

TPC

Lucent L690-LED Installation and Operation Manual



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Technical Assistance is available Monday through
Friday, 8:00 Am to 5:00 PM PST.

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SYMBOLS



DANGER

The paragraphs marked with this symbol contain instructions which must be followed carefully to avoid damaging the device, the operator and the patient.



WARNINGS

These instructions warn the operator that it is mandatory to operate with utmost care to avoid situations which could damage the device.



RESTRICTION

This icon indicates the most appropriate behavior to avoid damaging the device.



RECOMMENDATIONS

This icon indicates useful details for an effective use of the device.



Dispose of the device according to the regulations on separate waste collection of electrical equipment. Directive WEEE 2012/19/EC



Class II device.

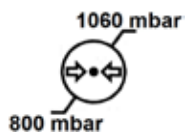


Danger warning symbol

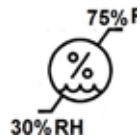


Refer to the documentation enclosed..

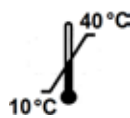
ATMOSPHERIC PRESSURE



RELATIVE HUMIDITY



TEMPERATURE



SWITCH SYMBOLS



**ADJUSTMENT
SENSOR**



SERIAL NUMBER

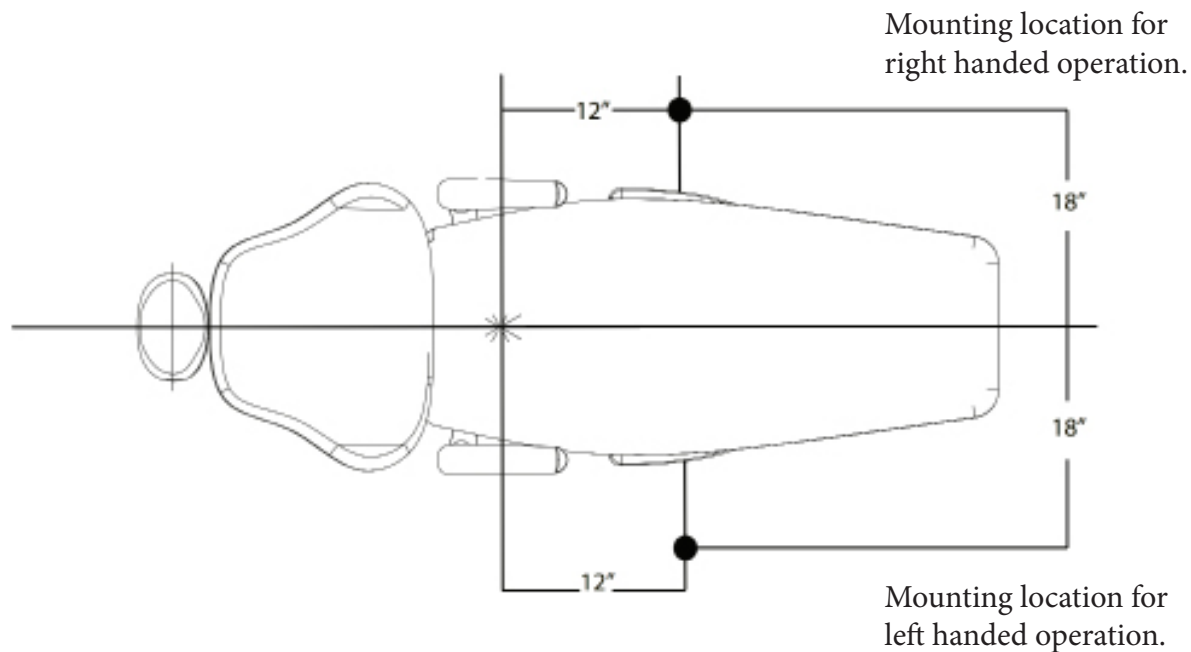


ITEM CODE



STERILISATION

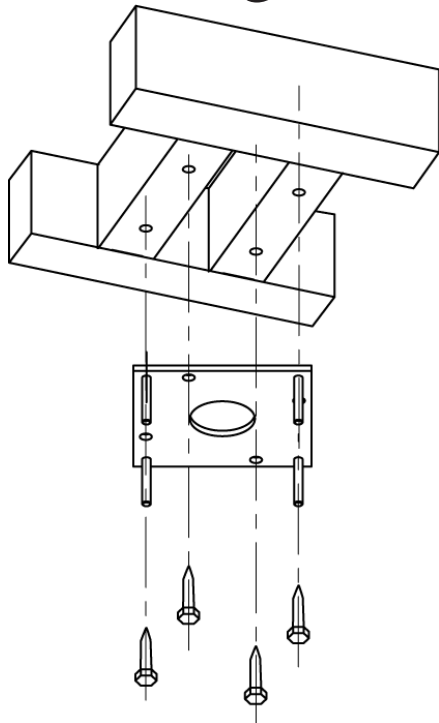
Ceiling Bracket Suggested Placement



Location

A typical location for mounting the ceiling light in relation to the dental chair for a right-handed operator is shown in the figure above. Mounting for a left-handed operator would be mounted on the opposite side of the chair.

Ceiling Brace Requirements



Ceiling Joists

The ceiling structure must be capable of supporting 220lb (100kg) dead weight.

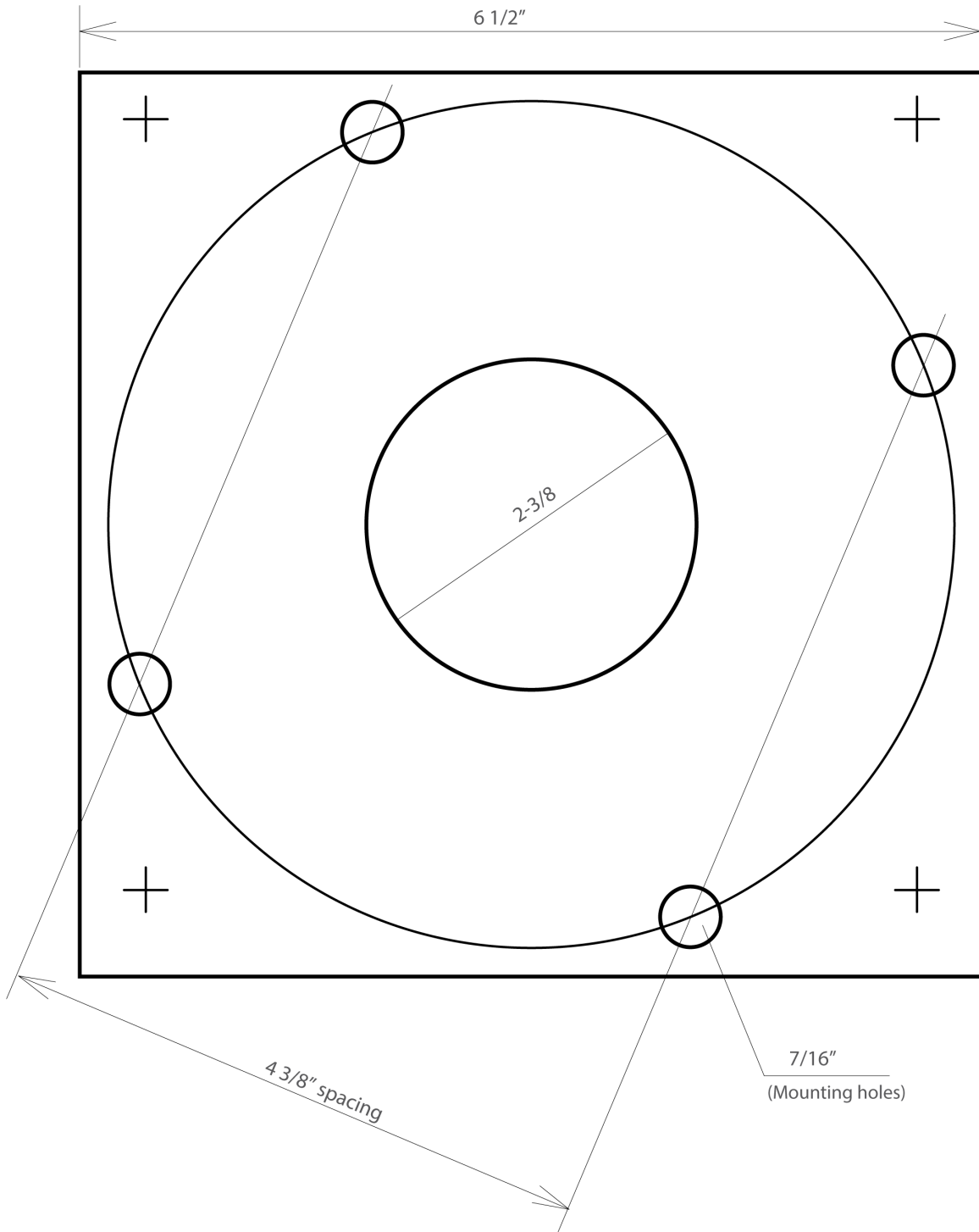


Ceiling bracket mounting plate.

Secure the mounting plate to the ceiling joists using the supplied 4" lag bolts.

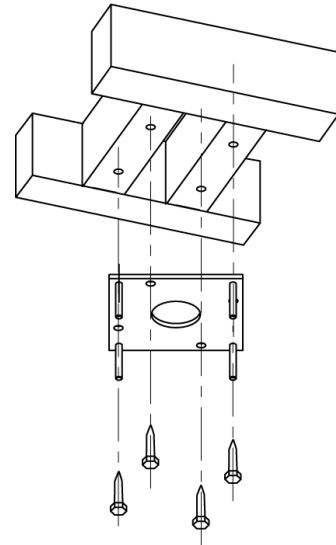
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Ceiling Bracket Mounting Plate

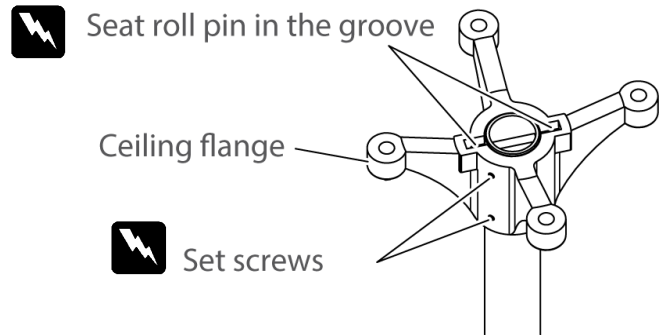


TPC Installation

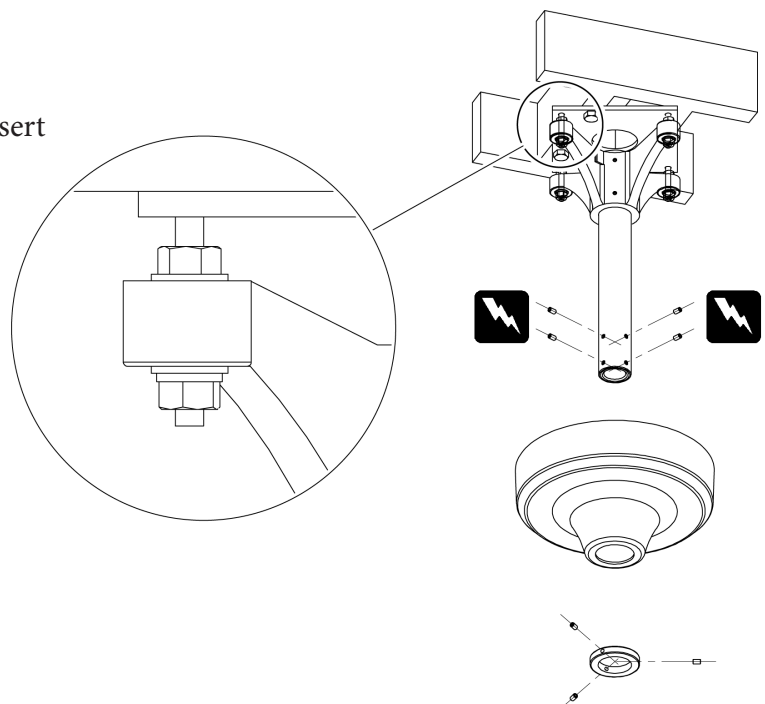
Secure the mounting plate to the ceiling joists using the supplied 4" lag bolts. If mounting to a concrete backing use the supplied concrete fasteners included with the bracket mounting kit.



Slide the light post through the ceiling flange. Make sure the roll pin is properly seated into the ceiling flange grooves. Secure set screws to lock the post in place.

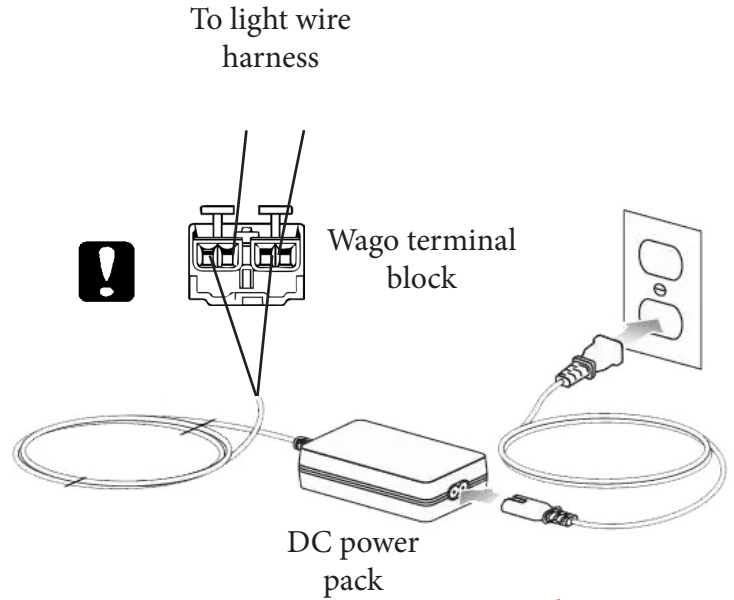


Level the ceiling flange by adjusting the nylon insert nuts on the studs the ceiling flange attaches to.

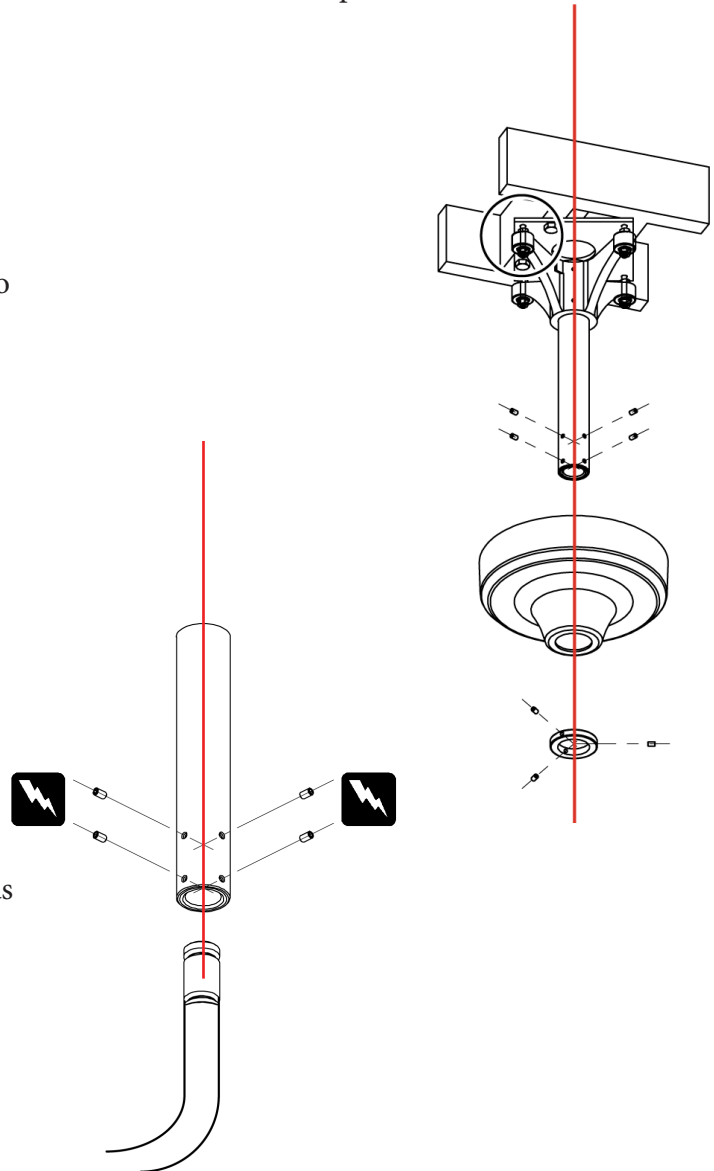


TPC Installation

The included power pack requires a receptacle for installation. It's not recommended to hard wire the connections to the power pack input. Follow all local electrical codes when making electrical connections. The power pack uses 110 - 240 AC input. Output is 24V DC @ 1.25 Amps. Place inside the ceiling or in the plastic ceiling bracket cover.



Run the light cord through the retaining ring, ceiling bracket cover then into the light post. Then feed it through the access hole of the ceiling bracket. Using the white terminal connection block included with the power pack complete the electrical connections to the power pack.



Secure the light arm to the ceiling post column and secure the 4 set screws to lock the light in place. Verify the rotation of the light once this is complete as you may need to rotate the arm to move the locking position to the desired location.

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Dental head

“EDI LED”

The device must be installed by specialized technicians only
Make sure all the components listed below have been included in the package received.

- Dental head (version according to order)
 - Wrench for front screen removal (8 fig.4)
 - Instruction manual
- ❗ The device has to be cleaned prior to use
(see “Cleaning the device” paragraph).
- ⚡ Cut off the power supply prior to installation.

ASSEMBLING THE HEAD TO THE ARM
(see product identification table)

Connect wire
harness



Secure light
head to arm

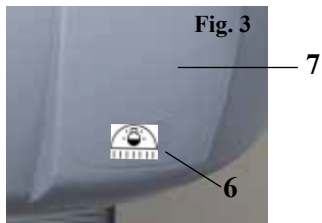
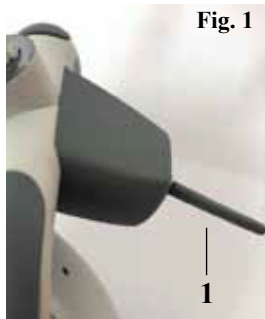


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FEATURES

- “EDI LED” head can be supplied in the following versions:
- Head with switch
- Head with proximity sensor
- Light source consisting of two LEDs whose light is mirrored into two parabolic reflectors.
- Reflecting surfaces with parabolic reflectors which allow obtaining a regular uniform light at all lighting levels and to uniformly distribute the light in the operating field with no shadows or dark areas created by the operator.
- Light intensity adjustment using a mechanical switch or with a sensor.
- Sensor enables the light to be switched on or off without direct contact, eliminating the possibility of cross-infection.
- “Automatic lighting” function allows the lamp to get switched on automatically whenever the power is enabled via a touchpad control. TPC Mirage units only.
- Easy maintenance thanks to the application of new technology that takes into consideration various requirement in terms of safety, ergonomics and hygiene.
- Removable handles for sterilization
- Front splash screen significantly lowers internal contamination of the device.
- Electrical connection: 24v AC / DC.


DESCRIPTION OF PARTS



- 1 - On/Off switch (Intensity)
- 2 - LED module
- 3 - Reflector
- 4 - Handle
- 5 - Front shield
- 6 - Sensor (with or with no Automatic lighting function)
Adjusting the light intensity
- 7 - Electronic board
- 8 - Wrench for front screen removal

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EDI LED head is used for lighting the oral cavity during surgery in dental practice. The optical parameters are obtained by positioning the lamp at 700 mm from the subject. At different distances the light spot could lose its optimum parameters in terms of size, homogeneity and lighting. It is therefore recommended to follow as much as possible the indicated distance.

 Never use the head if any part thereof is faulty

SYMBOLS



ADJUSTING THE LIGHT INTENSITY



ON

Switch on



OFF

Switch off

“EDI LED” HEAD WITH SWITCH

Switch on / off / Adjustment

- To switch the lamp On and Off, press and release the push button to the left or right side. When the lamp is switched On / Off, the device will beep (once).
- Adjustment: When switched on, the lamp is at its maximum lighting capacity. To lower light intensity, keep the push button pressed to the left /right side until it reaches the required intensity. When it reaches the minimum intensity, the device will beep once
- The adjustment goes from maximum to minimum light intensity.
- To go back to the maximum intensity, switch off and back on the lamp.



The light intensity will be MAXIMUM each time it is switch on.

The push button has to be handled easily to avoid its breakage. **Only toggle the switch from side to side.**

EDI LED ” AUTOMATIC TURN ON FUNCTION

The “automatic lighting” function allows the lamp to turn on automatically whenever the power is enabled.

“EDI LED” WITH SENSOR (Optional)



Sensor

Switch on / off / Adjustment

- To switch On or Off , get near the sensor up to a maximum distance of 3 cm. When the lamp is switched on / off, the device will beep (once).
- To adjust the light intensity, stand still near the sensor until it is reached the wanted intensity, from the maximum to the minimum value.
- The adjustment goes from maximum to minimum light intensity.
- To go back to the maximum intensity, switch off and back on the lamp.

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Vertical Arm Tension Adjustment

If you experience a downward drift with your operatory lights vertical arm please follow the procedure below.

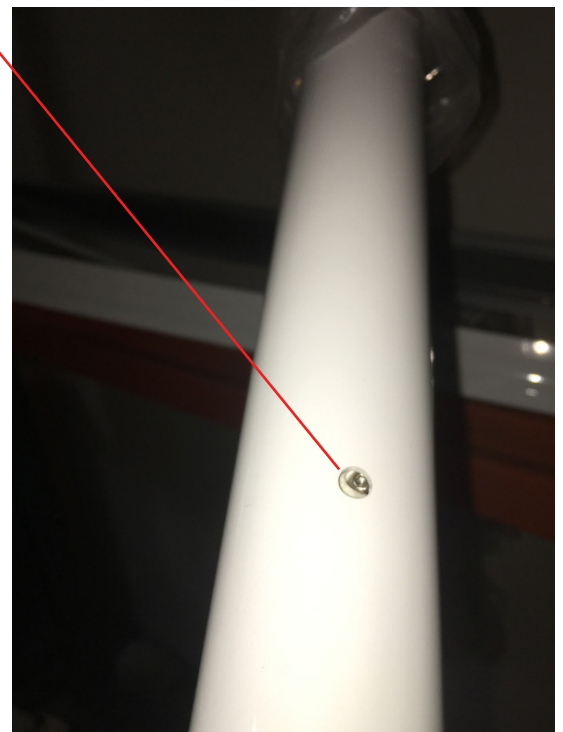
- Remove the end cap cover on the end of the vertical arm closest to the light head. This requires a small Phillips screw driver.
- Turn the tensions adjustment nut located at the end of the light arm to adjust the tension.
- Turn the nut clockwise to increase the tension. Turn the nut counter clockwise to decrease the tension.
- If your vertical light arm drifts down then you need to increase the tension.
- If the vertical light arm drifts back up you need to adjust the friction screw.

Only adjust the friction screw in quarter turn increments.

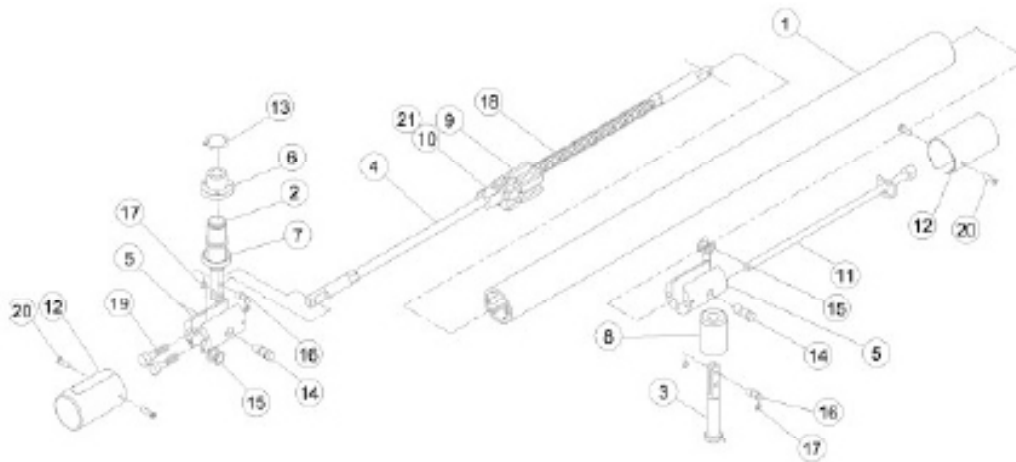
Tension Nut



Friction Screw



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Item	Part Number	Description
1	56021	Cover Flex Arm
2	56022	Knuckle, Rigid Arm
3	56023	Knuckle, Head
4	56024	Spring Rod
5	56025	Extension Support
6	56026	Bushing
7	56027	Bezel
8	56028	Bushing
9	56029	Block Spring Tensioner
10	56030	Friction Block
11	56031	Tensioner Rod
12	56032	End Cap Cover
13	56033	Retainer Ring
14	56034	Long Pin
15	56035	Retainer Ring Small
16	56036	Short Pin
17	56037	Retainer Ring Small
18	56038	Spring
19	56039	Screw Cap Head Socket
20	56040	Screw, End Cap
21	56041	Friction Screw



Cleaning and disinfecting guide

*The Manufacturer makes no representation as to the disinfectant efficacy of these products. We make no warranty expressed or implied that these disinfectants will not damage the surface finishes. Damage and discoloration of the surface finishes are not covered under the warranty. Iodophor based disinfectants will cause yellow staining on many surfaces. Regular washing with soap and water will minimize this staining. Iodophor neutralizers such as Promedyne are also available.

<p>Unacceptable Disinfectants</p> <p>These disinfectants will harm the surface finishes of dental equipment and are not recommended.</p> <p>Use of these products will void your warranty.</p> <p>Chemical Composition / Trade Names</p> <p>Strong Phenols / Lysol, Lysol 2, Lysol Phenol Alcohol Professional, Coe Foam, Coe combinations Spray Pump, Vitaphene, Omni II</p> <p>Sodium Hypochlorite / Clorox, Ajax, Purex</p> <p>Household Bleach</p> <p>Alcohol</p> <p>Household Cleaners</p>	<p>Conditionally Acceptable Disinfectants</p> <p>These disinfectants have been found to be the least harmful to the equipment surfaces by our test methods.</p> <p>Chemical Composition Trade Names</p> <p>Iodophors Biocide, Aseptic IDC, Wescodyne, SD5, Promedyne, Iodo Five</p> <p>Mild Phenols Procide ES, Asepti Steryl Aerosol</p> <p>Glutaraldehyde / Sterall Spray, Coldspor</p> <p>Phenol Sprays</p> <p>Synergized Super Dis cide, Cavicide, Kleenaseptic</p> <p>Quat</p> <p>Phenol/Water Sprays Top Cide, Sporicidin Pump Spray</p> <p>Birex se</p>
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Warranty Information

LED Operatory lights are guaranteed to be free from defects in workmanship and materials for a 2 years from date of purchase, unless otherwise stated. TPC will repair or replace any defective “part” at no charge. TPC will not be responsible for labor charges or shipping charges to and from the TPC facility. This guarantee does not cover normal wear or stains on surface finish. The guarantee does not cover damage resulting from improper installation, misuse or accidents incurred in shipping and handling. All claims against the freight carrier must be initiated at the time the damaged items are received. The claim is the responsibility of the customer. We are improving our products on a continuous basis. We reserve the right to make modifications without the need for prior notification and are not obliged to modify previously manufactured items. Only authorized service technicians should attempt to service TPC equipment. Service performed by any unauthorized technician may result in a voided warranty.

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Troubleshooting

Problem	Cause	Solution
Light does not illuminate	No power to light	Check power 24V AC / DC
	LED has expired	Replace LED
	Transformer is expired	Replace transformer
	Light switch is damaged	Replace light switch
Light intensity is low.	All TPC led lights have built in dimmer modes.	<p>Toggle light on. Once “on” hold the toggle in one direction to change the dimmer setting.</p> <p>Note: Dimmer modes are held in the lights memory.</p> <p>Sensor lights: place your palm on the sensor and hold in place to make any dimming adjustments.</p>
Light turns on and off when the light head is moved	Open in line power or loose molex connection.	Check light head to ridge arm connector. Inspect arm wire.
Sensor light toggles on and off on its own. It also adjusts the intensity on its own.	Electromagnetic force is effecting the sensor board.	Open and inspect the sensor PCB and move any metal objects away from the PCB board.
Vertical arm drifts down	Tension needs to be increased in arm	Tighten arm tension adjustment
Vertical arm drifts up	Friction arm adjustment loose	Tighten friction arm adjustment
Light drifts from left to right	Light post not level	Level unit / light post
Green light on power pack is flashing. The LED light does not turn on.	Transformer is going out	Replace the LED light power pack.