INSTALLATION MANUAL

UNICA

U29

SECONDARY SURGICAL LAMP (TREATMENT LAMP)

Introduction

Please read this manual carefully before using the Product, so as to protect "**the Technical Service Personnel**" and "**the Operator**" from any injury.

Marking CE

This appliance is a Class I medical device pursuant to European Directive on medical devices (MDD) 93/42/EEC (Annex IX) as amended and integrated.

Compliance

The manufacturer declares that this Product complies with Annex I (Essential requirements) of Directive 93/42/EEC as amended and integrated and certifies such conformity by affixing the CE marking.

Validity of manual

This installation manual is valid for the following models:

- UNICA 520 in ceiling, mobile versions;
- UNICA 520, in the ceiling version with double yoke;
- UNICA 860 in ceiling version;
- UNICA 860, in the ceiling version with double yoke;
- U29 in ceiling, mobile versions;
- U29, in the ceiling version with double yoke.

Customer Service

The customer service is at your disposal in case of Product details, information concerning its use, identification of spare parts being required and for any other queries you might have concerning the appliance, for ordering spares and for matters relating to assistance and warranty.

- RIMSA P. LONGONI SRL
- Via Monterosa 18
- I-20831 Seregno MB
- Tel.: ++39 0362 325.709
- Fax: ++39 0362 328.559
- E-mail: info@rimsa.it

Translations

The original language of this manual is ITALIAN. For all translations, reference must be made to the original manual language.

Index of contents

KEY

PRODUCT

The EM (Electro-Medical) EQUIPMENT to which this manual refers is a **SECONDARY SURGICAL LAMP (TREATMENT LAMP)**. For ease of description, in this manual this EM EQUIPMENT will be called "**Product**".

OPERATOR

Professional medical personnel (e.g., professional health personnel, expert person assisting the patient).

RESPONSIBLE ORGANIZATION

Entity accountable for the use and maintenance of an EM equipment or EM system (e.g., a hospital, an individual doctor or a non-expert person). Preparation and awareness are included in use.

TECHNICAL SERVICE PERSONNEL

The personnel (individuals or entity accountable to the responsible organization) that installs, assembles, maintains or repairs the equipment. Under certain circumstances, the safety of such persons depends on their knowledge and awareness and ability to take appropriate precautions when gaining access to hazardous parts partially. By way of example only, the following professional figures are deemed as SERVICE PERSONNEL:

- ⇨ Construction Engineer, Draughtsman, Building firm duly registered in the professional Register (for the masonry works)
- ⇨ Electrical Engineer Electro-technical expert qualified to work as an electrician (for the electrical works)

For the installation phase, as regards assembly operations only, a qualified person is deemed whosoever has attended a course organized by RIMSA or, alternatively, whosoever has carefully read the manual.

1 GENERAL SAFETY INFORMATION

This manual is an integral part of the Product as indicated by European Directive 93/42/EEC and subsequent amendments and supplements. Read and keep this manual close to the Product.

- The Product is not suitable for use in explosion-risk areas.
- The Product is not suitable for use wherever there are inflammable mixes of anaesthetics with air, oxygen or N_2O (laughing gas).
- The Product is not suitable for use in environments rich in oxygen and use is not intended in the presence of inflammable agents.

RIMSA disclaims all liability for any injury to persons or damage to things caused by the Product having been installed by persons who are not **"TECHNICAL SERVICE PERSONNEL"**.

The RESPONSIBLE ORGANIZATION is entirely responsible for Product installation activities; no costs or responsibilities relating to the installation and/or commissioning of the Product may therefore be traced back and/or in any case attributed to RIMSA.

The ceiling masonry works for Products to be installed on ceilings, and the electrical works for supplying power to the Product shall be carried out in a workmanlike manner by TECHNICAL SERVICE PERSONNEL to ensure these are sturdy and safe.

The electrical system in the premises must conform to IEC 60364-7-710 standard and any national regulations. A master switch must be installed with fuse or thermal magnetic circuit breaker to be able to interrupt power to the Product.

2 General information

2.1 Operator qualifications

Qualification of personnel in charge of operating on the Product:

Installation	Installer and/or qualified technician.
Use	Professional medical personnel.
Cleaning	Properly trained medical and paramedical personnel.
Routine maintenance	Qualified technician with required technical-professional skills.
Special maintenance	RIMSA or technical service personnel, the latter only for the fuse change.
Assistance	RIMSA or authorized Dealer.
Demolition	Comply with applicable laws on waste disposal. This product must not be disposed of in standard waste disposal bins. To avoid risks for the environment and health deriving from the dispersion of polluting substances in the environment, separate the various internal component parts such as iron, aluminium, plastic and electrical material, and dispose of these through authorized channels so as to ensure correct recycling.

2.2 Packaging, transport, storage and characteristics of installation premises

Packing

Cardboard boxes containing Product. Dispose of these in compliance with national directives applicable for waste disposal.

Transport

Product transport is done by land, sea or air according to the following characteristics:
Temperature (°C): -15 / +60
Humidity: 10 / 75 %
Atmospheric pressure (h/Pa): 500 / 1060

Storage

The packaged Product must be stored (warehoused) in dry premises having the following characteristics:
Temperature (°C): -15 / +60
Humidity: 10 / 75 %
Atmospheric pressure (h/Pa): 500 / 1060

Installation premises

The premises where the Product is started up must have the following characteristics:
Temperature (°C): +10 / +40
Humidity: 30 / 75 %
Atmospheric pressure (h/Pa): 700 / 1060

2.3 Graphic signs and symbols used in the installation manual

The following safety measures must be put in place during Product installation, use and servicing.
To emphasize their importance, a number of safety precautions are repeated throughout the manual.
Follow the safety precautions before using or repairing the Product. Carefully abiding by the safety precautions improves the ability to use the Product safely and correctly and helps prevent incorrect maintenance which could be hazardous and cause damage. The safety measures are approximate and not exhaustive; the Operator, the Responsible Organization and the Technical Service Personnel must develop their capacities to upgrade and integrate them.

General warning signal

General mandatory code of conduct signal

General prohibition signal

2.4 Graphic symbols used on packaging

List of symbols on packaging boxes:

This side upwards

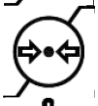
Fragile

Protect from rain

Do not stack packaging

Weight of packaging

Humidity to be complied with (max limit at top right and min limit at bottom left)

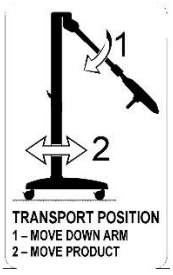


Pressure to be complied with (max limit at top right and min limit at bottom left)

Limit temperature (max limit at top right and min limit at bottom left)

2.5 Graphic symbols used on the Product

Below are the symbols to be found on the Product:

CE	CE marking indicating the Product conforms to directive 93/42/EEC and subsequent amendments and supplements
	Date of manufacture (month and year)
	Manufacturer's address
	Fuses used in the device
	Comply with the instructions for use
REF	Reference number
SN	Serial number
	Disposal
	Protection earth
'N'	Neutral lead connection point
'L'	Line lead connection point
'I'	ON
'O'	OFF
	Standby and switch-on
	Pushing, resting on or lying on the product is forbidden
	No stepping on surface
	Only move the product after lowering the arm

2.6 Warranty and liabilities

RIMSA disclaims all liability as regards unreliable Product operation in the following cases:

- Installation, authorized modifications and repairs have not been performed by TECHNICAL SERVICE PERSONNEL.
- The Product has not been used for its intended purpose and in conformity with the operating instructions (see operation manual).
- The premises have not been approved for healthcare activities.
- The premises are not built in conformity with the law and applicable regulations.
- The electrical system in the premises is not in compliance with appropriate requirements.

2.7 Structural changes or variations

CAUTION

No arbitrary structural changes or variations to the Product are admitted. Any modifications must have the prior written authorization of RIMSA. In case of the Product having been tampered with, the warranty shall be invalidated and the manufacturer disclaims all liability for any injuries or damage caused to the OPERATOR, the RESPONSIBLE ORGANIZATION and the TECHNICAL SERVICE PERSONNEL.

3 Instructions on how to prepare the premises mechanically and electrically

3.1 Preparing the premises mechanically (ceiling version)

Carry out safe masonry works.

The masonry works for preparing the ceiling to install the Product must be sturdy and safe and performed in a workmanlike manner according to applicable building regulations.
By way of example only, the professional persons charged with completing the masonry works are: Construction Engineer, Draughtsman, Building firm, duly registered in a professional register.

Collapse of the building structure.

In case of wrong perforation of the Product supporting wall (e.g., the breakage of a reinforced-concrete ceiling iron) always inform the building manager as this could affect the stability of the building.

Make sure that ceiling is adequate.

The ceiling must be able to withstand a weight of at least 300 kg/m^2 and have a thickness of at least 250 mm.
The Product installation premises must conform to local building standards.
After making sure the premises used for medical purposes are in conformity with the above requirements, proceed to mechanically anchor the ceiling plate, assessing the type of building and making all consequent adaptations.

The TECHNICAL SERVICE PERSONNEL has all technical, civil and legal responsibility relating to correctly and suitably performing Product anchoring and installation operations in a workmanlike manner.

3.2 Correctly wiring up the premises

	**Carry out safe electrical works.**

	**Make sure that the electrical environment complies with the law.**

The premises used for medical purposes must be safely wired up in a workmanlike manner by TECHNICAL SERVICE PERSONNEL to power the Product.

Before installing the Product, the TECHNICAL SERVICE PERSONNEL must make sure the following conditions exist:

- The wiring system of the environment (premises) in which installation is made must be in conformity with regulations for premises used for medical purposes and with applicable national laws and/or regulations.
- The electrical system must have a certificate of conformity issued by whosoever installed it.

The earth system must be certified as required by applicable regulations.

Main switch

Position the thermal magnetic switch near the Product so that it can be switched off in case of need.

CAUTION

In case of mobile version do not position the device so it is hard to reach and remove the power plug in case of an emergency.

4 Product installation

Before proceeding to install the Product, first of all check the presence of all the packaging and that this is in good condition and has not been damaged during transport.
Claims will only be taken into consideration if the seller or carrier has been immediately notified. All claims must be made in writing. Goods always travel under the responsibility and at the risk of the buyer.
Keep the original packaging in case the Product has to be re-dispatched.

Personnel required:  (Two)

Necessary protection equipment:

- Safety eyewear
- Gloves
- Accident-prevention footwear

Special equipment:

- Drill (ceiling version only)
- Set of hexagon spanners
- Screwdriver
- Circlip pliers
- Ladder (ceiling version only)
- Standard manual tools
- Set of drill bits (ceiling version only)

After installation, the Product must be tested by Technical Service Personnel before being used.

4.1 Parts included in the package

Ceiling version

The Product is supplied complete with lamp head, sterilisable handpiece, swing arm, horizontal arm, bar, bar cover with relative safety ring, structure retention screws with glue, switchboard. RIMSA does not provide any kind of anchoring for fastening the plate to the ceiling. Such equipment must all be provided by the installer.

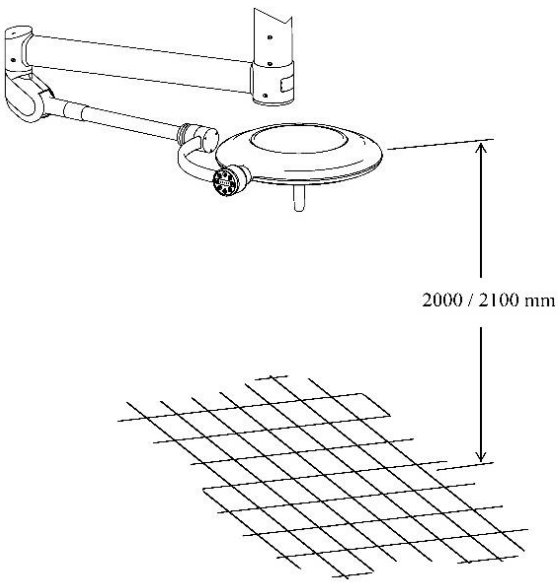
Mobile version

The Product is supplied complete with lamp head, sterilisable handpiece, swing arm, stems, wheeled base and base cover.

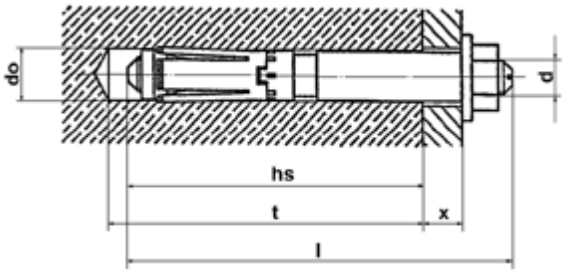
4.2 Ceiling drilling instructions

Fixing positions

For ceiling installation, the length of the bar varies according to the height of the premises in which the Product is installed.
The length of the bar is calculated to install the Product at a finished height off the floor of around 2000/2100 mm (as per drawing below), unless otherwise requested by the RESPONSIBLE ORGANIZATION.



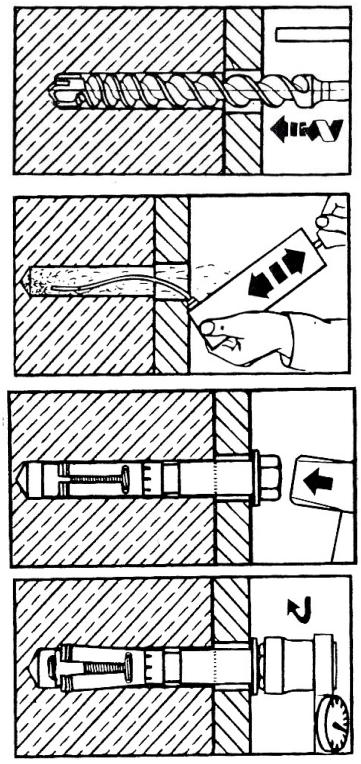
Reinforced concrete
Mechanical anchoring



By way of example only, below is a list of some types of walls:
Proceed to fasten the ceiling plate using Hilti HSL-3-G M16/25 screw anchors or other anchors with similar characteristics, carefully following the instructions provided by the anchor manufacturers and shown below for information purposes:

do	Nominal drill bit diameter	Mt	Closing bending moment
t	Minimum drilling depth	Sw	Wrench opening
hs	Minimum insertion depth	x	Fastening height
l	Anchor tie-rod length		

Anchor tie-rod	do (mm)	t (mm)	hs (mm)	l (mm)	Mt (Nm)	SW (mm)	x (mm)
HSL-3-G M 16/25	24	125	100	163	80	24	25



1. Apply the paper template at the Product installation point and mark the fastening hole points with a pencil.
2. Make the holes in the ceiling in accordance with the anchoring tie-rod manufacturer's specifications.
3. Using a pump or a vacuum cleaner, remove the drilling residues and dust from the hole.
4. Fasten the Bar to the ceiling and, using a hammer, insert the anchoring tie-rod in the hole.
   Attention!
   Check the fitting depth
5. Using a torque wrench, tighten the anchorage to the tightening force indicated by the screw anchor manufacturer.
   The anchorage will immediately bear the weight.
6. Proceed in the same way for the remaining anchors.
7. After one hour, again tighten the tie-rods to the prescribed tightening torque.

Chemical anchoring

Drill the ceiling using the template provided. Insert the resin inside the 6 drilled holes and fill the hole, carefully following the manufacturer's instructions. RIMSA recommends using HILTI HIT-HY 270 resin or similar products.
Fit 6 threaded bars into the holes. RIMSA recommends M16 bars. Proceed to fasten the ceiling plate with nuts and locknuts for each tie-rod and tighten using the Allen key.

Hollow-core concrete

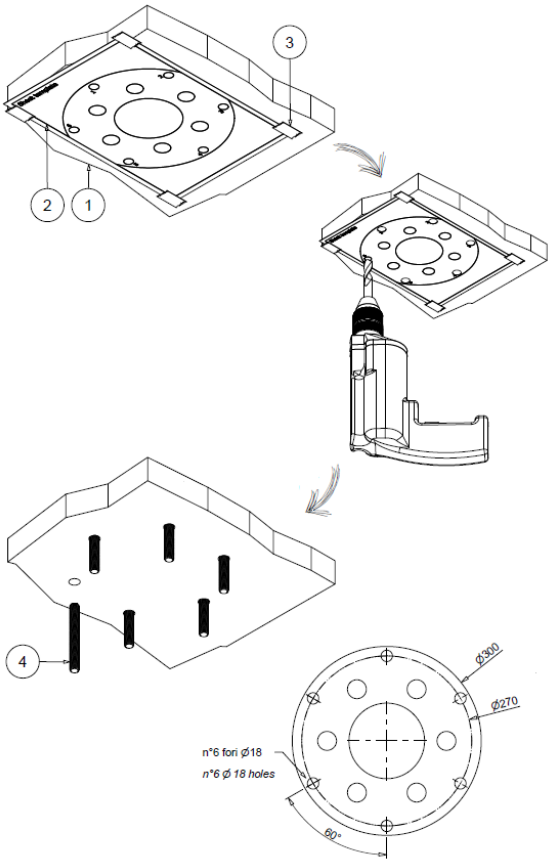
In this case the ceiling must be sandwich closed by means of the ceiling plate and counter-plate, being careful to include at least one rafter.

	Do not install the Product on unsuitable ceilings.

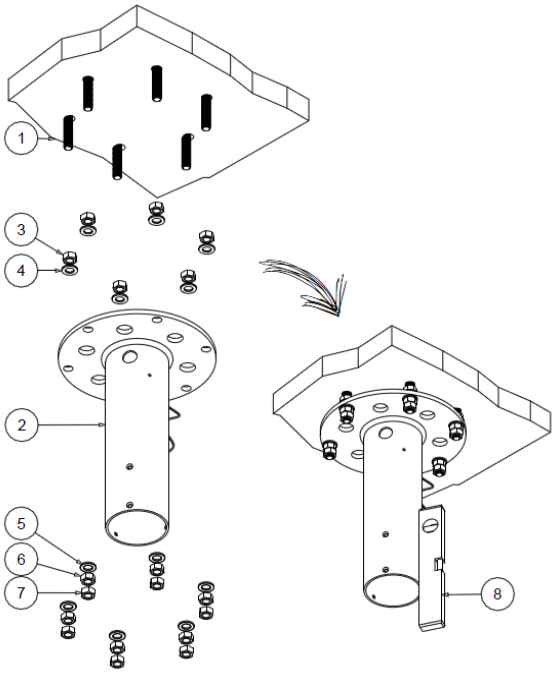
The plate and counter-plate must be fastened together using suitable M16 threaded steel bars, with ultimate tensile strength of at least 800 MPa, blocked at the top and bottom ends by relative washers, nuts and locknuts.

4.3 Instructions for ceiling version of Product

4.3.1 Installation of the ceiling plate, bar, power supply



VERSION WITH PRE-PREPARED TIE RODS OR CHEMICAL ANCHORAGE
If the tie rods are not prearranged in advance, place the template (drawing 12) (2) on the ceiling (1) and secure it with adhesive tape (3).
Drill the holes according to paragraph 4.2 and insert the 6 threaded bars M16 (4) into the ceiling.

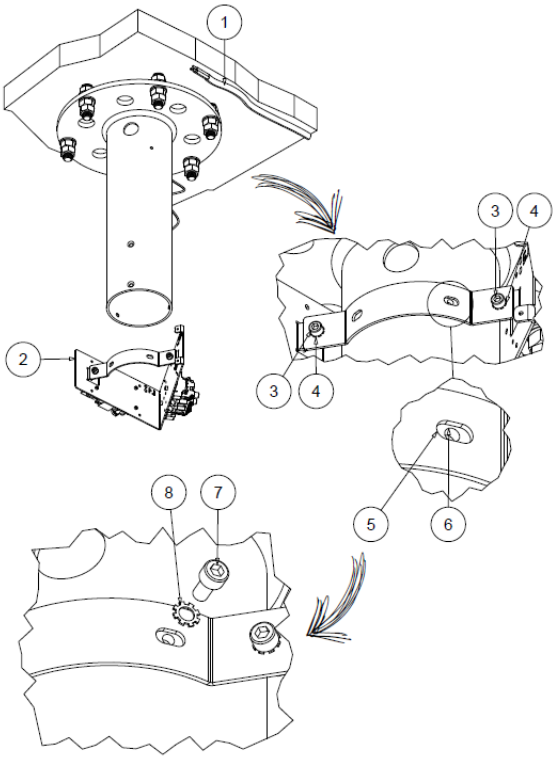


On the threaded bars (or pre-prepared tie rods) insert the nuts (3), the washers (4) (secure them with adhesive tape on the tiges (bar) to prevent them from falling) and insert the tiges (2).
Position the washers (5), nuts (6) and locknuts (7) from underneath.
Using the nuts (6) and locknuts (7), position the tiges tube vertically, making sure it is correctly aligned using a spirit level (8).
Once in the balanced position, tighten the upper nuts (3) so that everything is stable.

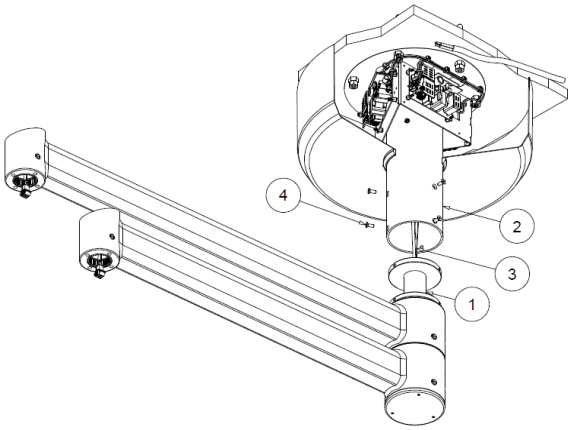
Make sure the product is stable.

VERSION WITH COUNTER-PLATE
In case of counter-plate (optional), drill the holes as shown in paragraph 4.2 and fix it to the ceiling.
To fasten the tiges to the counter-plate, follow the instructions given above.

Product falling hazard.



Make sure the mains power cable (1) can reach the lamp power board without creating interferences with the Bar.
Fit the switchboard (2) on the Bar tube and tighten the two screws (3) and their toothed washers (4). Position the switchboard so the slot (5) of the retention bracket coincides with the hole M6 (6) on the fastening tube. Make sure the switchboard is secure by tightening the screw (7) and its toothed washer (8).



4.3.2 Installation of structure to bar

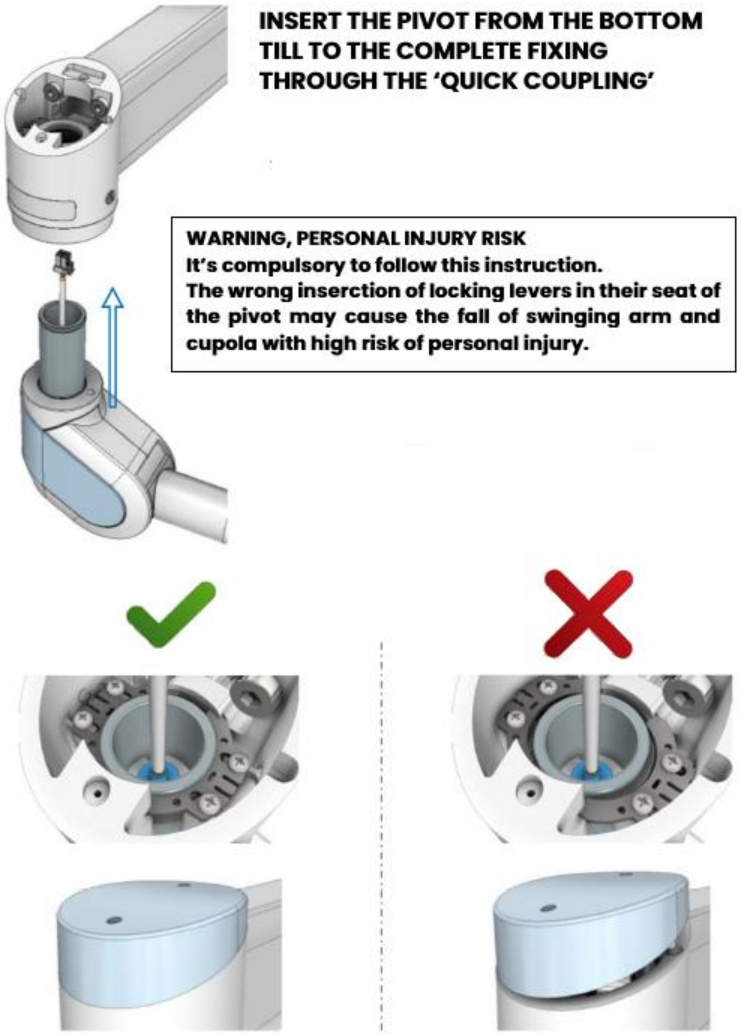
Align the pin of the horizontal arm (1) with the ceiling plate (2).
Fit the connection cables (3) in the tube so that they come out from the side hole, in order to connect them to the power board.
Insert the pin in the tube until the 3+3 holes at 120° of the pin coincide with the 3+3 holes at 120° of the tube.

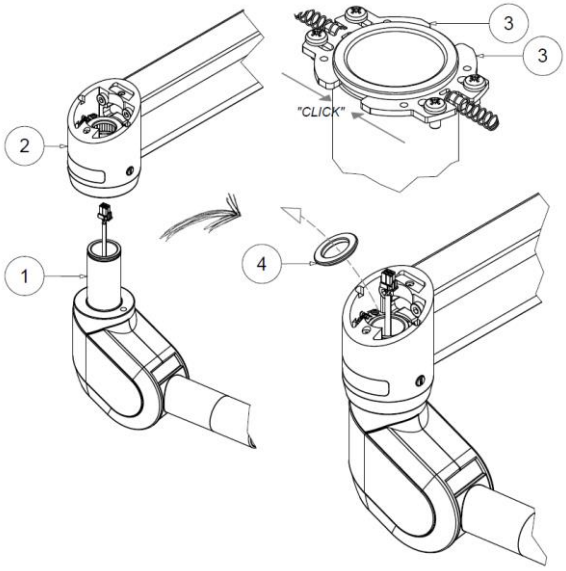
- Insert all 6 screws (4).
- Strongly tighten ONLY two screws of a same side in vertical the one to the other.
- Now tighten the remaining screws.

This way the loosening over time will be avoided during continuous Product rotation.

⚠	**Product falling hazard.**

4.3.3 Installation of swinging arm

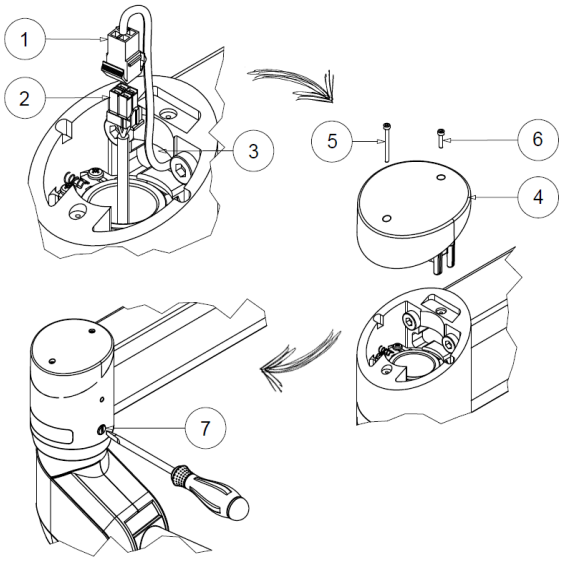




Align the swinging arm pin (1) and insert it into the horizontal arm (2) until the two locking levers (3) automatically engage and produce a "CLICK", and lock the arm in place.
During insertion the assembly ring (4) will be automatically ejected. It is only designed to guide and facilitate assembly.
It is recommended to keep it in case of future installation of the Product.

⚠	**If the assembly ring comes out before the pin is inserted, assembly is not possible. In the event of this coming out, it must be repositioned in its seat.**

⚠	**Before continuing with the assembly, check with swinging arm movements that the locking levers are in place in the pin slot.**



Join together connectors (1) and (2). In case of a standard lamp only one locking connector will be available.
In case of a lamp equipped with CCTV, the supply will include power connectors, to be connected according to colours, and video signal connectors, to be connected according to letters. These connectors need to be screwed together.
Put the wires into the horizontal arm slot (3).
Place the plastic cap (4) on the upper part of the horizontal arm making sure that the 4 tips fit into their respective seats and close with the screws (5-6).
Tighten the clutches (7) in order to make the arm position stable.

⚠	**Before proceeding, make sure the plastic cap is correctly positioned and in contact with the horizontal arm and that the screws are well tightened.**

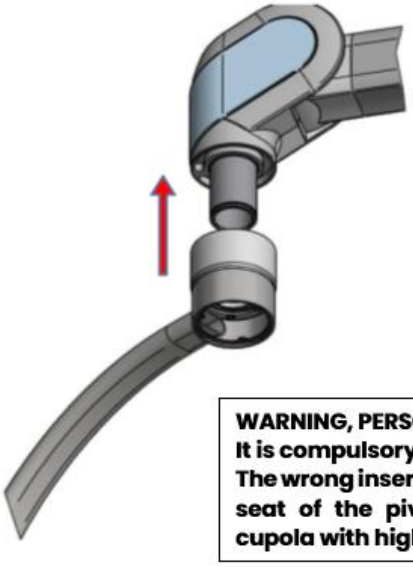
⚠	**The correct closure of the plastic cap ensures that the locking levers are locked.**

⚠	**To make assembly easier, it is best to assemble the swinging arm first, and then the cupola.**

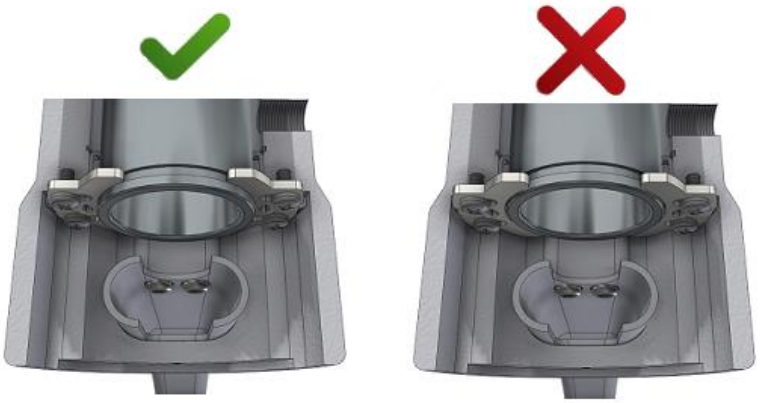
⚠	**Product falling hazard.**

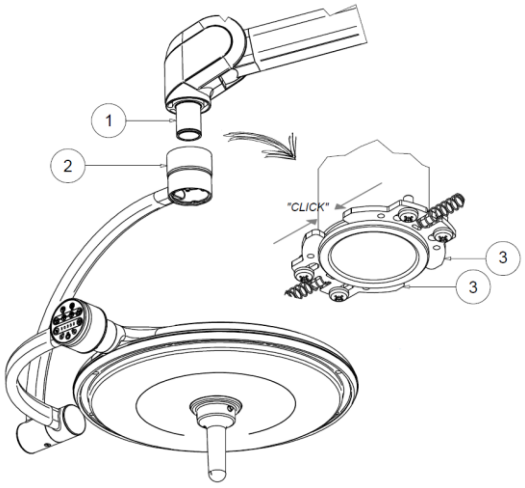
4.3.4 Installation of cupola (DOUBLE YOKE)

INSERT THE YOKE FROM THE BOTTOM TILLTO THE COMPLETE FIXING THROUGH THE 'QUICK COUPLING'

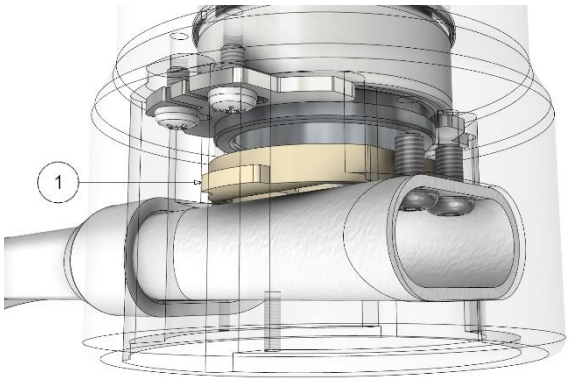


WARNING, PERSONAL INJURY RISK
It is compulsory to follow this instruction. The wrong insertion of locking levers in their seat of the pivot may cause the fall of cupola with high risk of personal injury.





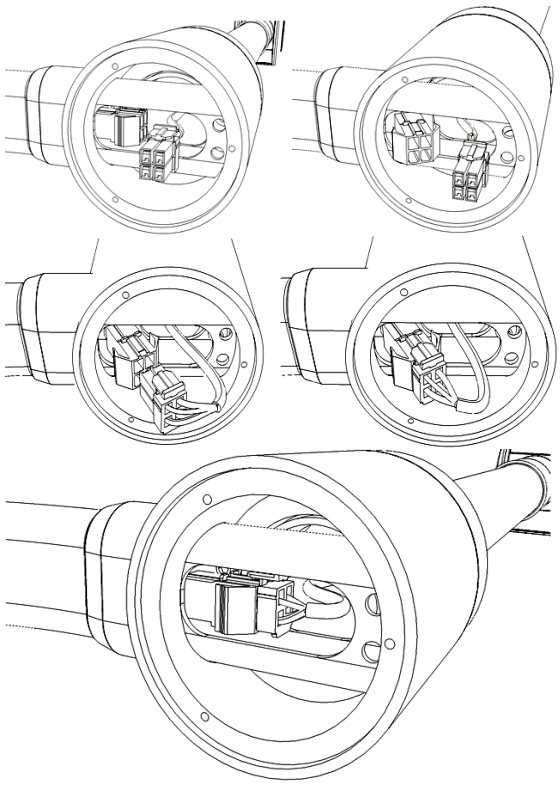
Align and fit the yoke hub (2) on the pin of the swinging arm (1) until the two locking levers (3) automatically engage and produce a "CLICK", and lock the arm in place.



During insertion the assembly ring (1), placed inside the hub, will not be ejected. It is only designed to guide and facilitate assembly.

⚠	**If the assembly ring comes out before the pin is inserted, assembly is not possible. In the event of this coming out, it must be repositioned in its seat.**

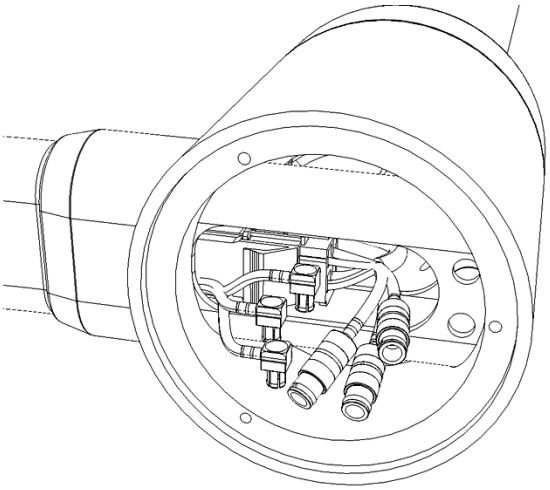
⚠	**Before continuing with the assembly, check with yoke rotation that the locking levers are in place in the pin slot.**



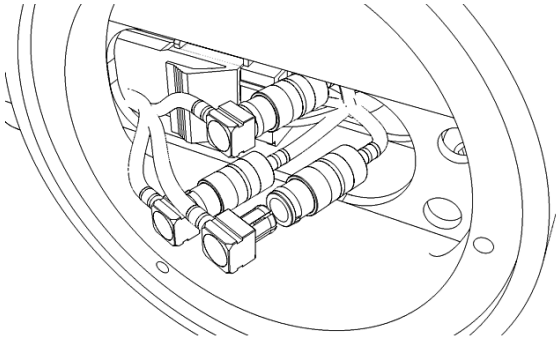
To ease the cables connection, first slightly extract the white connector coming from the swinging arm and then the one coming from the yoke.

Connect the white connectors together as shown in the images to the side.

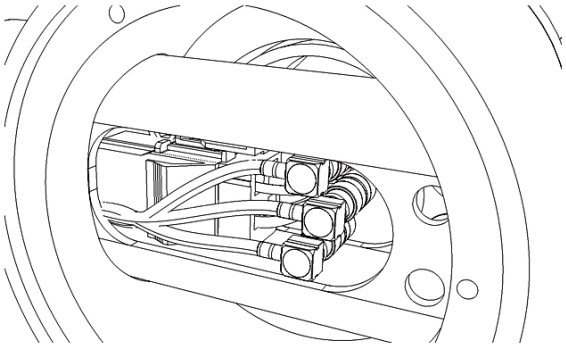
Then reposition the connectors inside the yoke, taking care not to crush cables.



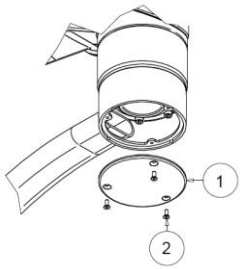
In case of a lamp equipped with CCTV, in addition to the power connector, there will also be video signal connectors.



Connect the connectors in accordance with the letters.



Then also reposition these connectors inside the yoke, taking care not to crush cables.



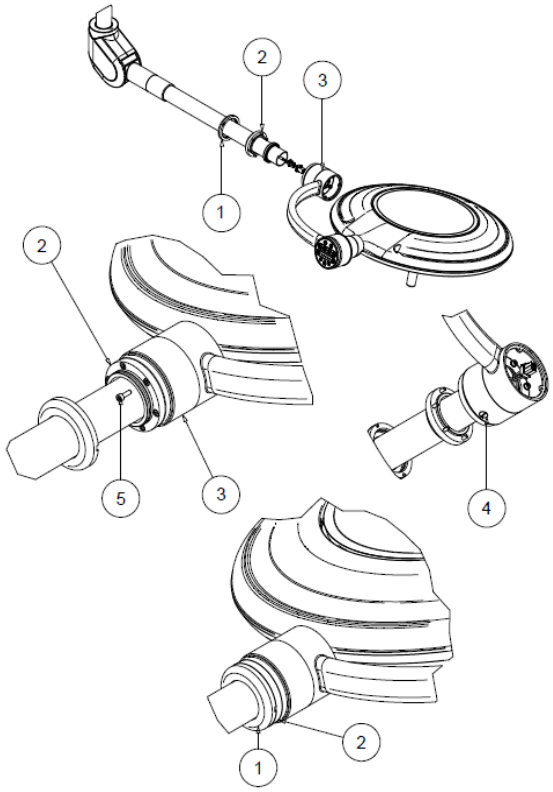
Once the connection is complete fasten the closing cap (1) using the three screws (2).

4.3.5 Installation of cupola (SINGLE YOKE)

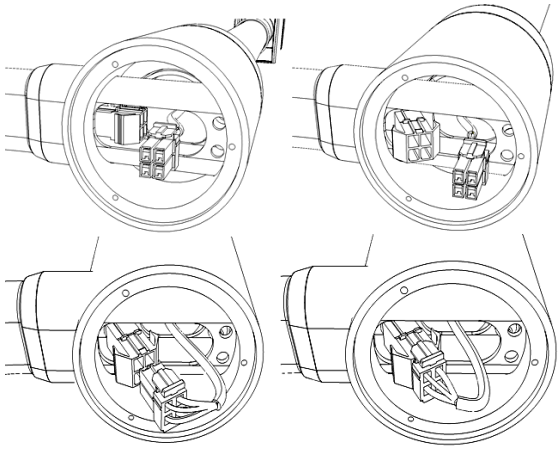
Install the swinging arm as indicated in point 4.3.3 above.

⚠	**To make assembly easier, it is best to assemble the swinging arm first, and then the cupola.**

⚠	**Product falling hazard.**

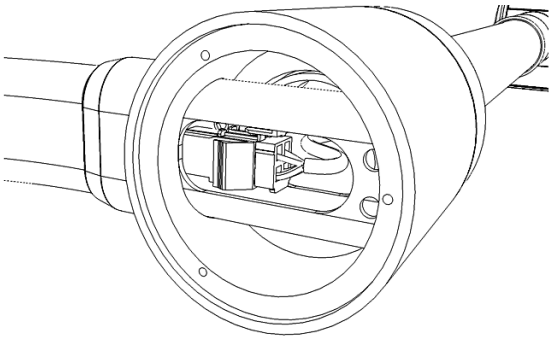


Before positioning the cupola, as indicated in the drawing, position the yoke lock covering (1) and the yoke lock (2) on the swinging arm tube.
Insert the head of the Product with the yoke (3) on the swinging arm and bring the surfaces into contact. Now the head is able to maintain the position autonomously, without any support.
Pay attention to place the Product head and the arm in the same position, as indicated in the drawing, with the yoke to the left of the arm and the friction screw (4) turned downwards.
Push the yoke hub lock (2) onto the yoke hub (3), and rotate it in order to match the corresponding 6 holes.
Screw the 6 screws (5) to lock the hub and lock.
Then position the cover (1) on the lock (2) in order to cover the screws.

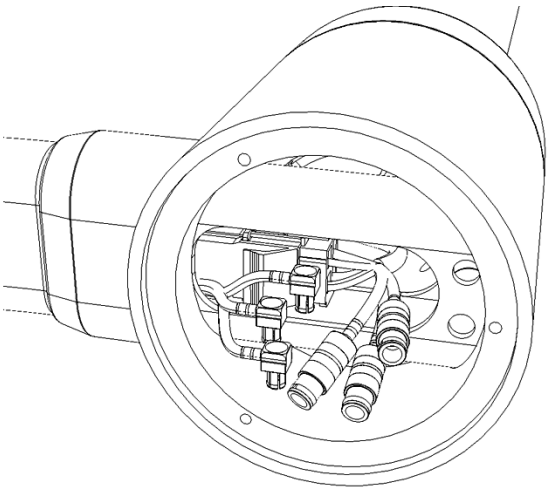


To ease the cables connection, first slightly extract the white connector coming from the swinging arm and then the one coming from the yoke.

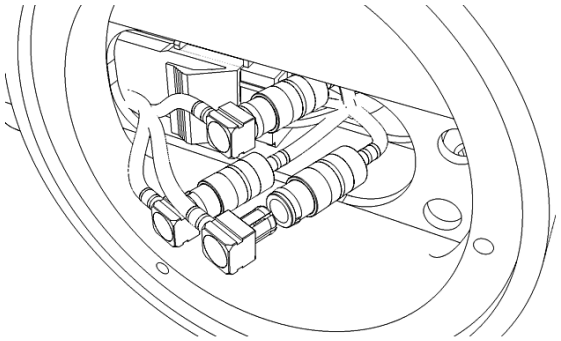
Connect the white connectors together as shown in the images to the side.



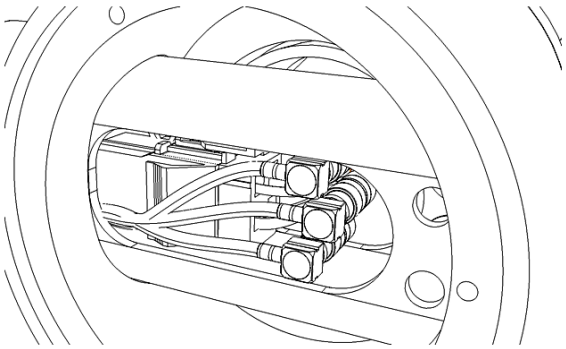
Then reposition the connectors inside the yoke, taking care not to crush cables.



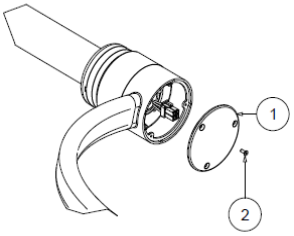
In case of a lamp equipped with CCTV, in addition to the power connector, there will also be video signal connectors.



Connect the connectors in accordance with the letters.



Then also reposition these connectors inside the yoke, taking care not to crush cables.



Once the connection is complete fasten the covering disc (1) in front of the yoke by screwing the three screws (2).

4.3.6 Electrical connection

	**Electric shock hazard.**

Before completing the installation, it is necessary to connect the electrical system. To avoid any risk of electric shocks, the Product must only be connected to mains supplies with earth protection.

Before making the Product power connections, make sure the mains supply line has been interrupted.
RIMSA does not supply the mains supply cables.

Prime the fuses in the switchboard terminal box after the mechanical and electrical assembly of the Product. Priming the fuses too early could permanently damage the Product. If the Product is not used for long periods of time, remove the fuses.

	**For wiring connections in the ceiling version, use a cable suitable for at least 105°C and connect the ground lead to the terminal provided.**

According to the different cases, the electronic panel could be installed on the anchoring tube or in the false ceiling.
The line and neutral cables (L, N) from the power line have to be connected into the terminal 1 and 2 for single light head lamps and for double light heads to the terminals 1 and 2, 3 and 4.
Connect the wires (red and black) to the 3 and 4 terminals in case of single light head lamps and in case of double light head lamps to the terminals 5 and 6, 7 and 8. Follow always the colors and numbers on cables and terminals.

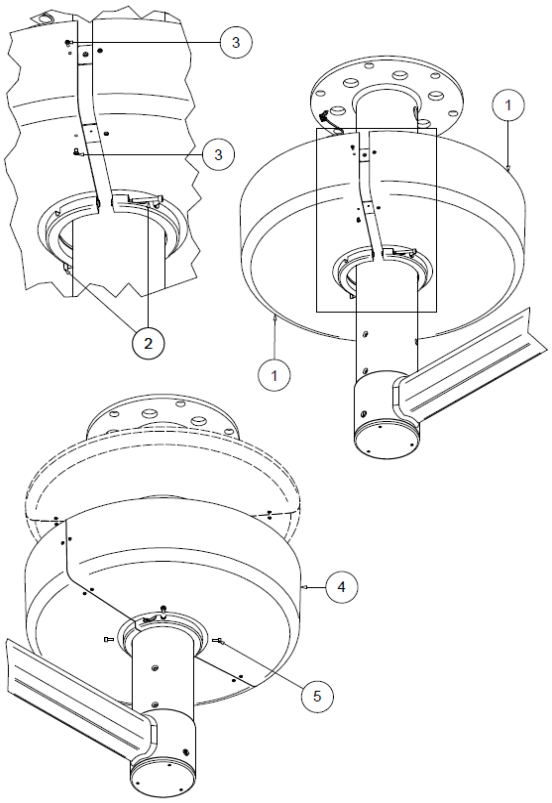
	**Comply with the line and neutral connection indications. An inverted connection would lead to the lack of fuse protection.**

	**Failure to connect the earth cables would prevent the safety of the Product.**

Always connect earthing cables (⏚) of lamp and net into the related terminals.

	**Strictly follow the wiring diagram for the correct connection.**

Out of every lamp there is always a communication cable (OW) connected to a forbox. In case of double light head lamp the cables (OW) of both lamps are connected to the same forbox.
This OW cable is needed for the communication between the lamps and to the optional wall control.
The cable (OW) of the wall control panel (if supplied) has to be connected to the forbox in order to allow the communication.
If the lamp isn't equipped with wall control panel, do not consider forbox connection

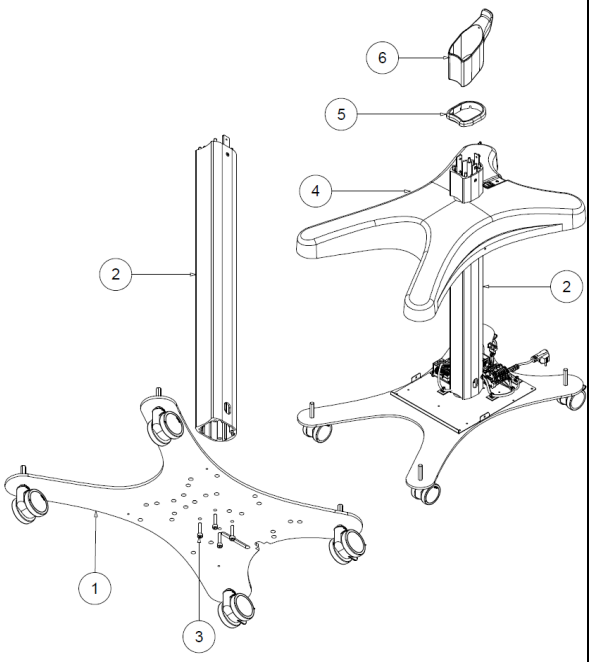


4.3.7 Installation of ceiling cover

Once the electrical connections have been completed, the installation can be completed by positioning the ceiling cover.
Depending on the type of ceiling (with false ceiling or not), a cover is provided split into two halves, which can be high or low.
To install, position the two halves (1) in line with the ceiling anchoring tube. Close them by tightening the two screws of the ring (2) and the 4 screws of the cover (3).
Fasten the ring earth lead in the respective terminal.
Bring the complete cover (4) up against the ceiling / false ceiling and secure it in position by fully tightening the 4 screws (5).

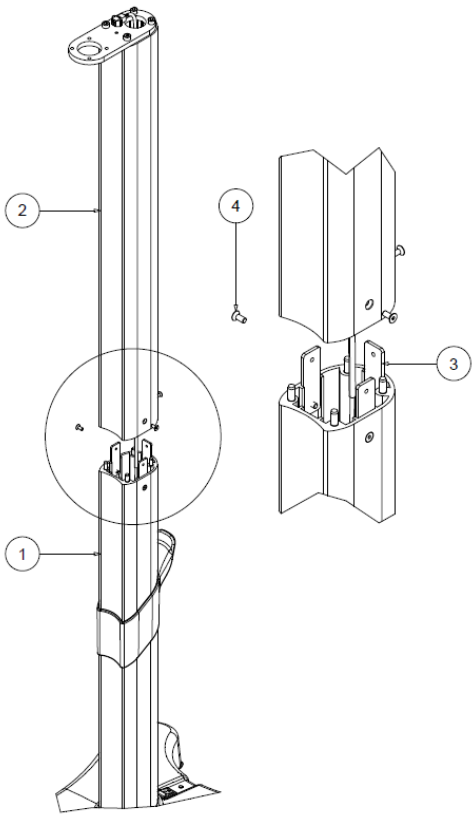
4.4 Installation of Product in mobile version

4.4.1 Installation of lamp stem

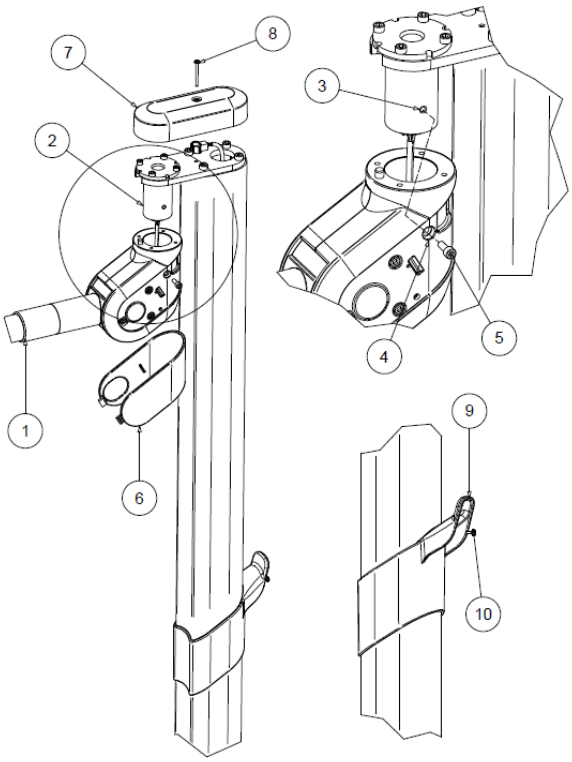


Position the lower stem (2) in the base housing (1) and tighten it with the 4 screws (3).
Adequately tighten the 4 screws (3) to avoid any risk of instability and possible Product overturning.
Insert from the top of the stem (2) the stand cover (4), the closing ring (5) and the stem cover (6) in the indicated order.

Instability and overturning hazard.



Insert the cables inside the top stem (2) and position it vertically above the lower stem (1). Make the two extremities coincide using the guides (3).
Fasten the two stems by means of the screws (4).

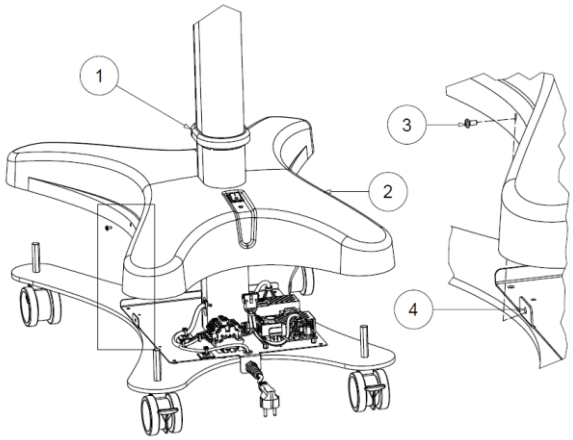


4.4.2 Installation of swinging arm

Position the swinging arm (1) in front of the stem and in correspondence with the pivot (2).
Match the threaded hole of pivot (3) with the hole located on the hub (4).
Insert the swinging arm (1) into the pivot (2) and fastening it by tightening the screw (5).
Insert the plastic cover (6) from the bottom, widening it if required to make insertion easier. Fasten the cover by inserting the fasteners in the hub recesses.
Join the wiring connectors and fasten the upper cover (7) with the screw (8).
Position the cover (9) and secure it with the screw (10) in line with the threaded hole.

4.4.3 Installation of cupola

See point 4.3.5 above.



4.4.4 Electrical connection

Lift the closing ring (1) and the stand cover (2) by 30-40 cm in order to access the power section. Join the connectors coming from the stem and switch. Return the cover and seal to original position and faster the cover (2) by means of the screws (3) to be fastened to the threaded bush (4). In the case of a battery lamp, also connect the battery faston that is disconnected.
After making the connection, engage the fuses.
The Product power connection is by means of a plug integrated in the supply cable supplied with the Product, placed on the box.

Fuses

4.5 Protection fuses

Product power protection is ensured by input fuses (L, N) and one output fuse (24V) of the TXAH 250V 5x20 type (where X is the fuse value). Only one input fuse (L) for ceiling versions.
FOR CEILING MODELS:
n°1 T2AH (L) and n°1 T10AH (+ 24VDC)
FOR MOBILE MODELS (only UNICA 520 and U29):
n°2 T2AH (L-N) and n°1 T10AH (+ 24VDC)
FOR MOBILE BATTERY MODEL (only UNICA 520 and U29):
n°2 T4AH (L-N) and n°1 T10AH (+ 24VDC)

4.6 Handpiece fitting

Insert the grip in the housing provided until the catch clicks into and is blocked in the handpiece hole.

4.7 Mechanical adjustments

The Product is supplied correctly clutched and balanced. To make movement adjustment, refer to the setting instructions shown in the operation and maintenance manual.

4.8 First switch-on

To ensure the Product operates correctly, proceed as follows:

1. Make sure the power rating of the premises corresponds to that of the Product;
2. Fit the plug in the power socket of the premises – Mobile versions only;
3. Close the switch upstream of the system;
4. Move the Product switch located on the base cover for the mobile version to position "I" (ON);
5. Press the ⏻ keyboard positioned on the lower part of the Product cupola.
6. Make sure all LEDs and functions are working properly.

At the time of commissioning, perform the electrical tests and prescriptions indicated in the IEC 62353 standard.

4.9 Check the result of Product installation and testing before use

Ticking the requirements listed below, if applicable to the Product version, is mandatory to ensure correct installation.

1. Make sure the ceiling is suitable for Product installation. ☐
2. Using a spirit level, make sure the bar is perpendicular with the ceiling. ☐
3. Make sure the switchboard is correctly fastened to the Bar by means of the threaded hole provided. ☐
4. Make sure the screws sustaining the horizontal arm are tight (*ceiling versions*). ☐
5. Check that the locking levers are in place and the cap with the 4 tips is inserted correctly (*ceiling versions*). ☐
6. Make sure the stand is correctly fitted in the base (*mobile version*). ☐
7. Check the Product earth connection and make sure the earth terminals are well tightened. ☐
8. Check the correct rotation of the articulated joints and mechanical movements. ☐
9. Adjustment and rotation movements must be carefully clutched to ensure the Product is stable and maintains its position. ☐
10. Make sure the Product emits light. ☐

Stamp and signature of TECHNICAL SERVICE PERSONNEL:

_____

5 Troubleshooting

Possible Product damage.

Presence of dangerous voltage.

N	Problem	Solution
1	The Product fails to remain in stable position	Make sure the instructions in this manual, in the "Product installation" paragraph, have been correctly followed. Refer to setting instructions in the operation and maintenance manual.
2	The Product fails to work	Make sure fuses have been fitted inside the terminal board. Make sure the electrical connectors are fitted. Check if there is voltage inside the Product.
3	The fuse continues to burn out	Check the specifications of the fitted fuses.
4	The light flickers and produces a stroboscopic effect	Contact the after sales service.
5	The Product does not switch on	Check the supply power voltage and check the fuses. The electronics are faulty: contact the after-sales service.