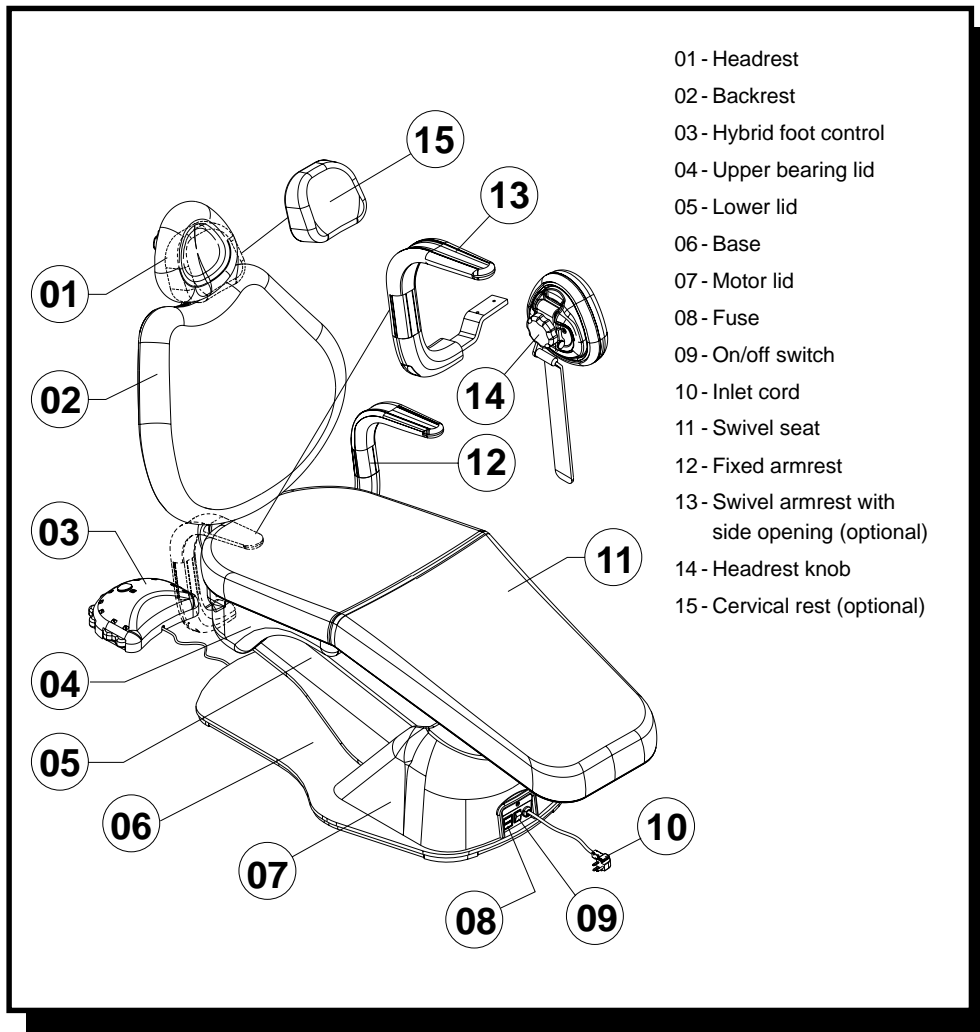
Maintenance of the equipment

The equipment doesn't need preventive maintenance, however when there is any problem that this manual can't solve, ask for an authorized Gnatus technician.

GENERAL DATA

List of pieces and circuit scheme

Gnatus Company declares that the supply of the circuit scheme, list of pieces or any other information that propitiates technical attendance for the user, can be requested if there is an agreement between the user and Gnatus Company.



TECHNICAL SPECIFICATIONS

| NOMINAL TENSION | FREQUENCY | CONSUMPTION | POWER |
|-----------------|-----------|-------------|-------|
| 127V~ | 60Hz | 4,2A | 530VA |
| 220V~ | 60Hz | 2,4A | 530VA |
| 220V~ | 50Hz | 2,4A | 530VA |

- **Product classification:**
According to norm NBR IEC 60601-1
- **Supply voltage**
127/220 V~ (manual selection)
- **Frequency**
50/60 Hz
- **Electric shock protection type:**
Class one equipment.
- **Degree of protection against electric shock:**
B type
- **Operation way**
Continuous with intermittent load: T-on 1min. - T-off 4min.
- **Water leak protection**
IPX0 – All the chair, excepting foot control
IPX1 – foot control
- **Power**
See table above
- **Protection fuses**
F1 e F28A - Time-lag
- **Rising capacity**
200 Kg
- **Delivery unit tray's maximum load capacity**
Syncrus line H - 1 Kg
Syncrus lines GL and L - 2 Kg
- **Net Weight**
115 Kg
- **Gross Weight**
154 Kg

• Electromagnetic compatibility

This product was tested and approved in compliance with the following standards:

- | | | |
|--------------------------------|--------------------------------|------------------------|
| EN 60601-1 (1990); | NBR IEC 601-1 (1994); | IEC 61000-4-2 (1999); |
| Amendment 1 EN 60601-1 (1992); | Emenda 1 NBR IEC 601-1 (1994); | IEC 61000-4-3 (1998); |
| Amendment 2 EN 60601-1 (1995); | (1994); | IEC 61000-4-4 (1995); |
| Amendment 3 EN 60601-1 (1995); | NBR IEC 601-1-2 (1997); | IEC 61000-4-5 (1995); |
| EN 60601-1-2 (2001); | CISPR 11, edição 3.1 (1999); | IEC 61000-4-6 (1996); |
| | | IEC 61000-4-11 (1996); |

Special providence or particular conditions for installation

- Check the electric net, it must be compatible with the specified one in the equipment.
- Verify the thread earth, it must be turned off correctly.
- Verify the general key of the equipment in the position "0".

OBS: These information also make part of the Manual of Installation and Maintenance of the equipment that can be found with the authorized Gnatius technician.

Transport and storage conditions

The equipment must be transported and stored with the following observations:

- Carefully, should not suffer drop and neither receive impact.
- With the side of the arrow upward.
- With humidity protection, not to expose to rains, sparkling of water or humidified floor.
- With temperatures from -12°C to 50°C.
- With maximum piling up of 04 units for storage (DENTAL CHAIR).
- With maximum piling up of 07 units for storage (UPHOLSTERY).

Standards

This equipment was designed, manufactured and tested in compliance with the following standards:
 NBR-IEC série 601-1 Equipamento Eletromédico - Parte 1: Prescrições gerais para segurança;
 NBR ISO 6875:1998 - Equipamento odontológico – Cadeira odontológica de paciente;
 EN 980:2003 (Ed. 2) - Graphical symbols for use in the labelling of medical devices;
 ISO 14971 - Medical devices - application of risk management medical devices;
 ISO 9687: 1993 - Dental equipment - graphical symbols;
 ISO 13485-2 - Quality systems - medical devices;
 ISO 780 - Packaging - pictorial marking for handling goods.

English

TECHNICAL SPECIFICATIONS

Product symbols



It determines the work position "1".



It determines the work position "2".



Lift seat.



Lower seat.



Lift backrest.



Lower backrest.



It determines the initial position.



It determines to spitting position / last position.



Activation of the dental light (high density).



Activation of the dental light (low density).



Emergency stop



Turned off position



B type equipment



Turned on position



Landing (in many parts of the equipment) indicates the condition of being landed.



Warning - Consult the manual

Packing symbols



The packing must be stored and transported away from direct sun light exposure.



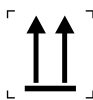
Temperature limit for the packing to be stored or transported.



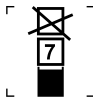
Packing to be transported and / or stored avoiding humidity, rains and wet floor.



Packing (dental chair) to be stored with a maximum stack of 4 units.



Packing to be transported and / or stored with the harrows up.






Packing (upholstery) to be stored with a maximum stack of 7 units.



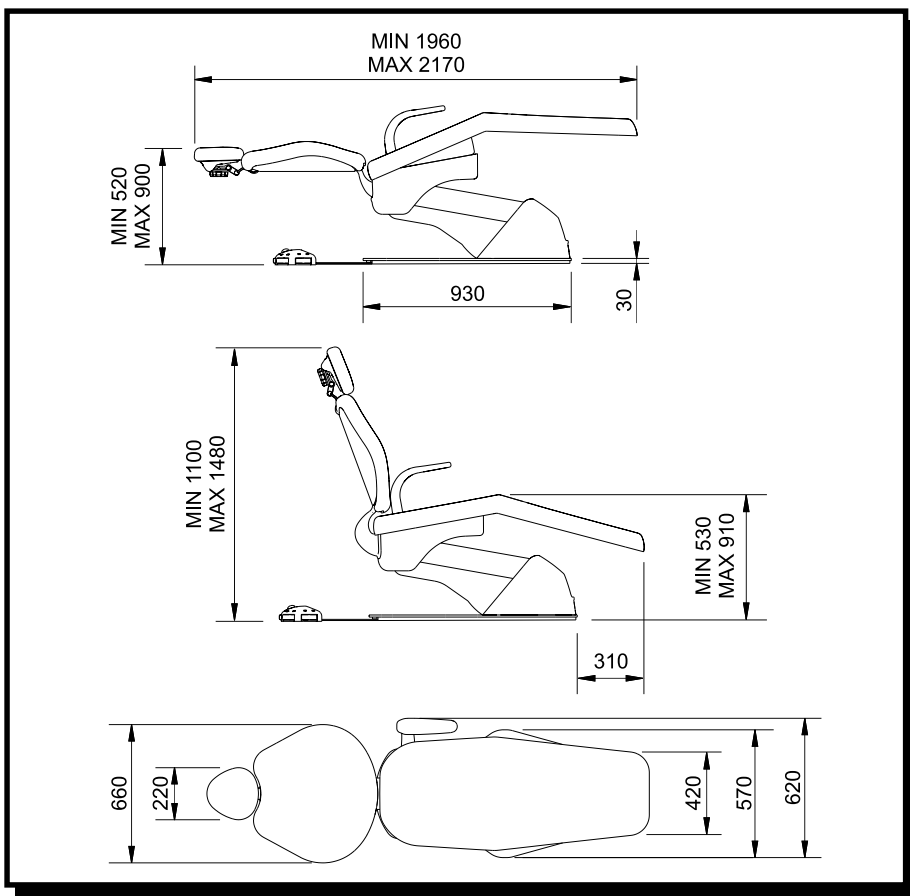
Packing to be transported and / or stored with care (should not suffer drop and neither receive impact).

TECHNICAL SPECIFICATIONS

Content of accessible and non-accessible demarcations

| | | | | | | | | |
|--|-----------|---------|--|------------------------------------|----------------------------------|---|---------------|-----------------------|
| FABRICANTE E RESPONSÁVEL PELA GARANTIA | | | MANUFACTURER AND RESPONSIBLE FOR THE WARRANTY | | | FABRICANTE Y RESPONSABLE POR LA GARANTIA | | |
| GNATUS | | | GNATUS EQUIPAMENTOS MÉDICO-ODONTOLÓGICOS LTDA. Rod. Abrão Assed, Km 53+450m - Ribeirão Preto - SP - Brasil | | | | | |
| APARELHO | EQUIPMENT | APARATO | OPERAÇÃO | OPERATION | OPERACION | FUSÍVEL | FUSE | FUSIBLE |
| | | | Contínuo, com carga intermitente | Continuous, with intermittent load | Continuo, con carga intermitente | 8A - AÇÃO RETARDADA | 8A - TIME-LAG | 8A - ACCIÓN RETARDADA |
| | | | T, ON: 1 min.-T, OFF 4 min. | | | | | |
| NUM. REG. MS: | | | | | | EQUIPAMENTO DE CLASSE I | | POT. - POWER |
| Authorized representative with regards to the Directive 93/42/EEC in the European Economic Area: Mr. Albert Leuthenmayr, Jacobo Klar Street 08, DE-80796 Muenchen, Germany, Phone (0049) 89 27273174 - Fax(0049) 89 2720948, e-mail albert.leuthenmayr@lamay.de | | | | | | CLASS I EQUIPMENT | | 530 VA |
| | | | | | | EQUIPAMIENTO DE CLASSE I | | |
| | | | | | |    | | |
| | | | | | | 0499 | | |

Dimensions (mm)



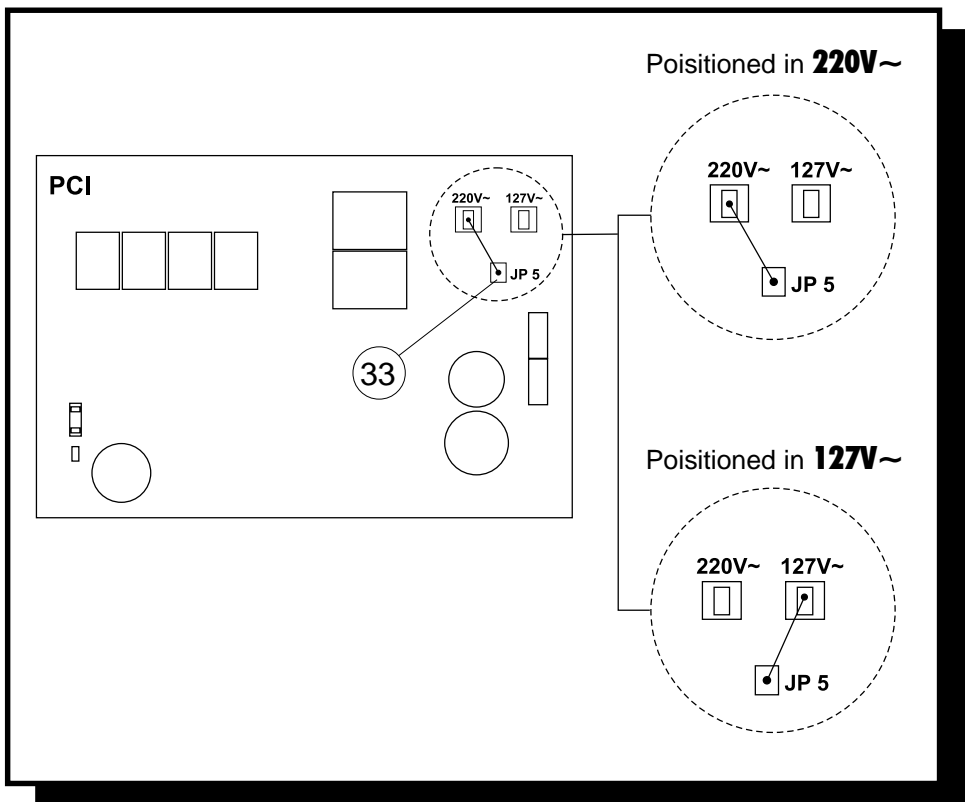
English

OPERATION

For your safety, Syncru GLX Dental Chair leaves the plant with a feed tension adjusted in 220V~, therefore, be sure that your electrical net is compatible before connecting it. In case the tension is 127V~, please invert the position as per the procedure below.

Reversion of voltage

- 1 - Disconnect the general key of the chair.
- 2 - Remove the finishing cover of the motor.
- 3 - Localize the Electronic Board, removing the protective cover .
- 4 - Put the Jumper (33) according to the voltage of the local electric net (127V~ - 220V~)
- 5 - After doing the operation, assembly the covers and turn-on again the equipment to the electrical net.



ATTENTION: Do not do the voltage inversion with the equipment turned-on.

OPERATION

Foot control operation

- 16 - Work position 1.
- 17 - Work position 2.
- 18 - Last position / Spitting position.
- 19 - Initial position.
- 20 - Dental light operation (Low intensity).
- 21 - Emergency stop.
- 22 - Dental light operation (High intensity).
- 23 - Lift backrest.
- 24 - Lower backrest.
- 25 - Lift seat.
- 26 - Lower seat.
- 34 - Emergency Led.

Warning:

When the key "Last position/ Spitting position" (18) is pressed, the dental light will go off (if it was on), the bowl will drain (for the preset time, and if it was not programmed yet, for four minutes) and the backrest will go up to the spitting position. When pressed again, the backrest will return to the last position and the dental light will go on (if it was on).

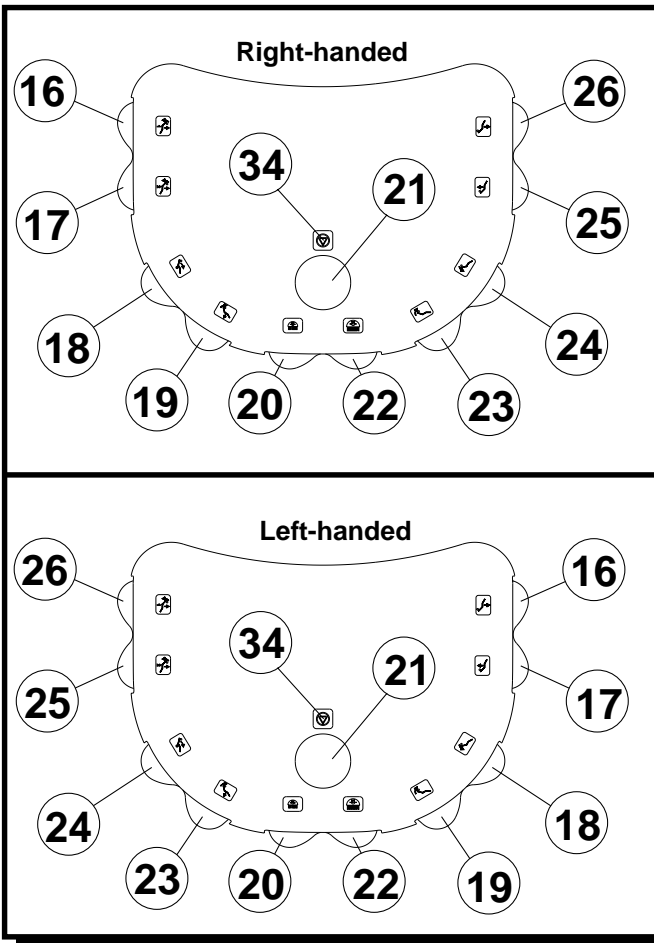
When the key "Initial position" (19) is pressed, the dental light will go off (if it was on), the bowl will drain (for the preset time, and if it was not programmed yet, for four minutes) and the backrest will go up and the set will go down.

To switch the dental light on, press the key (20) or (22), according to desired intensity, to change intensity just press the other key. To switch it off, press the key again.

After pressing the "Initial position" (19) key or the "Last position/Spitting position" (18) key, any other operation will trigger the "Stop", and automatically the backrest current position will be defined as "Last position".

When the "Emergency stop" (21) key is pressed, the LED (34) will be on and all chair movements are interrupted until pressed again. This operation does not erase previously recorded positions and programming. We recommend its use during long surgical procedures, because all chair movements are blocked, thus preventing unexpected movements.

The Syncrus chair features two programmable working positions. Just move the chair to the desired position and press the button "1" (16) or "2" (17) for 3 seconds (you'll hear a long beep).



OPERATION

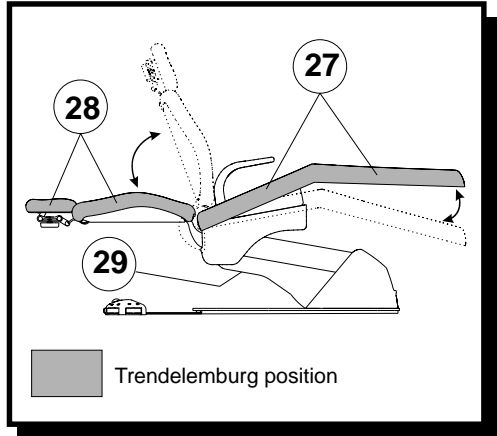
Backrest/seat simultaneous movement - Trendelenburg position

When lowering or rising backrest, the seat automatically moves, improving the patient's comfort.

At the backrest lowest position the patient can lie down in the Trendelenburg position - legs and pelvis (27) are located in a higher position than thorax and head (28).

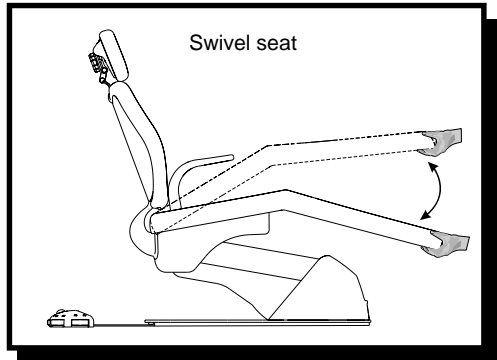
Bump preventing device

The Syncrus GLX chair features a leg bump preventing device (29). When the chair was descending, any obstruction below the chair would trigger this function, interrupting all movements and preventing further complications.



Swivel seat

The Syncrus GLX chair can swivel, thus making cleaning and disinfection easy. To move it, hold the seat end as shown in picture.



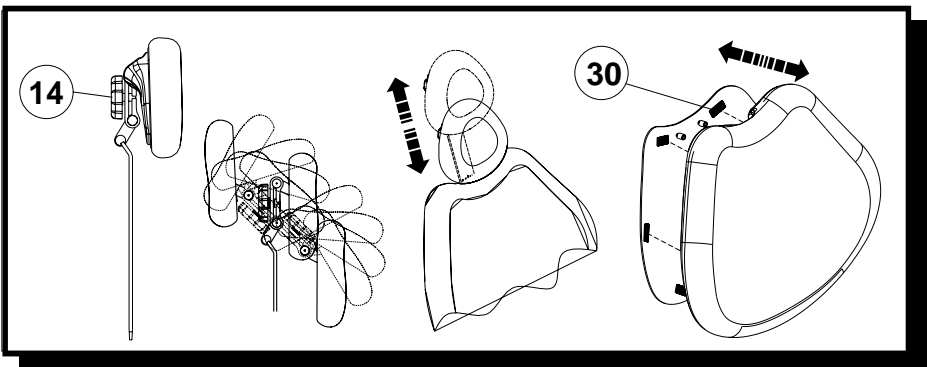
Headrest

To move the headrest, loose knob (14), turn it anticlockwise until desired position is reached and fix it turning it clockwise.

To adjust height just move it vertically.

Backrest

Backrest's upholstery is removable thanks to the Easy-fix system (30). To remove it, just pull. To place it again, find the correct position and push, fixing the upholstery to the backrest.




MAINTENANCE

Recommendations for the dental equipment maintenance.

Your Gnatus equipment has been designed and developed according to the standards of modern technology. Similarly to other kinds of equipment, it requires special care, which is many times neglected due to several reasons and circumstances.

Therefore, here are some important reminders for your daily routine. Try to follow these simple rules, which will save you a lot of time and will avoid unnecessary expenses once they start making part of your working procedure.

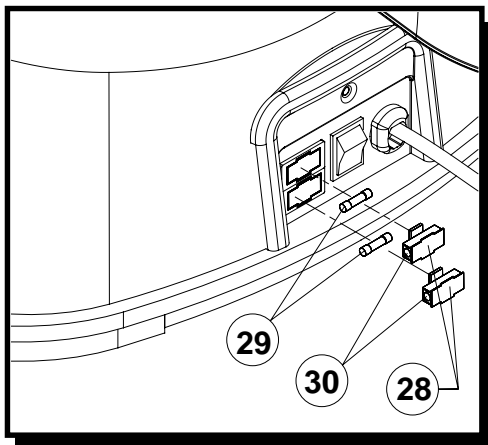
Precautions

-  Certify the correct voltage when you switch on your apparatus at the electricity.
- Install your apparatus on a proper place protected by solar rays and humidity.
- When moving the chair, never get it for the part of the support of the legs, lift it for the structure in the area of the seat.
- The plastic parts can't be in contact with most chemical substances used in dentistry treatments, i.e. acids, mercury, acrylic liquids, amalgams, etc.
- Whenever off duty turn off the main switch.

Replacing the fuse

With the aid of a screw-driver, loosen the fuse holder cover (28) and then replace the Fuse (29) to the spare fuse (30).

Note: The spare fuse (30) comes with the equipment, after making the first change it is advisable that there always be a spare fuse (8A) see pag. 17.



English

Cleaning of the equipment

To effect the cleanness of your equipment, we recommend the use of one clean cloth, wettish with water and neutral soap.

ATTENTION:

Do not utilize another chemical products for cleanness, with alcohol contents, solvents, etc. these componetes can damage the equipment.

TROUBLESHOOTING

| Problem: | Probable Cause: | Solution: |
|---|---|---|
| <ul style="list-style-type: none">- Chair is not working. | <ul style="list-style-type: none">- Bump preventing device triggered.- "Emergency stop" key pressed.- Plug disconnected from socket.- Power cut.- Main switch is off.- Burned fuse(s). | <ul style="list-style-type: none">- Release bump preventing device.- Press the "emergency stop" key again.- Connect plug to socket. - Wait until power is back.- Switch the main switch on.- Replace fuse(s) |

ATTENTION:

Any other problem that could happen with its equipment, should only be repaired by an authorized technician Gnatus.

The bad use, negligence or maintenance not made by technician authorized by the maker, will imply in the loss of the warranty.

FINAL CONSIDERATIONS

The most important aspect related to equipment care is that concerning spare parts.

To guarantee the life span of your equipment, use only **original Gnatus spare parts**. They are sure to follow the technical specifications and standards required by Gnatus.

We must also point out to you our chain of authorized dealers. Only dealers that make part of this chain will be able to keep your equipment constantly new for they count on technical assistants who have been trained and on specific tools for the correct maintenance of your equipment.

Doubts and information: GNATUS Call center (55-16) 2102-5000.

Este produto atende aos requisitos da diretiva 93/42/EEC (com marcação CE).
This equipment is in accordance with requirements of directive 93/42/EEC (with CE mark).
Este producto atiende a los requisitos de la directiva 93/42/EEC (con la marca CE).

Authorized representative with regards to the Directive - 93/42/EEC in the European Economic Area:
Mr. Albert Leuthenmayr Jacob, Klar Street 08, DE-80796 Muenchen, Germany
Phone (0049) 89 27273174 - Fax (0049) 89 2720948 - E-mail albert.leuthenmayr@lamay.de

NUM. REG. MS: 10229030022

Fabricante: / Manufacturer:

GNATUS 

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