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# OUTPATIENT® II & COOLSPOT® II

FloorStand, Wall & Ceiling Versions

Instructions for Use and Maintenance

**PHILIPS**  
**burton**

## Warranty

Mechanical components of Philips Burton's products are warranted to provide the original purchaser five (5) years of free service from defects in material and workmanship. The warranty does not cover the following items: light sources (halogen/fluorescent bulbs), transformers, power supplies, ballasts, handles, fuses, and consumables.

### Conditions:

1. This warranty will be granted only when the original invoice or sales receipt is presented together with the product. Philips Burton reserves the right to refuse free-of-charge warranty service if the above documentation cannot be presented, or if the information contained is incomplete or illegible.
2. This warranty will not apply if the serial or lot number on the product has been altered, damaged, removed or made illegible in any way.
3. This warranty does not cover damage or destruction caused by any reason, including but not limited to neglect, deferred maintenance or improper repairs, or any alterations, adaptations or adjustments made to the product to conform to the national or local technical/safety standards in force in any country other than the ones for which the product was originally designed and manufactured.
4. Lights for service under warranty must be either returned to the location instructed by your authorized Philips Burton representative or made available to the authorized Philips Burton field personnel, where they will be replaced or repaired free of charge.
5. This warranty does not cover the following:
  - Periodic maintenance and repair or replacement of parts due to normal wear and tear.
  - Any adaptation or change to upgrade the product from its normal purpose without the written consent of Philips Burton.
  - Abuse or misuse of the product.
  - Repair performed by non-authorized service stations, dealers or the customer.
  - Accidents, lightning, water, fire, improper ventilation or any cause beyond the control of Philips Burton.
  - Defects of any equipment system or fixtures into which the product is incorporated, including installation and modification.
6. This warranty does not affect the customer's statutory rights under applicable state or national laws in force, or the customer's rights against the dealer arising from its sales/purchase contract.

## Introduction

Congratulations on your purchase of an Outpatient<sup>®</sup> II / Coolspot<sup>®</sup> II Philips Burton medical light!

The light(s) are designed to give the professional health care market superior performance, reliability and value. The lights contain advanced optical and mechanical solutions intended to offer you an optimal working environment for efficient and comfortable procedures, while assisting in enhancing performance.

### Outpatient<sup>®</sup> II

The bulbs in the Outpatient<sup>®</sup> II are wired in parallel to ensure continuous operation in the event that one or two bulbs burn out. Heat filters and dichroic coatings ensure a cool light beam, and an air-circulating fan helps maintain cool interior lighthead temperatures.

Focus is changed by means of a central, removable, and autoclavable handle. It can be removed with one hand to protect sterile procedures. The handle also accepts sterile, disposable covers.

Power to the fixture is controlled from a switch on the extension arm for ceiling models, and a base-mounted foot switch for floor models. The wall model has a switch near the cord inlet on the fixture. Effective working distance between patient and lighthead is from 0.6 to 1 meter.

The floorstand model incorporates a footswitch, locking casters, and cord wrap. A friction knob at the top of the upright allows the user to quickly secure the self-balancing arm, preventing accidental movement or drift. When installed according to manufacturer's recommendations, ceiling and wall-mounted systems will meet California Seismic Codes.

The Outpatient<sup>®</sup> II is designed and assembled in the USA and classified/tested by a Nationally Recognized Testing Laboratory (NRTL). Low voltage operation of the bulbs minimizes electrical hazards. 100V, 120V, 230V or 240V input is standard. The Outpatient<sup>®</sup> II meets the medical light standards of IEC/UL 60601-1 and 60601-2-41.

### CoolSpot<sup>®</sup> II

The lighthead incorporates an aperture-control wheel and an intensity-control wheel. An intensity switch ("Hi/Lo") is located on the yoke. The bulb provides approximately 600 hours life on the standard intensity ("Lo") setting. A double heat filtration system keeps the beam cool, and an air-circulating fan helps maintain cool interior lighthead temperatures.

A removable, autoclavable handle is incorporated in the lighthead. To facilitate sterile procedures, this handle can be removed or replaced with one hand, and it accepts disposable sterile covers.

The floorstand model incorporates a footswitch, locking casters, and cord wrap. A friction knob at the top of the upright allows the user to quickly secure the self-balancing arm, preventing accidental movement or drift. When installed according to manufacturer's recommendations, ceiling and wall-mounted systems will meet California Seismic Codes.

The CoolSpot<sup>®</sup> II is designed and assembled in the USA and classified/tested by a Nationally Recognized Testing Laboratory (NRTL). 100V, 120V, 230V or 240V input is standard. The CoolSpot<sup>®</sup> II meets the medical light standards of IEC/UL 60601-1 and 60601-2-41.

Power to the fixture is controlled from a switch on the extension arm for ceiling models, and a base-mounted footswitch for floor models. The wall model has a switch near the cord inlet on the fixture. Effective working distance between patient and lighthead is from 0.6 to 1 meter.

**Intended Use:**

The Outpatient® II / Coolspot® II medical examination light is intended to provide illumination of body surfaces and cavities during a medical examination. It is available in floorstand, wall, ceiling, and track models.

This Head and Arm manual gives instructions on operation and maintenance and a technical description of the product. Refer to the installation instructions manual that was packed with mount.

Please read the installation instructions very carefully, and follow the safety instructions and requirements.

If there are any particular problems that have not been treated in sufficient detail in these instruction manuals, please contact your supplier for your own safety.

This manual contains guidance on how to use & maintain the light(s).

Philips Burton Medical recommends using qualified personnel for mechanical/electrical installation. Failure to use qualified personnel may invalidate the warranty of the product due to improper installation.

Philips Burton Medical is a leading manufacturer of medical lighting. The product lines encompass lights for procedure, examination and surgery applications. You are welcome to find out more on our web site at [www.burtonmedical.com](http://www.burtonmedical.com).

The following models are covered in this manual:	115V/120V 60Hz	230V/240V 50Hz International	230V/240V 50Hz Europe
OP II Floor	OP216FL	OP225FL	O202FL
OP II Wall	OP216W	OP225W	O202W
OP II Single Ceiling	OP216SC	OP225SC	O202SC
OP II Double Ceiling	OP216DC	OP225DC	O202DC
OP II Single Fastrac	OP216ST	OP225ST	~
OP II Double Fastrac	OP216DT	OP225DT	~
CS II Floor	CS316FL	CS325FL	C302FL
CS II Wall	CS316W	CS325W	C302W
CS II Single Ceiling	CS316SC	CS325SC	C302SC
CS II Double Ceiling	CS316DC	CS325DC	C302DC
CS II Single Fastrac	CS316ST	CS325ST	~
CS II Double Fastrac	CS316DT	CS325DT	~
OPII / CS II Combo Ceiling Mount	OC516CC	OC525CC	~
OPII / CS II Combo Fastrac	OC516CT	OC525CT	~

**9.2 Fastrac Mounts**

Check	Corrective Action
<p>Weekly — Check overall operation of the fixture:</p> <ul style="list-style-type: none"> <li>• Does the trolley slide easily from end to end (no mid-travel hang-ups)?</li> <li>• Do the lamps swing easily through their arcs (but are prevented from swinging through 360°)?</li> <li>• Do all components appear secure? This includes the wiring within the track, which should be suspended on the pulleys within – not dragging on the track as the trolley is moved.</li> <li>• Do the switches, and the bulbs and fans, in the light heads operate properly?</li> <li>• Are the horizontal extension arms level (not sagging)?</li> </ul>	<p>If the answer to any of these questions is NO, do <u>not</u> use the product.</p> <p>Consult with your maintenance personnel before operating the light.</p>
<p>Monthly —</p> <ul style="list-style-type: none"> <li>• Check tightness of setscrews holding the down-tube to trolley. (If loose, tube could slip off trolley.)</li> <li>• Check tightness of screws holding the transition/pivot assembly to the down-tube. (If loose, arm/light could drop.)</li> </ul>	<ul style="list-style-type: none"> <li>• Tighten with Allen wrench.</li> <li>• Tighten with Allen wrench.</li> </ul>
<p>Annually — Perform weekly and monthly checks, and:</p> <ul style="list-style-type: none"> <li>• Check tightness of screws holding the track to the ceiling pallet – accessible through the steel slots. (If loose, track could loosen, drop.)</li> <li>• Check tightness of screws holding the black trolley stops at each end of the track. (If loose and stops fall, trolley could escape.)</li> <li>• Check to see that retainer plug is seated in mating groove of shaft. (If loose, arm could lift out of support.)</li> <li>• Check wire connectors for evidence of overheating (charring, discoloration), and chafed insulation.</li> <li>• Verify the down-tube from the trolley is secure.</li> </ul>	<ul style="list-style-type: none"> <li>• Tighten at needed.</li> <li>• Tighten with Allen wrench.</li> <li>• Remove the retaining threaded screw, compression spring and retainer plug (use nose pliers). If plug is worn on upper corner of shaft, replace it with a new one or if not seated properly, re-adjust it.</li> <li>• Tighten the two screws that secure the down tube to the trolley.</li> </ul>

## 9.0 Maintenance Schedule



### 9.1 Ceiling Mounts

Check	Corrective Action
<p>Weekly — Check overall operation of the fixture:</p> <ul style="list-style-type: none"> <li>Do the lamps swing easily through their arcs (but are prevented from swinging through 360° by built-in stops or other arms)?</li> <li>Do the switches, and the bulbs and fans, in the light heads operate properly?</li> <li>Are the horizontal extension arms level (not sagging)?</li> <li>Do the lamp heads stay in position when the arms are moved up and down (not drift)?</li> <li>Do all components appear secure?</li> </ul>	<p>If the answer to any of these questions is NO, do <u>not</u> use the product.</p> <p>Consult with your maintenance personnel before operating the light.</p>
<p>Monthly —</p> <ul style="list-style-type: none"> <li>Check tightness of set screws holding the down-tube to the ceiling casting.</li> <li>Check tightness of screws holding the transition/pivot assembly to the down-tube. (If loose, arm/light could drop.)</li> </ul>	<ul style="list-style-type: none"> <li>Remove the outer cover by loosening the lock ring (collar), slide the cover down the tube to give access to ceiling casting.</li> <li>Tighten loose set screws with Allen wrench.</li> </ul>
<p>Annually — Perform weekly and monthly checks, and:</p> <ul style="list-style-type: none"> <li>Check wear on the retainer plug at the joint between the horizontal extension arm and the light arm. (If worn, arm could lift out of support.)</li> <li>Check to see that retainer plug is seated in mating groove of shaft. (If loose, arm could lift out of support.)</li> <li>Check wire connectors for evidence of overheating (charring, discoloration), and chafed insulation.</li> <li>Verify the downtube is secure. There must be one “dog-point” set screw holding it to the ceiling casting, and in recent issues there will be a safety cotter pin through the tube above the casting.</li> </ul>	<ul style="list-style-type: none"> <li>Remove retaining threaded screw, compression spring and retainer plug (use nose pliers). If plug is worn on upper corner of shaft, replace it with a new one.</li> <li>Remove retaining threaded screw, compression spring and retainer plug (use nose pliers). If plug is not seated properly, re-seat it.</li> <li>Replace as necessary.</li> <li>Correct as necessary.</li> </ul>

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## 8.0 Cleaning

<b>WARNING</b> 	Electrical shock. For all cleaning work, power off the equipment and secure it from being switched on again. Make sure cleaning fluids do not run into the equipment.
<b>CAUTION</b> 	Damage to equipment. Apart from mild detergents and isopropyl alcohol, no other cleaning agents or chemicals should be used on the product.

### 10.2.1 External Surfaces (weekly, or as needed – **unplug or turn off the fixture first**)

- External surfaces of the Outpatient® II and CoolSpot® II fixtures are polycarbonate, ABS, and/or powder-painted aluminum or steel. Suggested cleaning technique is to use a soft cloth and mild soap and water. Do not let any water solution run into the arm or lighthouse. After cleansing, dry all surfaces promptly with a soft cloth or towel.
- For especially stubborn external stains, isopropyl alcohol can be used. Under no circumstances should organic solvents such as paint thinners, MEK, or acetone be used.
- Every 100 hours of typical use, open the lighthouse and blow out the loose dust. Use a damp cloth or swab to clean out remaining dirt, especially in the grill areas. Clean the lenses and exterior of the light with a mild detergent or alcohol solution.

### 10.2.2 Handle Sterilization

- Outpatient® II: The central, single-post handle may be removed for cleaning and sterilization (autoclave). Push in the locking rod to release handle. To reinstall a sterilized handle, locate the machined flat surface facing the locking rod and push the handle in until it bottoms out. Twist the handle until it clicks (~ ¼ turn).
- CoolSpot® II: The single-post handle on the lighthouse can be sterilized (autoclaved) and re-attached without touching the lighthouse. Simply unscrew the handle to remove it.

#### Sterilization Protocol:

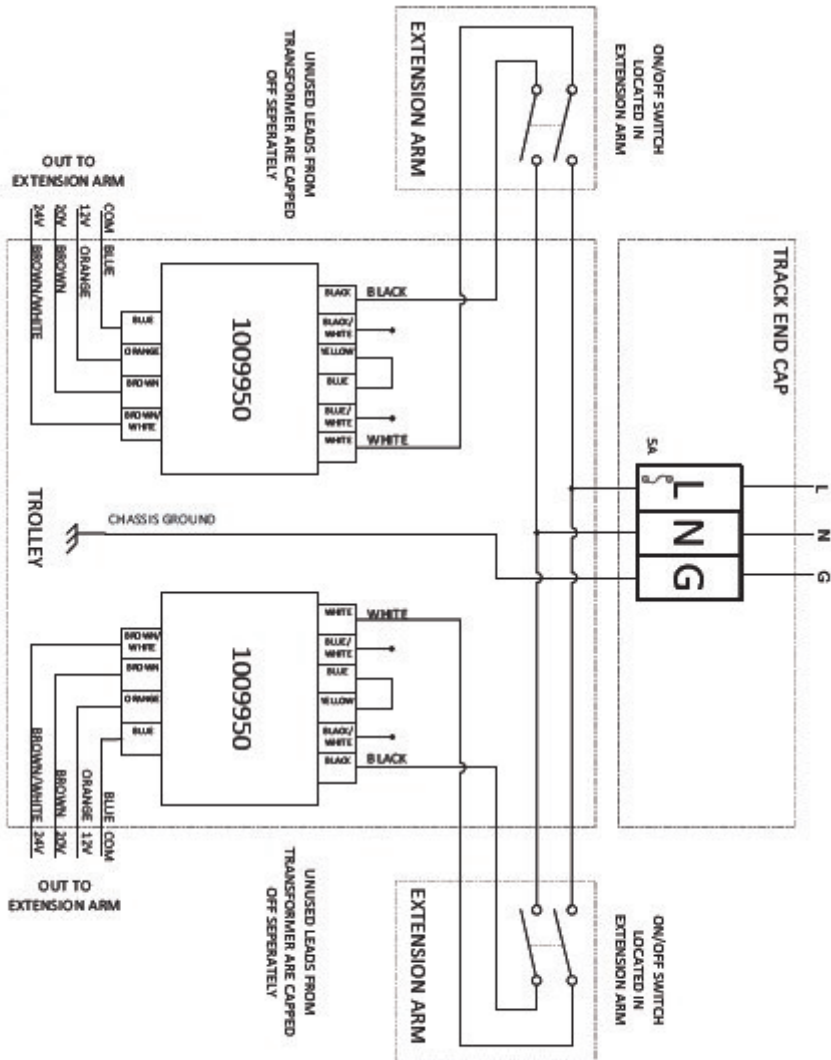
1. Place the handle in the autoclave.
2. Set the autoclave cycle for 270°F (132°C) pre-vacuum cycle.
3. Set the cycle time for 3 minutes, turn the sterilizer on, and wait for the process to be completed.
4. Remove the handle and place it in use, or transport and store it in a sterile environment pending use.

#### Hygiene and Disinfection:

Hospital, clinic, and office protocols generally are based on CDC and other National Committee guidelines for hygiene and disinfection. The user of this equipment should follow these guide lines to eliminate or minimize the risks of cross-contamination and infection.



**NOTE:** Disposable handle covers are an available option for both models; order using Philips Burton part number 0008100PK (25 pack).



## 1.0 Safety Instructions

Please note that certain duties must be carried out by people with the appropriate corresponding qualifications:

- These operating instructions become applicable only after proper installation and assembly in accordance with the assembly instructions provided.
- Only persons with proper training are permitted to operate the equipment.
- Only trained personnel are permitted to clean the equipment.
- Please carefully read these operating instructions before using the floor stand. It will help protect you and others from potential injuries that may occur.
- If problems are encountered that have not been addressed in these operating instructions, please contact your supplier in the interest of your own safety.
- These operating instructions only apply to the product listed here and should not be used for any other products.

**Please keep these operating instructions in a secured place near the device. This ensures easy access to safety instructions and important information should the need arise.**




- The maintenance work and troubleshooting, as described in this manual, should only be done by trained service technicians. Anyone else is not authorized to perform maintenance work and any trouble shooting.
- The maintenance work, as described in this manual, should only be carried out by a hospital technician or someone with similar qualifications. Anyone else is not authorized to perform adjustment work.
- This equipment has been built accordingly and is operationally safe. Nonetheless, it may still present some danger, especially if not used according to the operating instructions as specified in this manual.
- Modifications are never to be made for any reason. This is to ensure safety for all persons involved. If modifications are made to the system the warranty is then void.
- The contents of the operating instructions are subjected to changes without further notice.

### 1.1 Explanation of Symbols

In these operating instructions and on the device, important points have been marked with symbols. The symbols have the following meanings:

### 1.2 Symbols & Warnings

Symbols Used In This Manual

 <b>WARNING</b>	Disregarding this instruction can present the risk of a serious or fatal injury.
 <b>CAUTION</b>	Disregarding this instruction can result in medium to minor injury and damage to property.
 <b>NOTE</b>	Provides useful information.



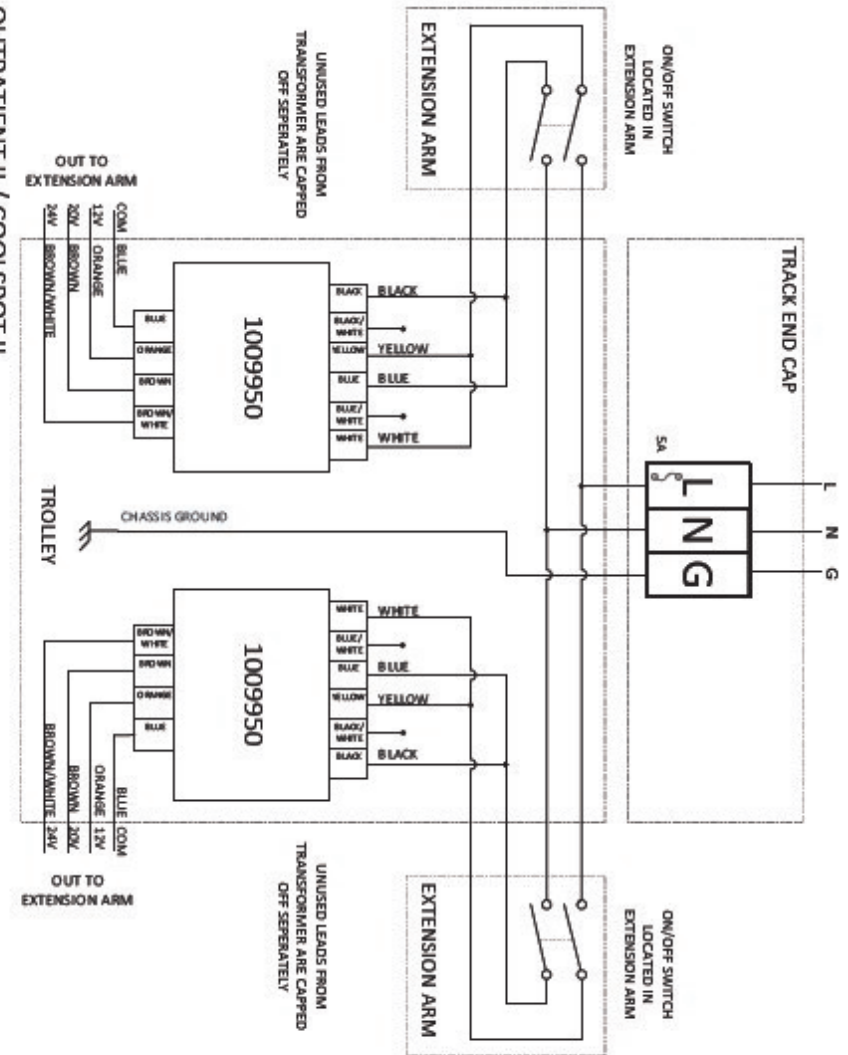
Symbols Used In This Manual

	On / Off (power connection/disconnection to the mains)
	Protective ground connection
	Alternating current
	"Hot Surfaces" symbol.

1.3 Safety Precautions

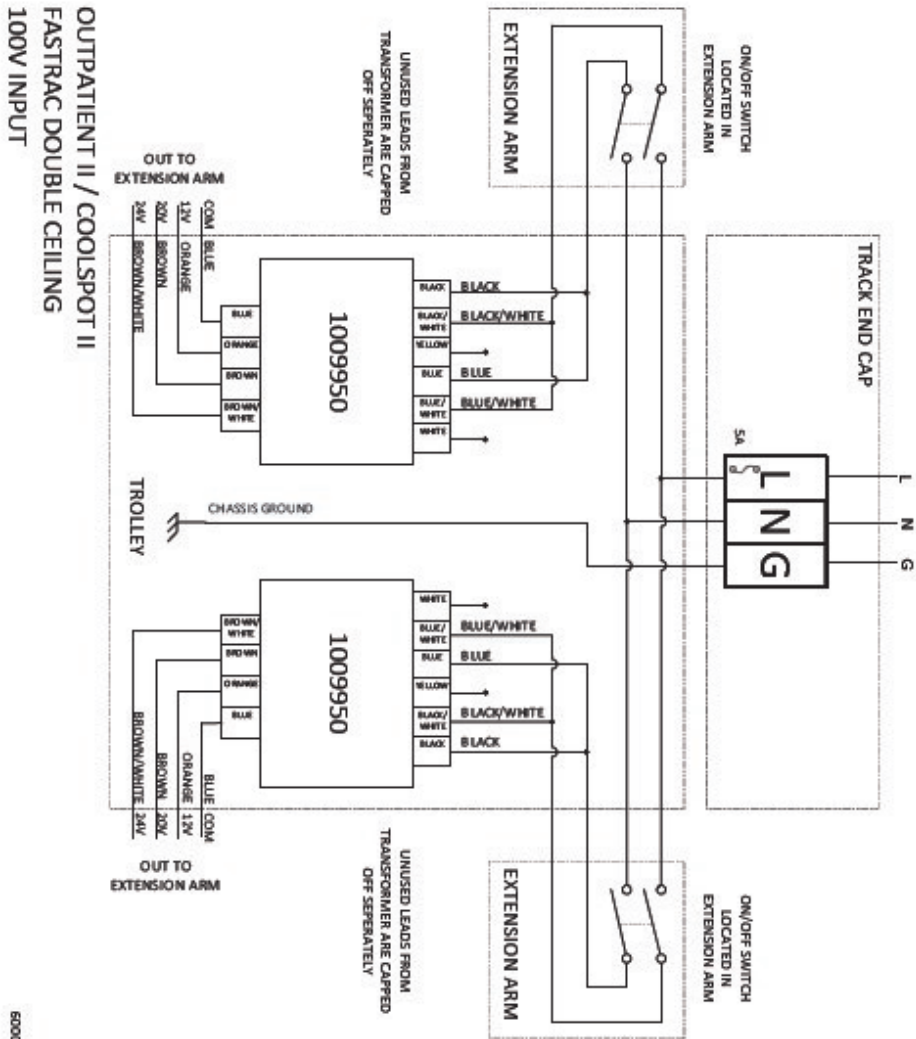
	<b>WARNING</b>	Risk of burn. During normal operation do not touch any optical surfaces (e.g. bulb, lenses). Change bulbs only when light switch has been in Off position for at least 30 minutes after use.
	<b>WARNING</b>	Fire hazard. Do not obstruct any vents or openings.
	<b>WARNING</b>	Do not use the fixture if, for any reason, it does not appear to work properly. Instead, alert your Maintenance Department, or Philips Burton, of observed deficiencies and have them corrected before continuing to use the light.
	<b>CAUTION</b>	Do not look directly into the light.
	<b>WARNING</b>	Incandescent: Suitable for dry locations only.
	<b>CAUTION</b>	Do not open the light head while unit is on. Do not spill liquids onto or into the light head.
	<b>CAUTION</b>	Do not operate the Outpatient® II light for extended periods with one of the bulbs burned out.
	<b>CAUTION</b>	Bulb life is a (non-linear) function of applied voltage. Increasing the voltage by only 5% decreases bulb life by almost 80%! The Hi-Low switch on the CoolSpot® II yoke near the lighthouse increases applied voltage when on the "Hi" setting. To avoid premature burnout, ALWAYS turn on the fixture with the Hi-Low switch in the "Low" setting. Avoid prolonged use with the yoke switch on the "Hi" setting. Burton recommends a "duty cycle" of less than 10% for maximum bulb life. This means that for every hour of use, six minutes or less would be at the "Hi" setting.
	<b>CAUTION</b>	Friction between the lighthouse yoke and articulating arm is preset at the factory. If the lighthouse becomes too loose or too tight on the arm, consult Philips Burton technical support

OUTPATIENT II / COOLSPOT II  
FASTRAC DOUBLE CEILING  
120V INPUT



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	<b>WARNING</b>	Failure to properly follow installation and preventive maintenance instructions may result in mechanical failure and void the warranty.
	<b>WARNING</b>	Explosion hazard. Do not use this fixture in the presence of flammable anesthetics.
	<b>WARNING</b>	The Outpatient® II and Coolspot® II lights with the Burton FlexiMount™ mounting systems. Both the Outpatient® II and CoolSpot® II lights are provided as Head and Arm assemblies which are authorized for use only with Philips Burton FlexiMount™ ceiling mounts, wall mounts, or floor stands. Any other use will void the warranty and may cause a safety hazard.
	<b>WARNING</b>	Unplug the fixture before replacing fuses.
	<b>WARNING</b>	Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Grade".
	<b>WARNING</b>	Do not bump or bounce equipment/fixture during operation. Mechanical shock can cause shattering and failure of the bulb.
	<b>WARNING</b>	Use of a higher wattage and/or lower voltage bulb may cause a fire hazard, and will void the warranty. For Outpatient® II use only Philips Burton P/N 0006130PK replacement bulbs. For Coolspot® II, use only Philips Burton P/N 0007006PK replacement bulbs.
	<b>WARNING</b>	Do not attempt to re-focus the CoolSpot® II by twisting the lens. The lens assembly can loosen and eventually fall out.
	<b>WARNING</b>	To avoid overheating, do not operate the light if the fan is not operating. (Check by feeling warm air exiting rear of light head.) Do not cover any of the grills in the light head.
	<b>WARNING</b>	These fixtures have built-in stops. Do not routinely swing the arm(s) hard against the stops or severe damage will result, possibly leading to fracture of the stops and electrical short-circuit. <b>Warranty will be voided.</b>

## 2.0 Operation

### 2.1 Outpatient® II

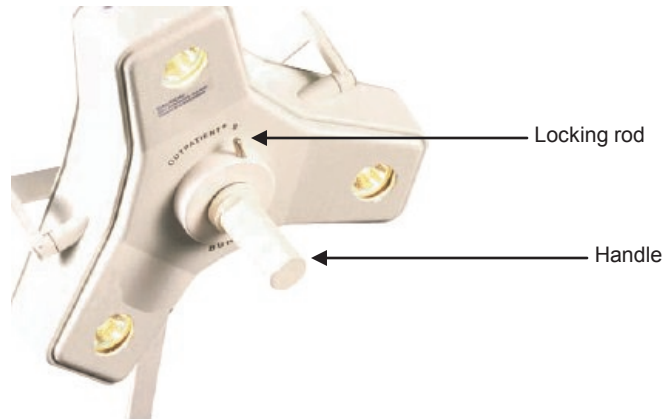
Installation instructions are provided with the mounting system. The Outpatient®II head and arm must be used with an approved Burton mounting system. Under no circumstances should the head/arm be energized directly from line voltage.

- Use the footswitch at the base of the stand to turn on power to floor models.
- Ceiling mount fixtures are powered by a switch on the extension arm.
- Wall mount fixtures are powered by a switch next to the cord inlet of fixture.

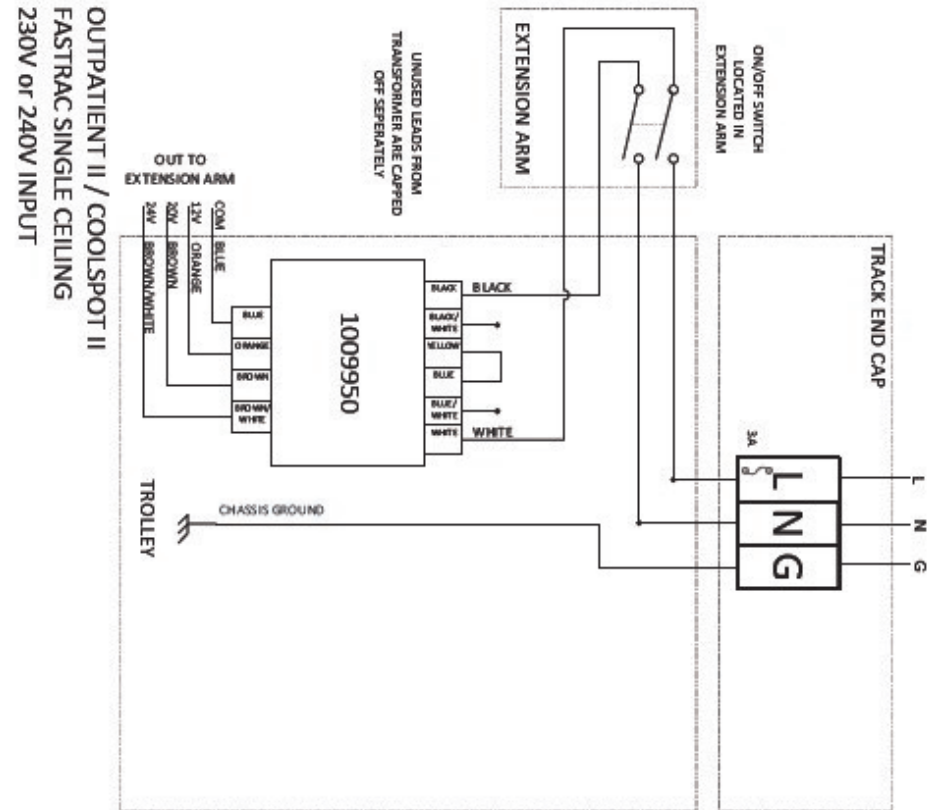
2.1.1 All models can be focused by turning the single-post handle in the front center of the lighthead.

2.1.2 Handle Sterilization: The front handle can be removed for sterilization (autoclave). Push in the locking rod to release the handle.

2.1.3 To reinstall a sterilized handle, locate the machined flat surface facing the locking rod, push the handle in until it bottoms out, and twist the handle until you hear a click (~ ¼ turn).

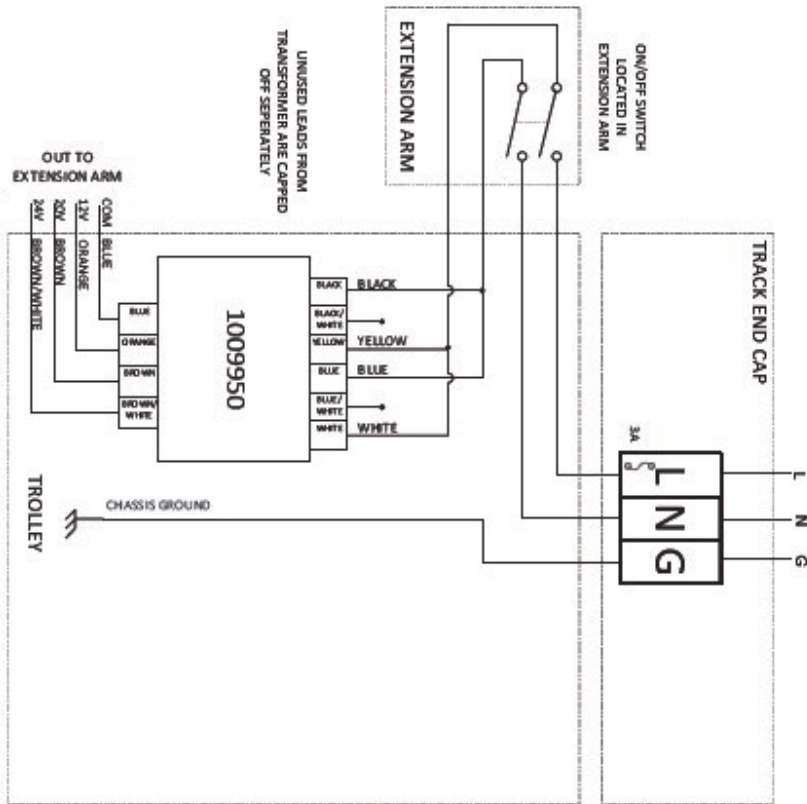


**NOTE:** Disposable handle covers are also available (Burton P/N 0008100PK). See Replacement Parts section.



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OUTPATIENT II / COOLSPOT II  
 FASTRAC SINGLE CEILING  
 120V INPUT



## 2.2 Coolspot® II

Installation instructions are provided with the mounting system. The Outpatient® II head and arm must be used with an approved Burton mounting system. Under no circumstances should the head/arm be energized directly from line voltage.

- Use the footswitch at the base of the stand to turn on power to floor models.
- Ceiling mount fixtures are powered by a switch on the extension arm. (Hi intensity switch located on the head of the unit).
- Wall mount fixtures are powered by a switch next to the cord inlet of fixture.

2.2.1 Focus Control: The lamp and lens system is pre-focused at the factory, and the lens is locked in place by a setscrew. To re-focus, it is necessary to loosen the setscrew first. (You must remove the handle in order to access the set screw.) Under normal conditions of use, it should not be necessary to reset the lens.

2.2.2 Aperture Control: This is the wide, fully-ribbed wheel located on the lighthead. This control allows the user to choose four different illuminated-field diameters.

2.2.3 Intensity Control: The intensity control wheel is located next to the aperture control wheel on the lighthead. It is the narrow wheel with ridges on the rim. The ridges indicate the degree of intensity from 1 ridge (minimum intensity) to 4 ridges (full intensity). Both control wheels may be rotated independently and in either direction.

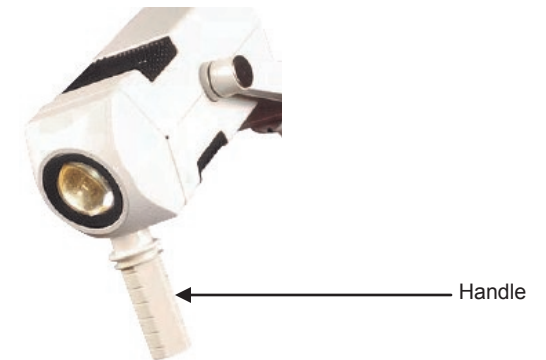
**NOTE:** The three-ridge setting has a blue filter for color correction. Use of this filter, will however, decrease light intensity by approximately half.

**NOTE:** Intensity Switch: Located on the yoke holding the lighthead, the intensity switch can be set at “standard” intensity and “high” intensity.

**NOTE:** If the intensity switch remains on “high”, bulb life will decrease by approximately 80% over time. To maximize bulb life, it is recommended that the switch be set on “standard” before the light is turned on.

2.2.4 Handle Sterilization: The front handle can be removed for sterilization (autoclave). Twist the handle counterclockwise to release the handle.

2.2.5 To reinstall a sterilized handle, twist it clockwise until it stops (about three full turns.)




**NOTE:** Disposable handle covers are also available (Burton P/N 0008100PK). See Replacement Parts section.

## 2.3 Handle Sterilization

The handle assembly is made from high-temperature resistant Noryl™ plastic. It should normally withstand multiple sterilization cycles according to the procedure below, without deterioration. If the plastic handle starts cracking or peeling it should be replaced. The most important factor for keeping the handle from wearing out is not to exceed the temperature limit.

If there is any foreign matter on the handle it should be cleaned thoroughly prior to sterilization.

**NOTE:** See Replacement Parts section for part numbers.

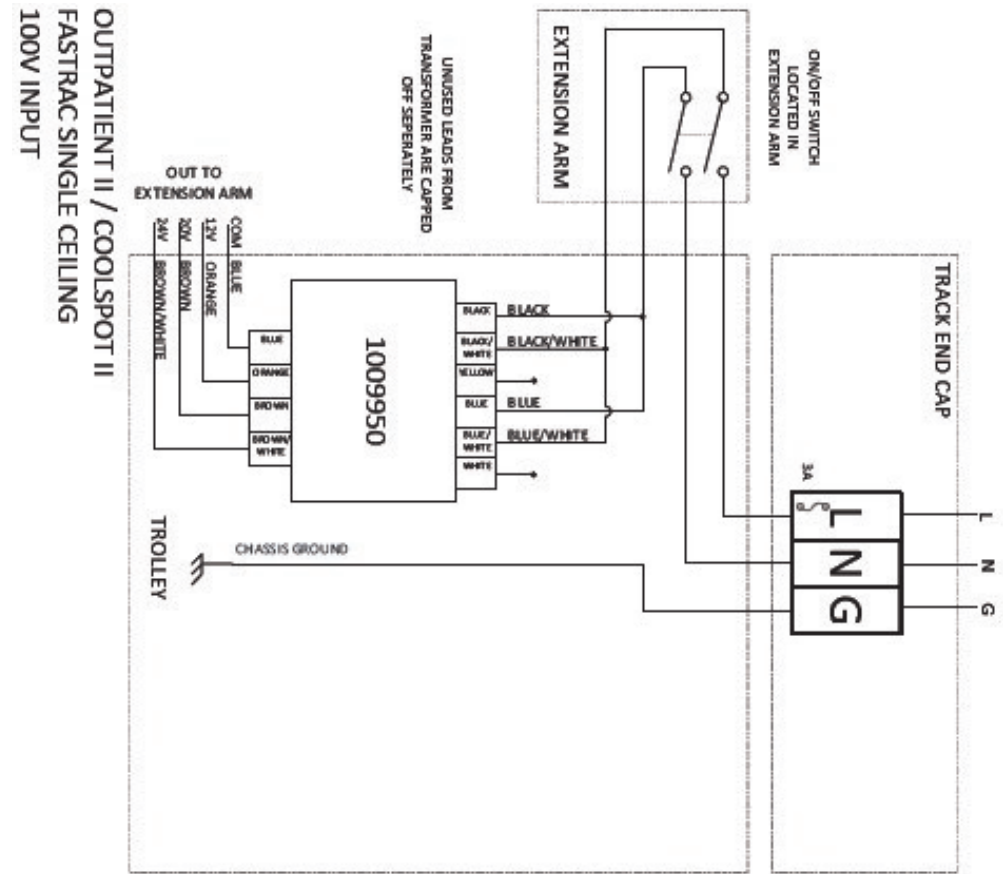
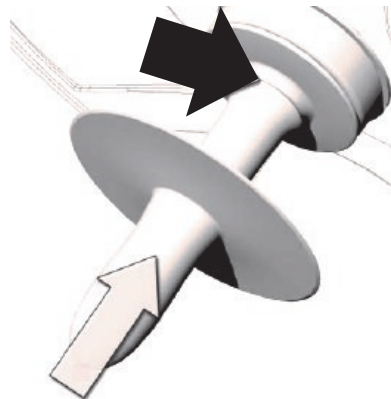
	<ol style="list-style-type: none"> <li>1. Place the handle in the autoclave.</li> <li>2. <b>Set the autoclave cycle for 270°F (132°C), pre-vacuumed cycle.</b></li> <li>3. <b>Set the autoclave cycle time for 3-minutes</b>, turn the sterilizer on and wait for the process to be completed.</li> <li>4. Remove the handle and place it in use, or transport and store it in a sterile environment pending use.</li> </ol>
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**NOTE: DO NOT AUTOCLAVE FOR MORE THAN 3 MINUTES. THIS WILL CAUSE HANDLE TO BECOME BRITTLE AND WILL SHORTEN THE LIFE OF THE HANDLE.**

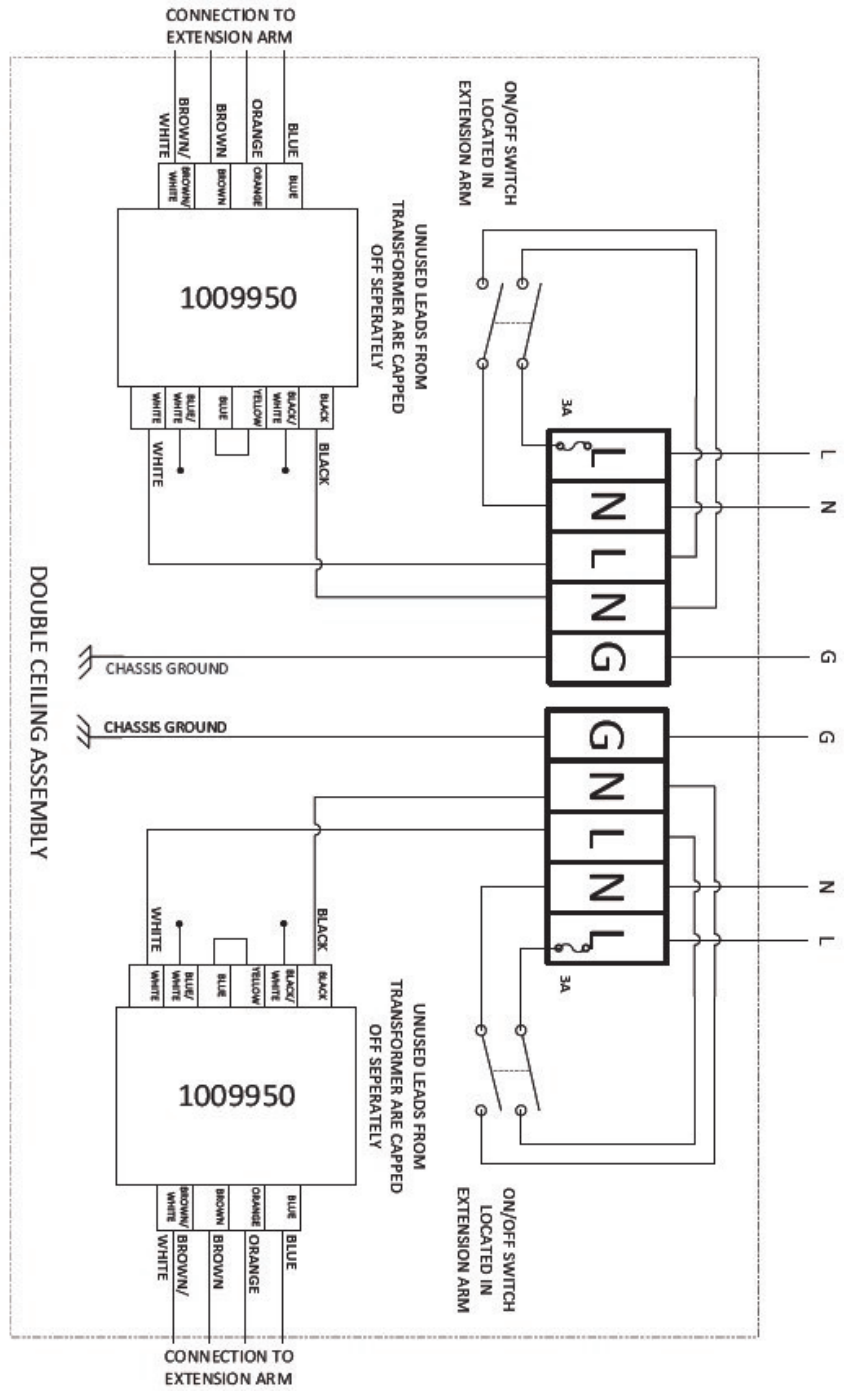
## 2.4 Sterile Disposable Handle Covers

The handle is designed to fit Burton's sterile disposable covers (Philips Burton part #0008100PK).



To attach the cover to the handle, simply slip it onto the handle and make sure it goes over the flange on the handle.



OUTPATIENT II / COOLSPOT II  
DOUBLE CEILING MOUNT  
230V or 240V INPUT



### 3.0 Maintenance





 <b>WARNING</b>	The proposed maintenance schedule is a suggestion. Depending on the use of the product and the operating environment, the required maintenance may not be limited to this. It is the responsibility of the user to service and maintain the product as needed. Failure to do so may present risk of serious or fatal injury.
 <b>WARNING</b>	If the equipment is not functioning properly, do not attempt "quick fixes" with tape, wires etc. If the solution cannot be found in this manual Philips Burton should be contacted.

#### 3.1 Fuse Replacement

**Ceiling Mounts**—Disconnect power to the lamp circuit at the main breaker before replacing fuses. Fuses are under the ceiling cover. Access is gained by lowering the ceiling cover.

**Track and Trolley Mount**—Disconnect power to the lamp circuit at the main breaker before replacing fuses. Use a flat screwdriver to open the fuse holder. The fuse holder is located on one of the track end plates.

#### 3.2 Bulb Replacement—General

	<b>WARNING</b>	Risk of burn. Avoid replacing lamps when the fixture is hot. Wait at least 30 minutes for it to cool.
	<b>WARNING</b>	Fire hazard. Replace bulbs with same type and rating. Purchase bulbs from a Philips Burton authorized distributor.
	<b>CAUTION</b>	Electrical shock. When replacing bulbs, make sure that the power is off.
	<b>CAUTION</b>	Do not touch the bulb with bare hands, as oil from skin will cause premature failure. Use gloves or a dry cloth.



### 3.2.1 Outpatient® II - Bulb Replacement

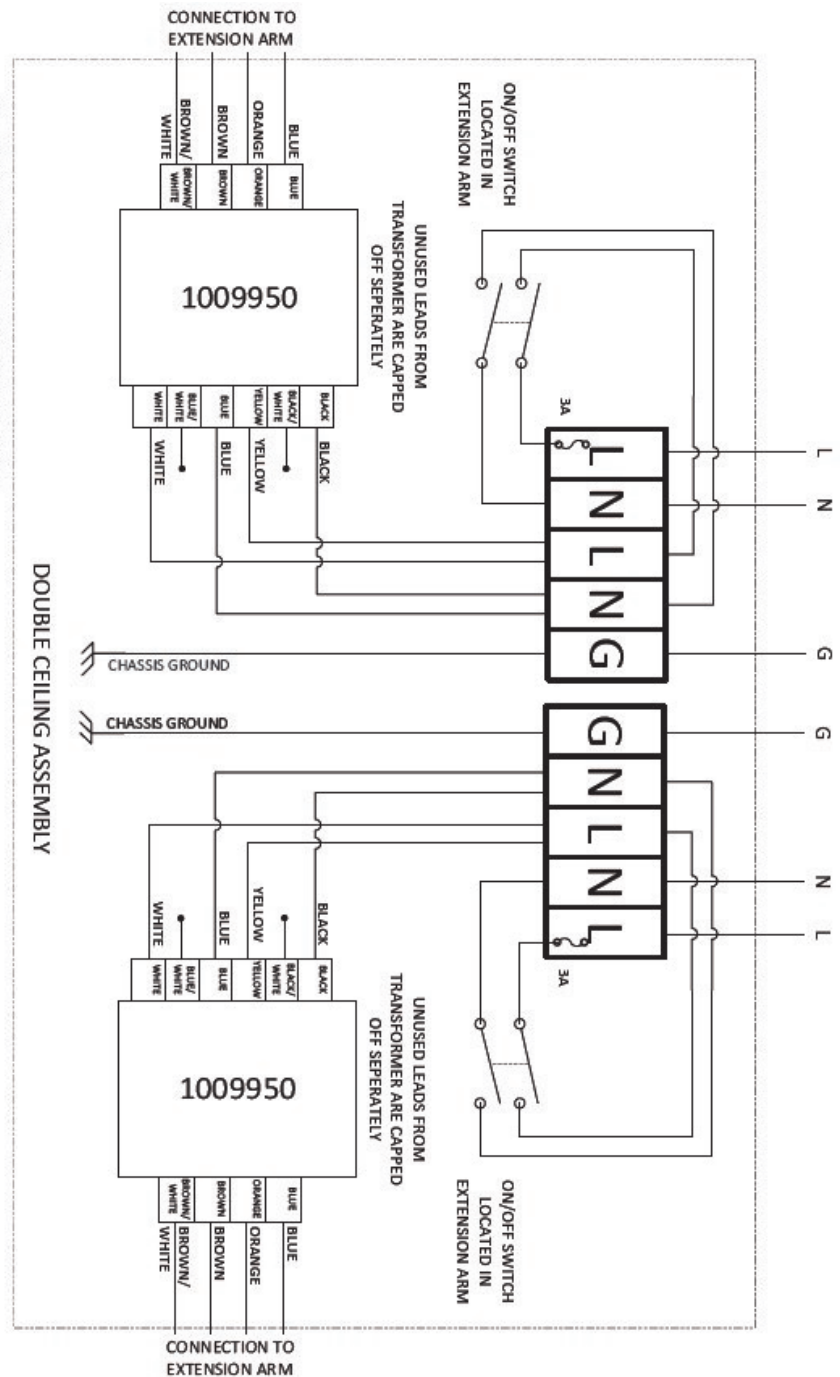
- 3.2.1 Before doing any maintenance inside the lighthouse, allow bulbs to cool. If the light has been operating for 10 minutes or more, allow at least 30 minutes for cooling.
- 3.2.2 The average bulb will have a life of 4,000 hours\*, but when one of the three bulbs burns out, the other two will remain on, operating at a slightly higher voltage. Operation above rated voltage decreases bulb life and increases UV and IR outputs. It is important to replace bulbs shortly after they burn out to avoid overstressing the remaining good bulbs.  
\* Under normal operating conditions at nominal voltage.
- 3.2.3 The back cover is attached to the housing with three pan-head Phillips screws. Remove the back cover by lifting it away from the housing.
- 3.2.4 Slide the bulb out from the metal bracket. (It is held in the bracket by two spring wires at this point.) Unplug the white ceramic socket from the bulb by gently pulling and rocking them straight apart from each other.  
**NOTE:** Do not twist the socket— it does not screw in.
- 3.2.5 Install the new bulb by connecting the socket to the bulb by aligning the bulb pins with the two small holes in the socket, and pushing the socket and bulb together. (It may help to rock the socket slightly while pushing it onto the pins.) Then slide the bulb into the lampholder.
- 3.2.6 Replace all covers, optical filters, and shields to prevent personal injury or property damage. Reinstall the back cover with the three screws.

**NOTE:** Socket condition may affect bulb life. Replace the socket if deterioration (corrosion, pitting) of socket or bulb pins is observed.



**WARNING:** Replace bulbs only with Philips Burton P/N 0006130PK (set of 3).

OUTPATIENT II / COOLSPOT II  
DOUBLE CEILING MOUNT  
120V INPUT



6000232-8 A01

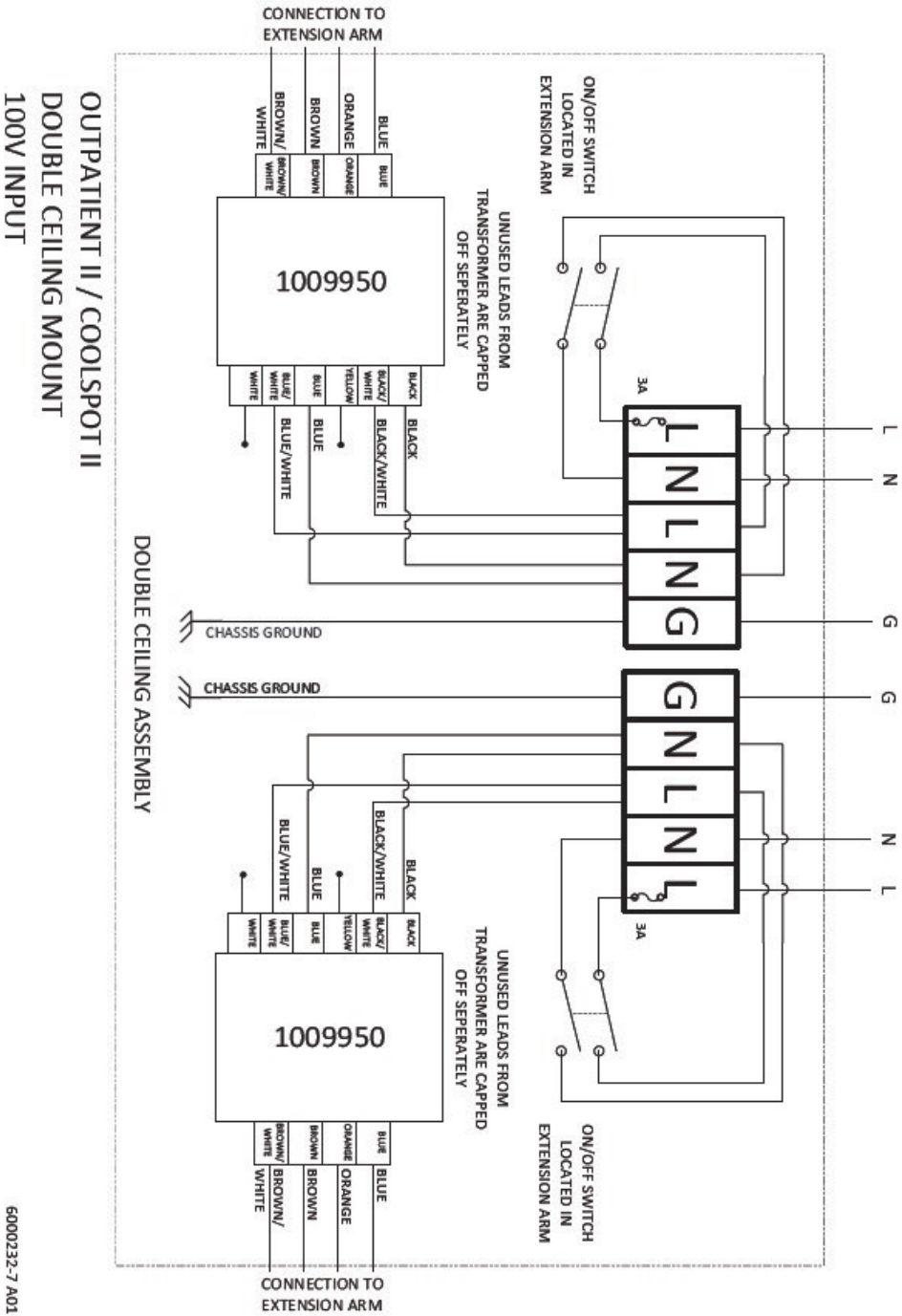
### 3.3.1 Coolspot® II - Bulb Replacement

- 3.3.1 Before attempting any maintenance inside the lighthead, always be sure to allow the light to cool. If the light has been operating for 10 minutes or more, allow at least 30 minutes for cooling.
- 3.3.2 Locate the large, black plastic, slotted screw head near the front of the lighthead. Using a screwdriver or coin, turn this screw ¼ turn to unlock the top cover. Lift the top cover open (tilt the lighthead as necessary to allow the cover to open fully, past the yoke).
- 3.3.3 Pull the lever next to the bulb straight back toward the fan (it is retained in its bracket by wire springs). It will pull out from the ceramic socket automatically. Remove bulb.
- 3.3.4 To avoid damaging the glass, do not touch the bulb or the inside of the reflector with bare hands. Oil on your hands can cause hot spots on the bulb, which lead to early bulb failure. Hold the bulb on the outer edge of the reflector when installing. If touched, wipe off fingerprints before operating the light (use alcohol or acetone).
- 3.3.5 Close the top cover and lock it in place by pressing and twisting the black locking screw.

**NOTE:** Socket condition may affect bulb life. Replace the socket/bulb holder if deterioration (corrosion, pitting) of socket or bulb pins is observed.



**WARNING:** Replace bulb only with Philips Burton part number 0007006PK (4 pack). Using a higher wattage bulb could cause **overheating, electrical overload, and a possible fire**, and will void the warranty.

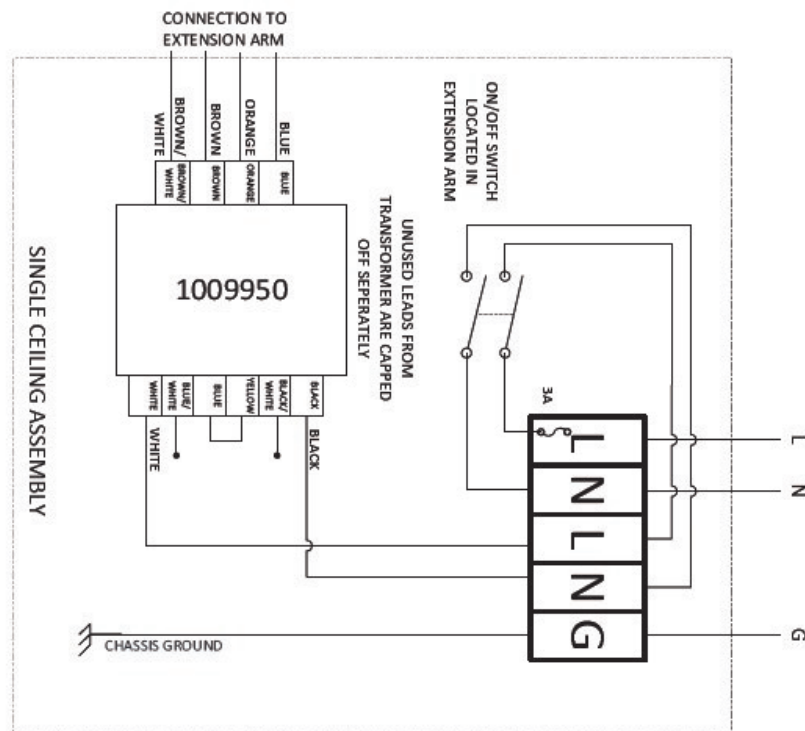




#### 4.0 Troubleshooting Guide - Outpatient® II

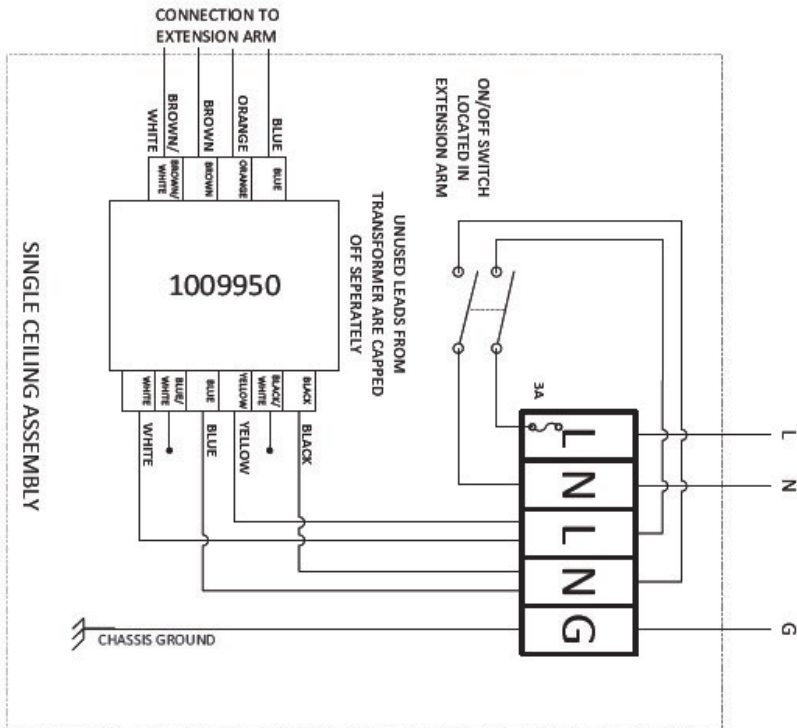
Symptom	Probable Cause	Corrective Action
One bulb does not light.	Light bulb failed or socket failed.	Replace with new bulb or socket. See bulb replacement instructions.
All three bulbs do not light, fan does not work	<p>Not plugged in.</p> <p>Switch not on (   ). Fuses failed: Because of internal short.</p> <p>Because of high mains voltage, or high voltage spikes. Because of single occurrence of lightning strike. Break in wiring.</p> <p>Short or open circuit in transformer. Switch failure (or defective).</p>	<p>Plug into a suitable Hospital-grade outlet.</p> <p>Turn switch on (   ). Replace with new fuse(s). Have a qualified electrician check all wiring. Locate short and fix it. Put voltage regulator on line.</p> <p>Check condition of transformer and wiring.</p> <p>Have a qualified electrician locate break and repair wires. Determine failure mode, replace transformer. Replace switch.</p>
Bulb(s) is/are dim.	<p>Loose or corroded connectors. Weak transformer (defective). Low mains voltage.</p> <p>Wrong bulb(s). Transformer primary leads are not connected properly for mains voltage. Wiring problem.</p>	<p>Check all connections; clean/replace as necessary.</p> <p>Replace transformer.</p> <p>Check mains condition and have an electrician correct it.</p> <p>Verify correct bulbs in place.</p> <p>Check transformer circuit diagram and rewire for proper input voltage.</p> <p>Have qualified electrician check all wiring.</p>
Bulbs work, fan doesn't work.	<p>Fan blade(s) jammed.</p> <p>Cooling fan failure.</p>	<p>Turn power off and check that the fan blade moves freely when turned by hand.</p> <p>Check the wiring: the fan may need replacement.</p>
Arm moves up or down 1" or more after position set.	Spring tension screw is not seated correctly, or not tightened correctly.	Rotate head and yoke fully counterclockwise to access the spring tension screw. Insert the 3/16" Allen wrench into the hole at the end of the arm near the light head yoke. Push and twist the wrench until it seats in the hexagonal socket in the spring tension screw. If the arm does not hold in the highest position, tighten the screw – several clockwise turns should be sufficient. If the arm moves up from the lowest position, loosen the screw (counterclockwise).
Arm is too tight/ too loose to re-position.	Wrong adjustment of friction knob.	Use the black knob to adjust arm friction. Turn knob clockwise to increase drag, and counterclockwise to release drag.
Arm drifts left or right.	Uneven installation.	Check that installation is "plumb". If not, contact the installer for support.

#### OUTPATIENT II / COOLSPOT II SINGLE CEILING MOUNT 230V or 240V INPUT



6000232-6-A01

OUTPATIENT II / COOLSPOT II  
 SINGLE CEILING MOUNT  
 120V INPUT



Troubleshooting Guide - CoolSpot® II

Symptom	Probable Cause	Corrective Action
No light output, but fan works.	Light bulb failed. Socket failure.	Replace with new bulb. Replace socket.
No light output, fan doesn't work.	Not plugged in. Thermostat circuit is open. Switch not on (○). Fuses failed:  - Because of internal short. - Because of high mains voltage, or high voltage spikes. - Because of single occurrence of lightning strike. Break in wiring. Short or open circuit in transformer. Switch failure (or defective).	Plug into a suitable Hospital-grade receptacle. Reset thermostat. Check function of fan. Turn switch on ( ). Replace with new fuse(s). First, check primary fuse located at the mounting system, then check circuit breaker or fuse for the light circuit. If these are in operating condition, have electrician check power switch/wiring: - Locate short and fix it. - Put voltage regulator on line.  - Check condition of transformer and wiring.  Locate and replace wires. Determine failure, and replace transformer. Replace switch.
Light works, fan doesn't work.	Fan blade(s) jammed. Fan failure.	Turn power off and check that the fan blade moves freely when turned by hand. If the fan still does not work, check the wiring: the fan may need replacement.
Poor (low) light output.	Loose or corroded connectors. Weak transformer (defective). Low mains voltage.  Wrong bulb. Transformer primary leads not connected properly for mains voltage.	Check all connections; clean/replace as necessary. Replace transformer. Check mains condition and have an electrician correct any issue(s). Verify correct bulb in place. Check transformer circuit diagram and rewire for proper input voltage.
Arm is too tight/ too loose to reposition.	Wrong adjustment of friction knob.	Use the black knob to adjust arm friction. Turn knob clockwise to increase drag, and counterclockwise to release drag.
Arm moves up or down 1" or more after position set.	Spring tension screw is not seated correctly, or not tightened correctly.	Rotate head and yoke fully counterclockwise to access the spring tension screw. Insert the 3/16" Allen wrench into the hole at the end of the arm near the light head yoke. Push and twist the wrench until it seats in the hexagonal socket in the spring tension screw. If the arm does not hold in the <u>highest</u> position, tighten the screw – several clockwise turns should be sufficient. If the arm moves up from the <u>lowest</u> position, loosen the screw (counterclockwise).
Arm drifts left or right.	Uneven installation.	Check that installation is level. Correct as needed. If not, contact the installer for support.

## 5.0 Technical Data<sup>1</sup>

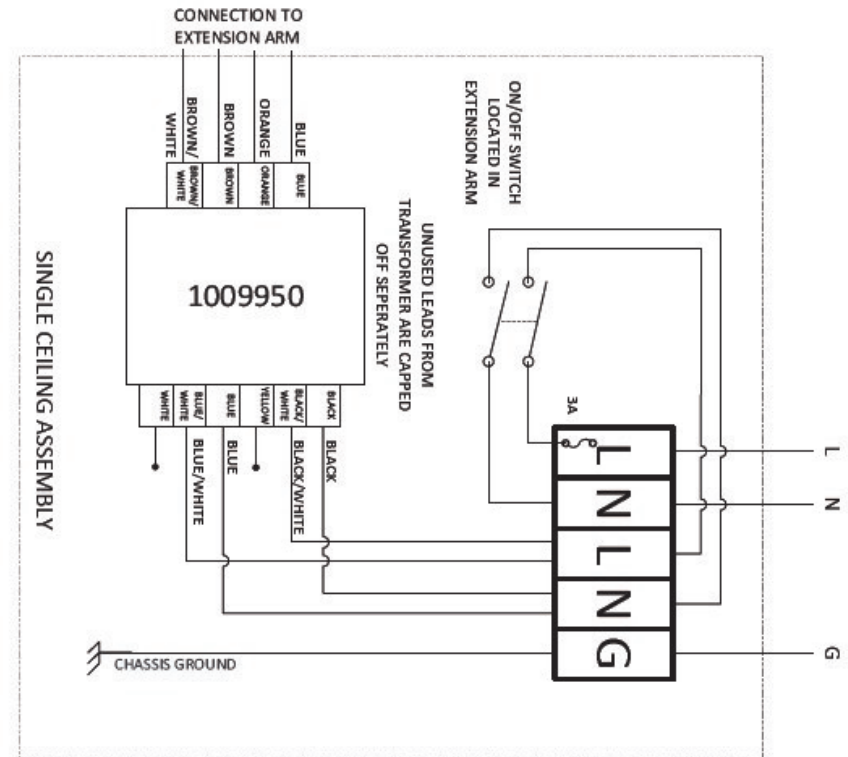
Type of Data	Outpatient®	Coolspot®
<b>Classifications</b>		
Type of Protection Against Electric Shock	Class I	Class I
FDA Classification	FDA Class I, Minor Surgery Light	FDA Class I, Major Surgery Light
CISPR II Classification	Group 1, Class A	Group 1, Class A
Allowable Leakage Current	Does not exceed 100 µA	Does not exceed 100 µA
Reliability of Earth Protection	Does not exceed 0.1 ohm	Does not exceed 0.1 ohm
Mode of Operation	Continuous	Continuous
Protection Against Explosion Hazards	Not to be used in the presence of flammable anesthetics	Not to be used in the presence of flammable anesthetics
Protection Against Hazardous Parts and Ingress of Liquids	IP20	IP20
Degree of Mobility	Ceiling and Wall mount versions: Permanently installed. Floor stand version: mobile.	Ceiling and Wall mount versions: Permanently installed. Floor stand version: mobile.
Approvals	UL 60601-1; IEC60601-1; IEC 60601-2-41; CSA 22 No. 601.1 M-90 230V versions: MDD 93/42/EEC, IEC 60601-1-2	UL 60601-1; IEC60601-1; IEC 60601-2-41; CSA 22 No. 601.1 M-90 230V versions: MDD 93/42/EEC, IEC 60601-1-2
Standards	Meets the requirements for surgical task lighting in ANSI/ IESNA RP-29-06, Lighting for Hospitals and Health Care Facilities	Meets the requirements for surgical task lighting in ANSI/ IESNA RP-29-06, Lighting for Hospitals and Health Care Facilities

EU Conformance <sup>2</sup>	Outpatient®	Coolspot®
Authorized European Representative	<b>Philips Healthcare Netherlands B.V.</b> PMS Quality & Regulatory Affairs Veenpluis 4-6 5684 PC Best The Netherlands (see last page)	<b>Philips Healthcare Netherlands B.V.</b> PMS Quality & Regulatory Affairs Veenpluis 4-6 5684 PC Best The Netherlands (see last page)
CE Classification	Class I	Class I

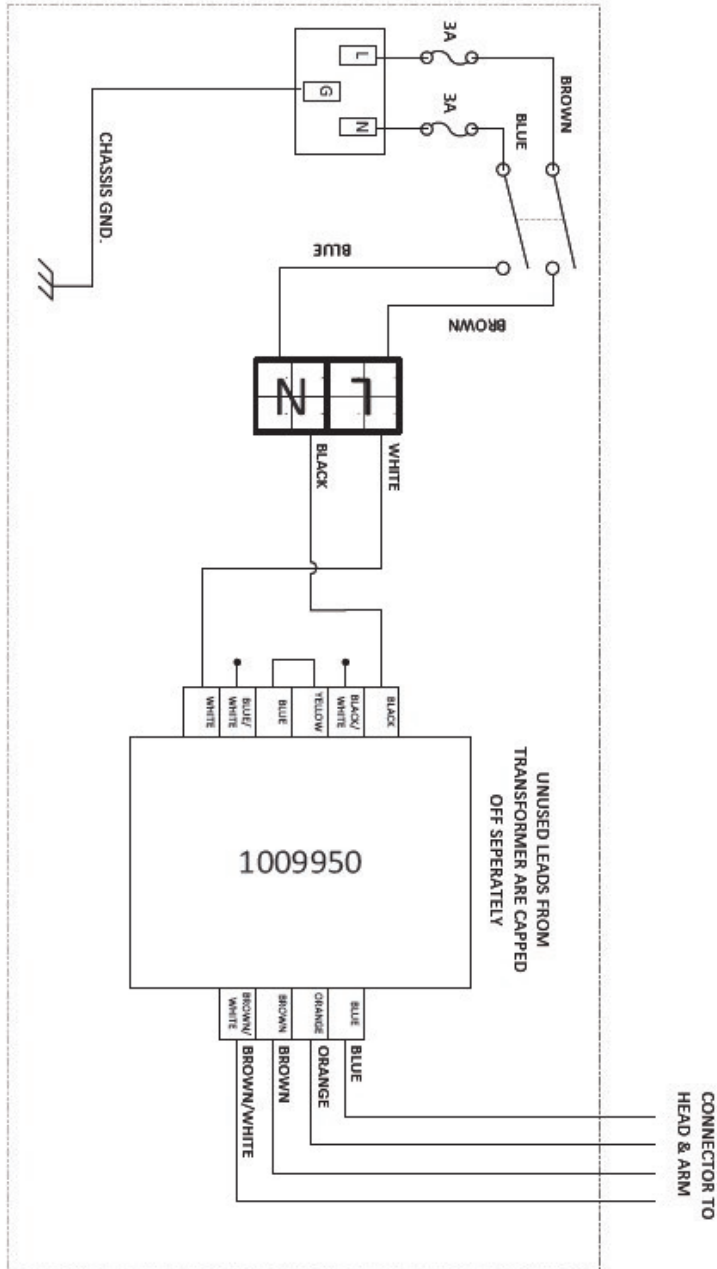
<sup>1</sup>All specifications are subject to change without notice.

<sup>2</sup>The CE mark on this product (230V, 240V version) indicates it has been tested to and conforms to the provisions noted within the 93/42/EEC Medical Device Directive.

## OUTPATIENT II / COOLSPOT II SINGLE CEILING MOUNT 100V INPUT



OUTPATIENT II / COOLSPOT II  
 FLOOR & WALL MOUNT  
 230V or 240V INPUT



Electrical	Outpatient®	Coolspot®
Supply Connections	100V, 120V, 230V or 240V*, 50/60 Hz, 176W *Wired at factory	100V, 120V, 230V or 240V*, 50/60 Hz, 160W** *Wired at factory **200W when hi-intensity switch is on.
Power Consumption	176W	160W
Bulb Types	Philips Burton part number: 0006130PK (3 pack)	Philips Burton part number; 4000056PK (4 pack)
Fusing	<b>Floor, wall, double ceiling mounts:</b> (2 fuses) T 3 A, 250V, 5x20mm <b>Single ceiling, single Fastrac mount:</b> (1 fuse) T 3 A, 250V, 5x20 mm <b>Double ceiling, single Fastrac mount:</b> (1 fuse) T 5 A, 125V, 5x20 mm  The T indicates Time delay (i.e. slow blow fuses). There are 2 fuses in the floor stand and the double ceiling versions. There is 1 fuse in the single ceiling and the wall versions.	<b>Floor, wall, double ceiling mounts:</b> (2 fuses) T 3 A, 250V, 5x20mm <b>Single ceiling, single Fastrac mount:</b> (1 fuse) T 3 A, 250V, 5x20 mm <b>Double ceiling, single Fastrac mount:</b> (1 fuse) T 5 A, 125V, 5x20 mm  The T indicates Time delay (i.e. slow blow fuses). There are 2 fuses in the floor stand and the double ceiling versions. There is 1 fuse in the single ceiling and the wall versions.
Power Cord (Floor Stand Version)	8 ft (2.44m), NEMA 5-15, hospital-grade plug	8 ft (2.44m), NEMA 5-15, hospital-grade plug

**Electromagnetic compliance (EMC)**

To prevent harmful interference to other devices in the vicinity, it is important to install and use the equipment in accordance with the instructions. If this equipment does cause interference to other devices, which can be determined by turning the equipment of f and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the other device(s).
- Increase the separation between the equipment.
- Use different electrical circuits for the conflicting devices.
- Consult with Philips Burton or your filed service technician for help.

Transport and Storage Conditions	Outpatient®	Coolspot®
Ambient Temperature	0°-70° C (32°-158° F)	0°-70° C (32°-158° F)
Relative Humidity	10 - 100% (no condensation)	10 - 100% (no condensation)
Atmospheric Pressure	500hPa - 1060 hPa	500hPa - 1060 hPa
Operation Conditions	Outpatient®	Coolspot®
Ambient Temperature	10°- 40°C (50°-104°F)	10°- 40°C (50°-104°F)
Relative Humidity	30 - 75%	30 - 75%
Atmospheric Pressure	700hPa - 1060 hPa	700hPa - 1060 hPa

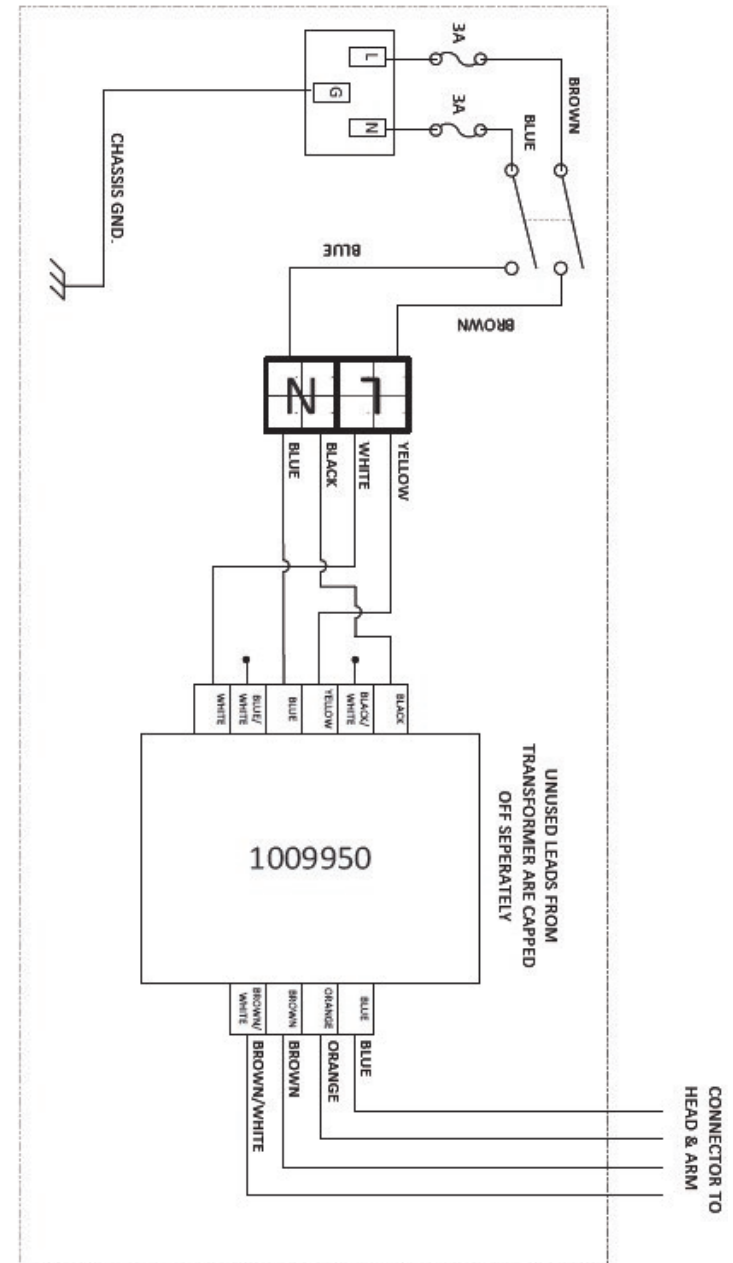
Weights and Dimensions	Outpatient®	Coolspot®
Articulating arm length (lighthead to extension arm/upright)	19.5 in. (50 cm)	19.5 in. (50 cm)
Extension arm length	18 in. (46 cm)	18 in. (46 cm)
Wall mount full extension	45" (1.14 m)	45 in (1.14 m)
Recommended mounting height (wall mount casting)	55-60 in. (1.4-1.5 m)	55-60 in. (1.4-1.5 m)
Double ceiling or combo mount arm span	90 in. (2.28 m)	90 in. (2.28 m)
Ceiling/Fastrac mount downtube length (custom lengths available)	30 in. (76 cm) / 21 in (53 cm)	30 in. (76 cm) / 21 in (53 cm), custom lengths available
Ceiling mount weight (double or combo)	53 lbs (24 kg)	54 lbs (24.5 kg)
Wall mount weight	25 lbs (11.4 kg)	23 lbs (10.5 kg)
Floorstand upright height (from base)	5 ft (1.52 m)	5 ft (1.52 m)
Base longest dimension	17-7/8 in. (46.7 cm)	17-7/8 in. (46.7 cm)
Lighthead longest side length	12 in. (30 cm)	9 in. (23 cm)
Lighthead vertical movement	36 in. (91 cm)	31 in. (79 cm)
Fastrac length	6 ft (1.82 m)	6 ft (1.82 m)
Max. Fastrac weight (double or combo)	106 lbs (48 kg)	181 lbs (82.7 kg)
Can be installed in ceilings	from 8 ft (2.44 m) to 10 ft (3.05 m)	from 8 ft (2.44 m) to 10 ft. (3.05 m)
Rotation about the central axis (single ceiling mount)	360°, limited by stops	360°, limited by stops

Optical Performance / Operating Characteristics <sup>4</sup>	Outpatient®
Central Illumination at 24" (0.61 m), Ec	87,000 Lux (8000 fc) (operated @ 120V input)
Central Illumination at 1m (39.4"), Ec	24,000 Lux (2243 fc) (operated @ 120V input)
Total Irradiance, Ee	8.7 mW/cm <sup>2</sup>
Ultraviolet Radiation	< 1 mW/cm <sup>2</sup>
Color temperature	3300° K
CRI (Color Rendering Index)	94

<sup>4</sup>The optical data are nominal values (unless specified otherwise) based on measurements done according to the IEC 60601-2-41 standard on the rated voltage. Please be aware the lights are very sensitive to voltage variations, and that this can affect the light performance and bulb life significantly. Also, the performance of individual bulbs has a natural variance due to their manufacturing process. Do not substitute. Use only Philips Burton supplied replacement bulbs. Failure to do so will affect performance and invalidate the warranty status.

**OUTPATIENT II / COOLSPOT II  
 FLOOR & WALL MOUNT  
 120V INPUT**

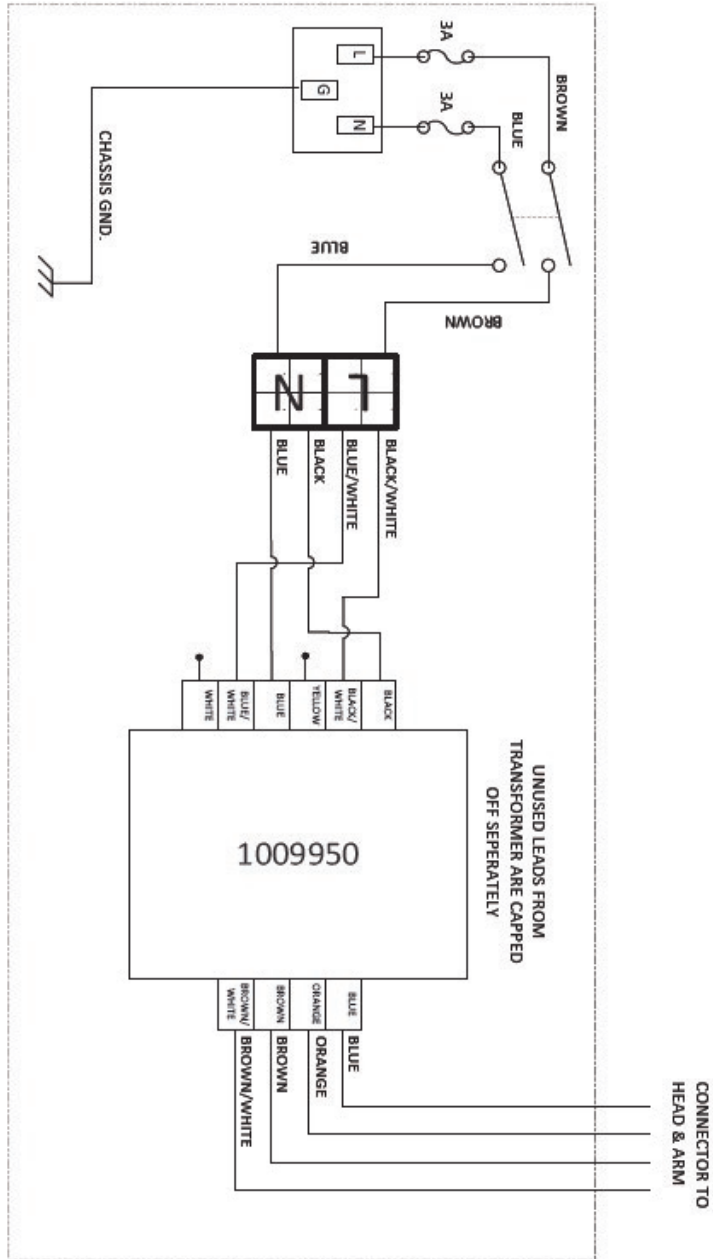
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## 7.0 Wiring Diagrams

### OUTPATIENT II / COOLSPOT II FLOOR & WALL MOUNT 100V INPUT

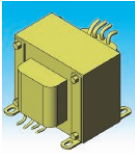
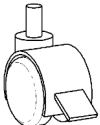
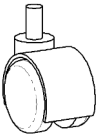
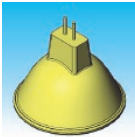


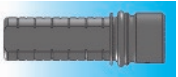
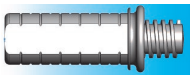


Optical Performance / Operating Characteristics <sup>4</sup>	Coolspot®
<b>Yoke switch on “Low”</b>	
Central Illuminance, E <sub>c</sub> at 24-in. (61 cm)	54,000 Lux (5000 fc) (operated @ 120V input)
Central Illuminance, E <sub>c</sub> at 1-meter	35,000 Lux (3270 fc) (operated @ 120V input)
<b>Yoke switch on “Hi”</b>	
Central Illuminance, E <sub>c</sub> at 24-in. (61 cm)	144,400 Lux (13,400 fc) (operated @ 120V input)
Central Illuminance, E <sub>c</sub> at 1-meter	53,000 Lux (4910 fc) (operated @ 120V input)
<b>Fixture Operated 1-Meter from Target, 120V 60Hz Input, Hi/Low Switch on “Low”</b>	
Remaining Illuminance when beam is obstructed by 1 mask	0
Remaining Illuminance when beam is obstructed by 2 masks	80% E <sub>c</sub>
Remaining Illuminance at bottom of standardized tube (inside)	100% E <sub>c</sub>
Remaining Illuminance at bottom of standardized tube when beam is obstructed by 1 mask	0
Remaining Illuminance at bottom of standardized tube when beam is obstructed by 2 masks	81% E <sub>c</sub>
Total Irradiance, E <sub>e</sub>	11 mW/cm <sup>2</sup>
Spot size	2-10 in. (5-25 cm)
Light field diameter, d <sub>10</sub>	8 in. (20 cm)
Light field diameter, d <sub>50</sub>	4.3 in. (11 cm)
Depth of field when focused at 1 meter	46 in. (117 cm)
Ultraviolet Radiation	< 1 mW/cm <sup>2</sup>
Color temperature	up to 4300° K
CRI (Color Rendering Index)	92
Ratio: Irradiance/Illuminance	3.8 mW/m <sup>2</sup> ·lux

<sup>4</sup>The optical data are nominal values (unless specified otherwise) based on measurements done according to the IEC 60601-2-41 standard on the rated voltage. Please be aware the lights are very sensitive to voltage variations, and that this can affect the light performance and bulb life significantly. Also, the performance of individual bulbs has a natural variance due to their manufacturing process. Do not substitute. Use only Philips Burton supplied replacement bulbs. Failure to do so will affect performance and invalidate the warranty status.

<b>Ecological Characteristics</b>	Philips Burton Medical Products cares about the ecological environment, and in the design and manufacturing of our lights we strive to minimize the ecological impact.
Materials	No hazardous materials are used in the production of the lights.
Plastic	The plastic parts are made from an ECO-compliant grade of plastics. This means that no brominated or chlorinated substances are used in the production of the raw material.
Recycling	The plastic parts are marked with the material type to accommodate easy sorting for recycling.
Disposal	Although no hazardous materials are used in this product, public laws may contain special specifications with regard to disposal. To avoid damage to the environment and health, relevant authorities should be consulted before disposing of the product.

## 6.0 Replacement Parts

Picture	Description	Part Number
	Transformer Assembly	1009950
	Caster with brake	1009717
	Caster without brake	0002803
	Bulbs Outpatient®II Coolspot®II	0006130PK (3 pack) 0007006PK (4 pack)
	<b>100V, 120V, 230V and 240V</b> Fuse T3A, 250V, 5x20mm	4000025
	Disposable Cover	0008100PK (25 pack)
	Handle Outpatient®II	1008465
	Handle Coolspot®II	1008466B