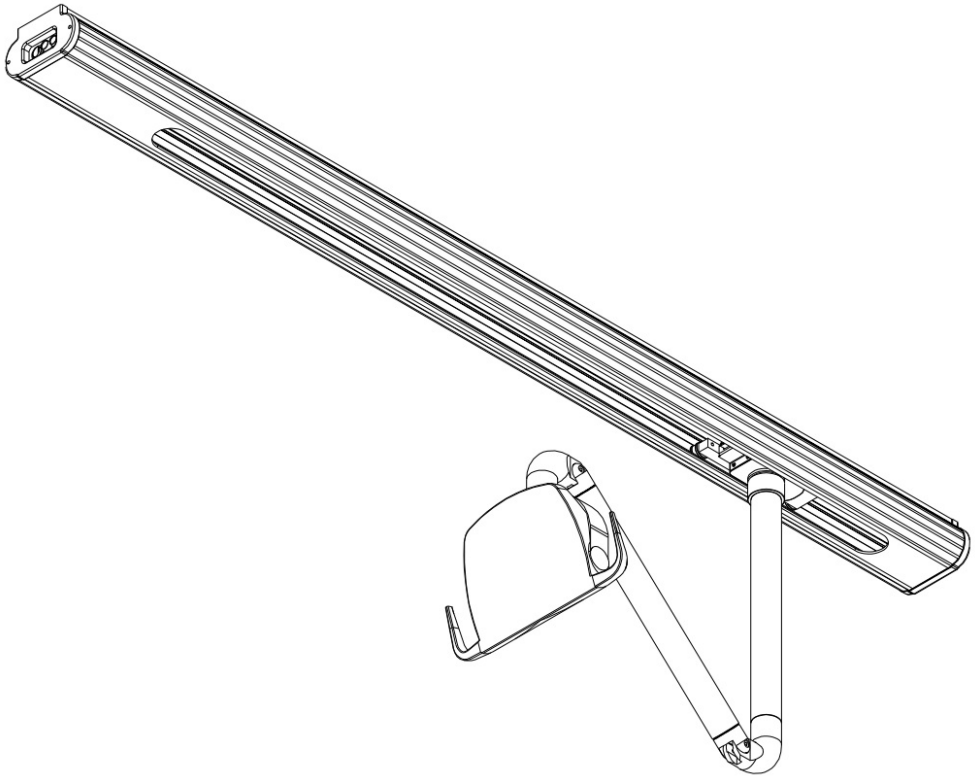
Ergonomic Products

Performance Without Compromise®

Specification / Installation and Operation Guide

L2A1 The FastTrack LS



Product ID: **L2A1**

950-060 Rev: B

Thank you for purchasing the Ergonomic Products **L2A1 FastTrack**

Years of research by dentists, engineers and designers have made this a uniquely effective product in the industry. We stand behind our equipment, and genuinely believe it to be the best available on the market.

Should you have any questions regarding the product's installation or use, please don't hesitate to call our customer service specialists at **1-866-ERGO-4-US**. We may also be reached via email at **equip@ergonomic-products.com**.

We hope you enjoy the benefits and quality of your new equipment and look forward to handling your future needs as you and your practice continue to grow!

- The Ergonomic Products Team

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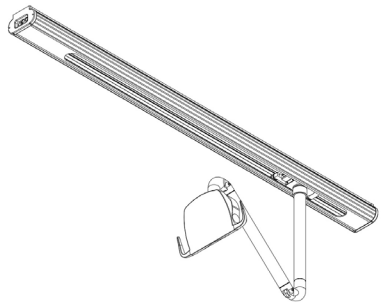


QUESTIONS?

Call our Customer Service Specialists at:

1-866-ERGO-4-US

1 – GENERAL INFORMATION

INTENDED USE

The Ergonomic Products L2A1 FastTrack is a Class I dental operative unit, which is an AC-powered device that supplies oral cavity illumination. The device is to be operated and used by dentists and other legally qualified professionals.

CONTRAINDICATIONS

There are no known contraindications for the use of this device.

WARNINGS

Warnings alert the user to the possibility of injury or damage to the equipment if not operated properly.

Only properly trained and authorized personnel are to use this equipment.

Do not modify this equipment without authorization from Ergonomic Products, Inc.

Read and understand all warnings, precautions, and operating instructions before use.

To avoid risk of electric shock, this equipment is only to be connected by a qualified electrician, and wired with a protective earth ground. Do not bypass the grounding circuitry.

This light should have its own circuit(s) and avoid sharing circuits with other devices that can create strong EMI signals such as x-rays and electro surgery units.

The device might cause interference with other electronic devices while in use. Ensure that other medical devices used in the treatment office do not receive interference from this device.

A dental unit might include magnets which might affect the function or programming of some implantable pacemakers or defibrillators. People who have devices programmed to respond to a magnet must avoid dental units with magnets.

1 – GENERAL INFORMATION CONT'D

DEFINITIONS OF SYMBOLS:
The following symbols may be used throughout the product manual.

WARNING. Failure to carefully follow the described procedure may result in damage to the equipment.

Risk of electrical shock present. Make sure power is disconnected before attempting this procedure

IEC SYMBOLS:
The following symbols conform to IEC labeling standards and may be located throughout the product.

	AC (Alternating Current)
	Protective earth (Ground)
	Protected against splashing water
	See operating instructions
	Type B equipment (Protected against electrical shock).
	Dangerous Voltage
	Manufacturing Date
	Waste Electrical and Electronic Equipment
	Warning, strong magnetic field
	On / Off
K	Temperature Selector (4000k – 5500k)
MT	Manual Operating Mode
AT	Sensor Operating Mode
+ –	Luminance Adjustment (More +) (Less -)
	Important to follow instruction. Not a Caution.

- Equipment Disposal

Contact Ergonomic Products for proper disposal of your device to ensure compliance with your local environmental regulations.

- Incompatible Equipment

To guarantee the operational safety and function of this device, the use of unapproved units or accessories is not advised. Doing so could result in potential hazard.

- Obtaining Technical Literature

The manufacturer will make available on request circuit diagrams, component parts lists, descriptions, calibration instructions or other information that will assist technical personnel to repair and replace serviceable items.

- Transport & Storage

Packaging should be handled with care and not be allowed to get wet. Storage temperatures should range from -68°F(-22°C) to 122°F(50°C) with a humidity range from 10% to 90%.

- Environmental Conditions

The dental light is intended to operate in a dry, indoor, thermally controlled environment. The temperature range should be kept between 50°F (10°C) and 110°F (43°C).

- Working Conditions

Temperature: 41°F (5°C) to 104°F (40°C)
Relative Humidity: 30% to 75%
Atmospheric Pressure: 70 to 106Kpa

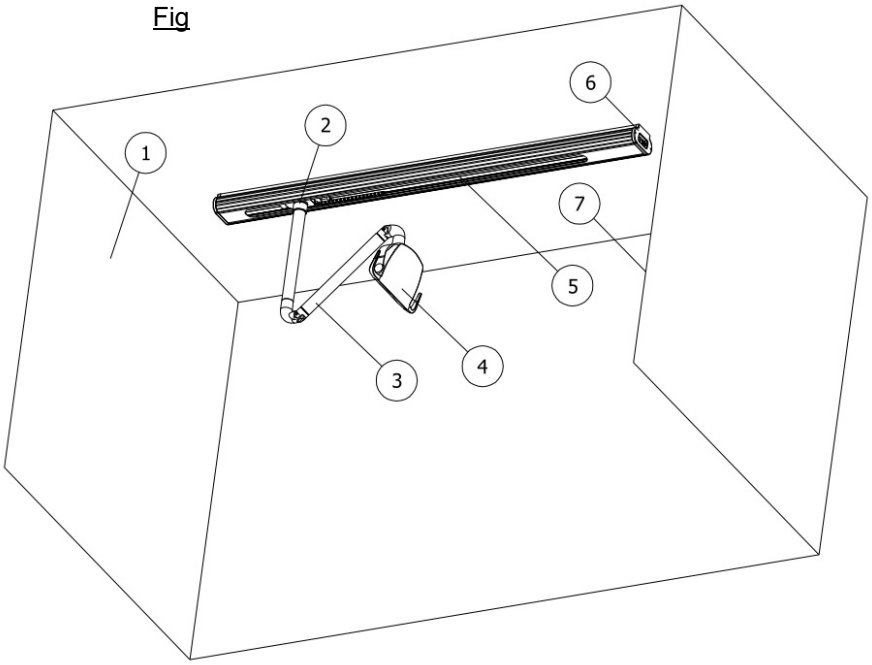
- EXPLOSION HAZARD –
DO NOT USE THIS EQUIPMENT IN THE PRESENCE OF FLAMMABLE ANESTHETICS.

We are constantly striving to improve our products. We reserve the right to make modifications without the need for prior notification and are not obliged to modify previously manufactured items.

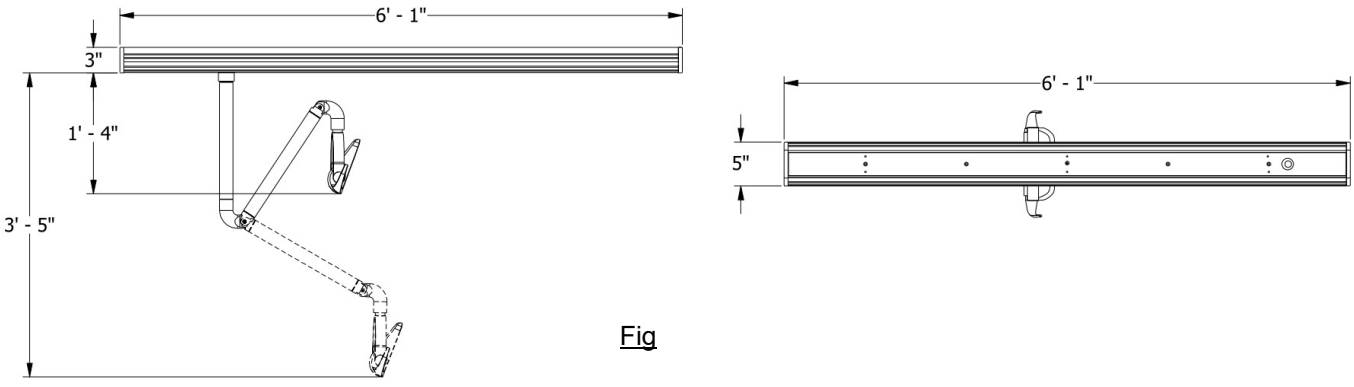
2 – SPECIFICATIONS

Balloon callouts in Fig 2.1 are the common parts of the FastTrack LS.
Fig 2.2 gives the overall dimensions of the FastTrack LS.

Fig



(1) – Toe Wall
(2) – Trolly
(3) – Flex Tube
(4) – Head Lamp
(5) – Track
(6) – Power Supply Box
(7) – Head Wall



Fig

2 – SPECIFICATIONS CONT'D

Fig 2.3 shows the wiring schematic for the FastTrack LS. Fig 2.4 is the L2A1 FastTrack technical data.

For replacement fuses use:	
Part number	Amps
309-018	1.0 amp fuse (1)

Supply Mains – minimum 1 amp Circuit

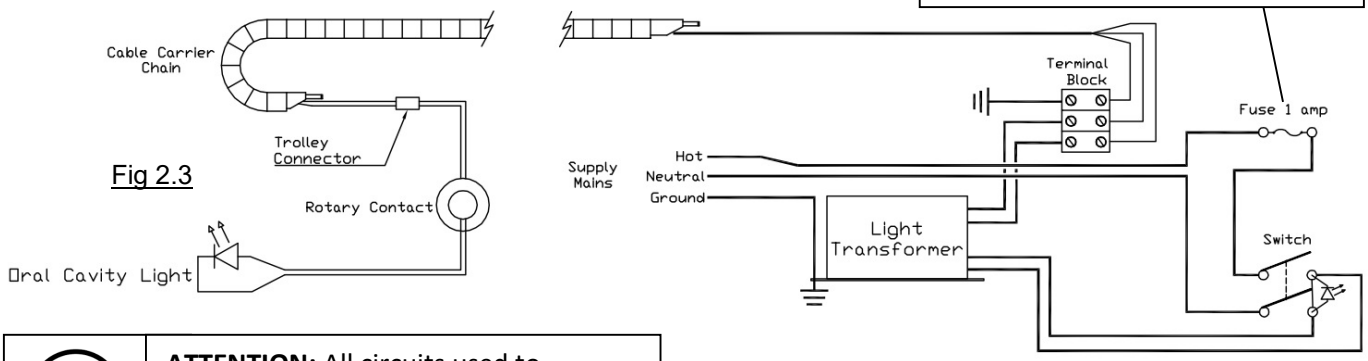


Fig 2.3

	ATTENTION: All circuits used to connect ME equipment must comply to national and local electrical codes

	WARNING: Unit must be hardwired by a qualified electrician. Before servicing, be sure all power has been disconnected.	Unit must be switched to meet IEC 60601-1 guidelines Supply Mains – Over current protected circuit

Fig

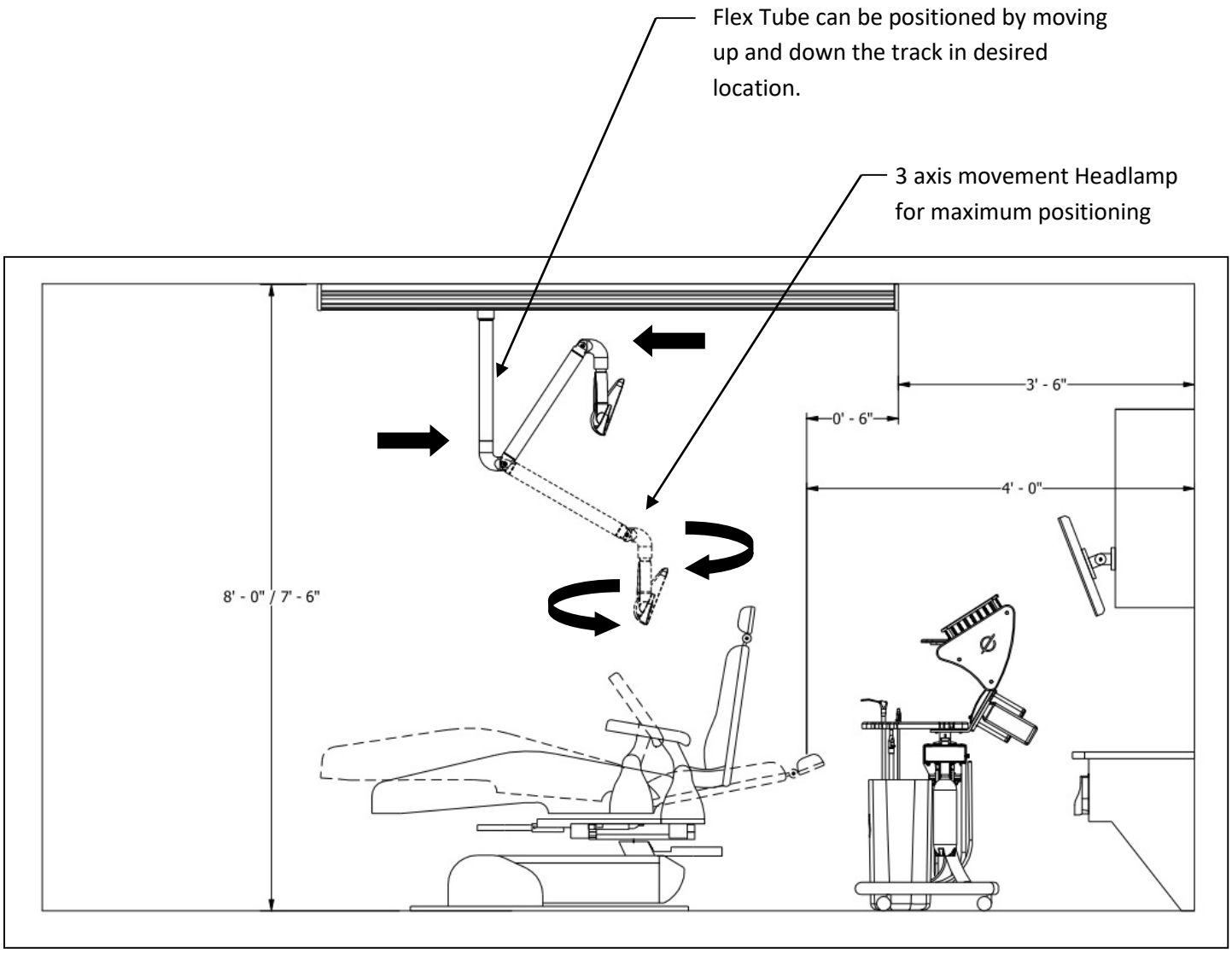
TECHNICAL DATA:

L2A1 FastTrack requires a minimum 1 amp circuit.

LED Oral Cavity Light (Headlamp)
120 Volt
Wattage: 10w
Color Temp: 4000k & 5500k
Color Rendering Index: 90 (CRI)
Weight: 36 lbs.

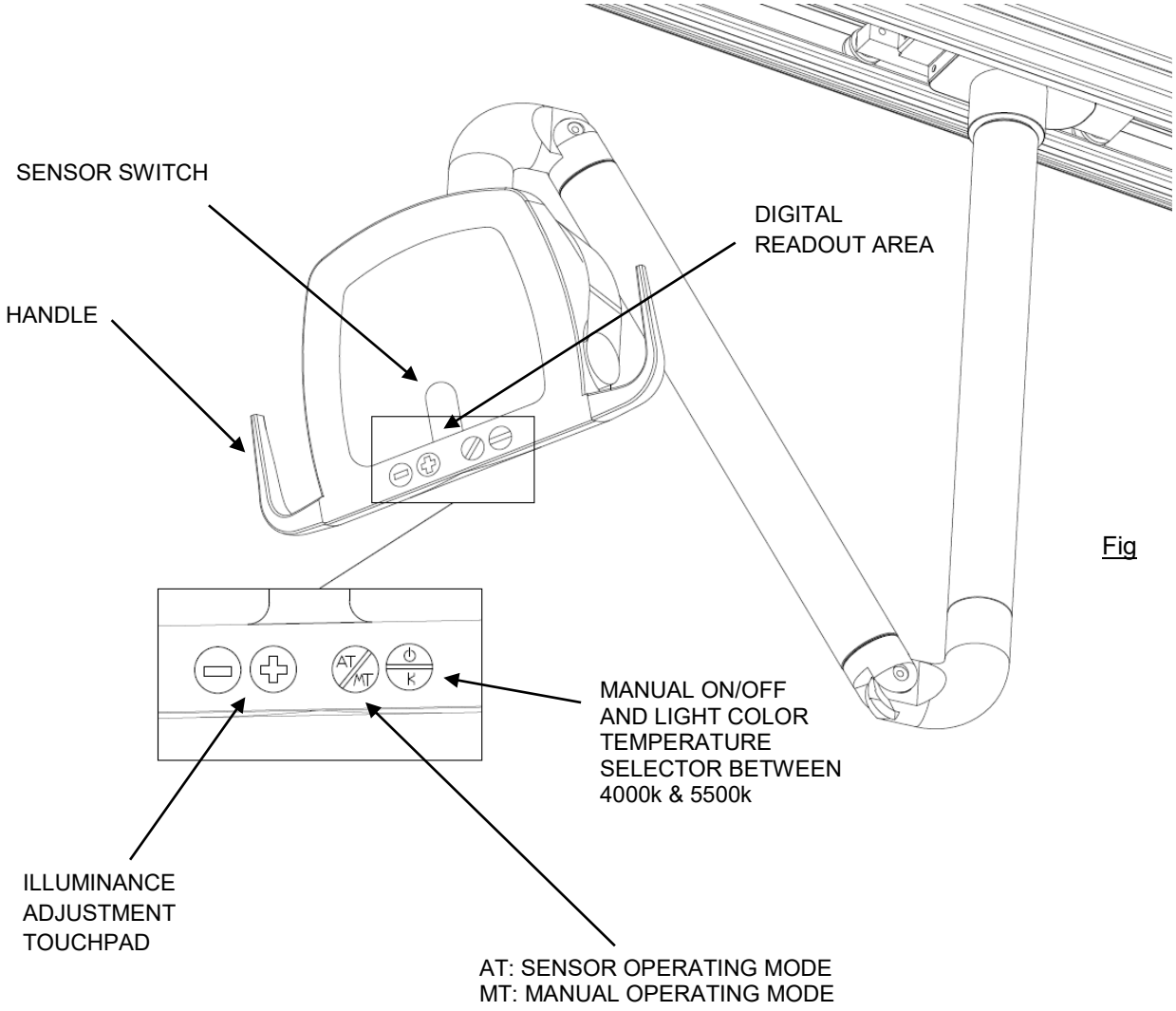
2 – SPECIFICATIONS CONT'D

Fig 2.5 shows the range of the Flex Tube and Headlamp.



3 – STRUCTURE OF THE LIGHT

Fig 3.1 shows the HEADLAMP on board functions and descriptions.



Fig

4 – OPERATING INSTRUCTION

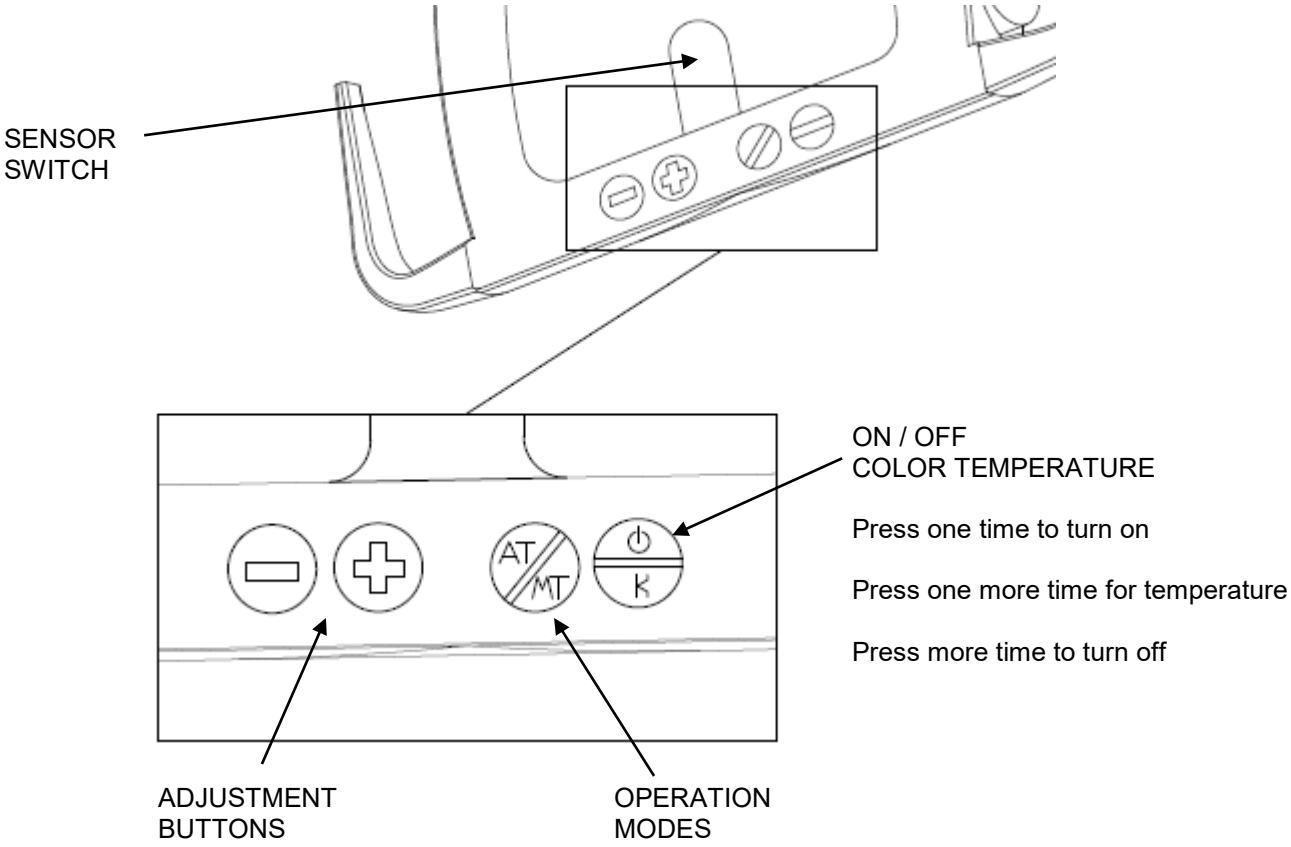
1. When you touch “AT” / “MT” you can change the operation mode from SENSOR OPERATION MODE and the MANUAL OPERATION MODE.

2. When the light is under “AT” MODE, the light can be operated by the SENSOR SWITCH. Skim hand over the SENSOR SWITCH within 100MM, and the light will turn on or off. When the light is on, keep the hand in front of the SENSOR SWITCH within 100MM, and the illumination of the light will be adjusted. Touch the “K” button to shift between the low color temperature of 4000k to the high color temperature of 5500k.

3. When the light is under “MT” MODE, touch the “ON/OFF” and “K” button to shift among low color temperature, high color temperature, and off.

4. No matter if the light is under “AT” OR “MT” MODE, when the light is on, you can adjust the illumination by pressing the adjustment button. Touch once and the illumination will be increased or decreased by 1000LUX. Press the “**+**” or “**-**“ button and the illumination will be adjusted. The illumination setting will be automatically memorized.

5. Adjust the angle of the light using the handles to adjust to any position you prefer. The light head is three axis, providing unlimited positioning.



5 – UNPACKING and INSPECTING

1. Inspect all shipping containers for visible damage upon arrival. If transit damage is found photograph damage, and contact Ergonomic Products immediately. (This will expedite the corrective process).

2. Use safe lifting procedures to free the product from the container, and remove all packing material and any accessory boxes from shipping container.

3. Lay individual components on clean surface to avoid scratching, and inspect contents. If damage is found, contact Ergonomic Products immediately.

4. Do not discard accessory boxes without thoroughly confirming they are empty first.

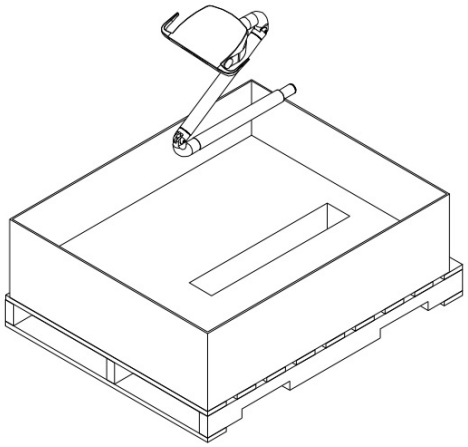
NOTE: *Depending on quantity of lights order may come on one pallet or multiple.*

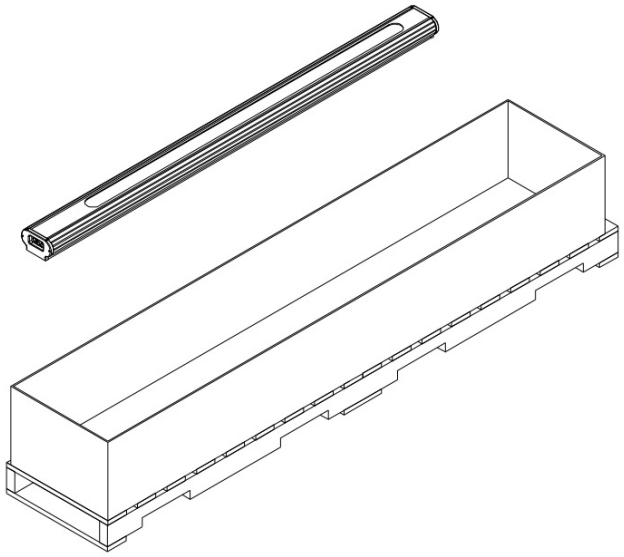
All claims against the freight carrier must be initiated at the time the damaged items are received. The claim is the responsibility of the customer.

REQUIRED TOOLS

Utility Knife
Electric drill and Assorted Bits
Construction Level
7/16” Wrench (7/16” Ratchet Preferred)
Phillips head screw driver
Allen Wrench – 1/8”

Fig



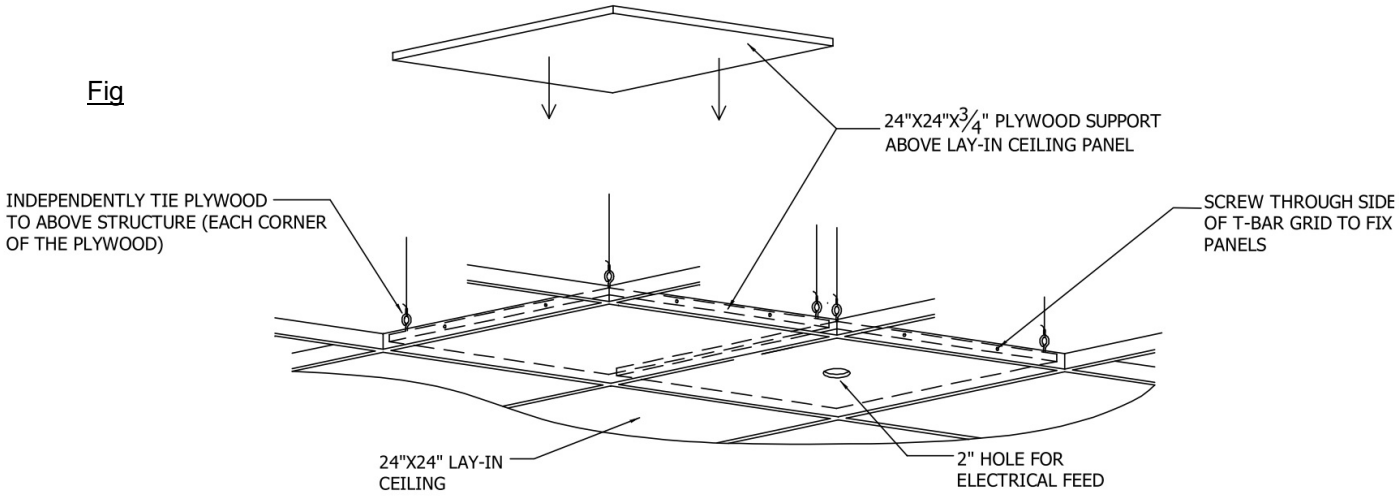


6 – MOUNTING METHOD

REINFORCING FOR DROP CEILING

Fig 6.1 below shows how to reinforce a drop ceiling to mount the L2A1

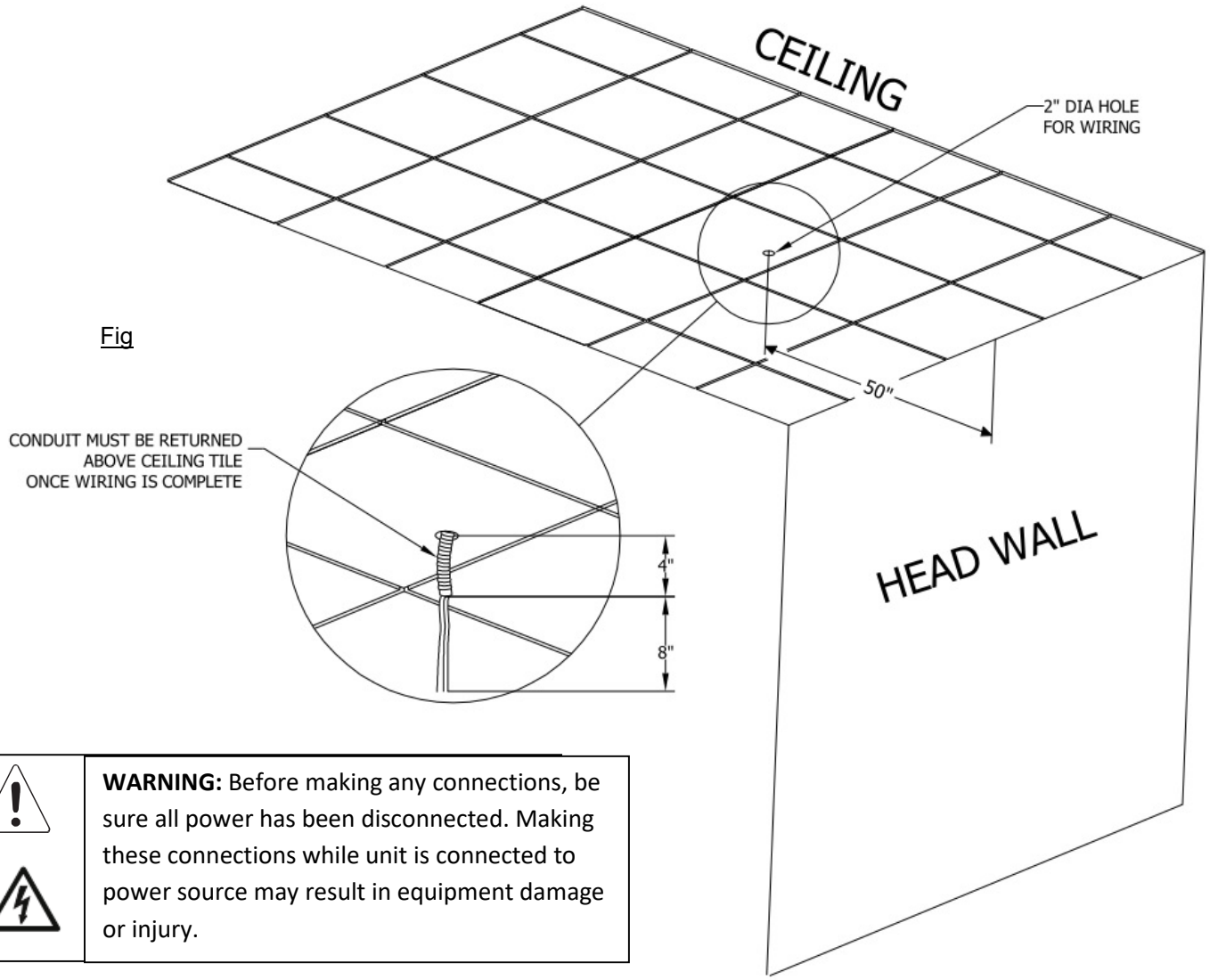
Fig



!	WARNING: It is the responsibility of the contractor to provide suitable support framing prior to installation.

7 – TRACK INSTALLATION

Fig 7.1 below shows the conduit and wiring preparation.

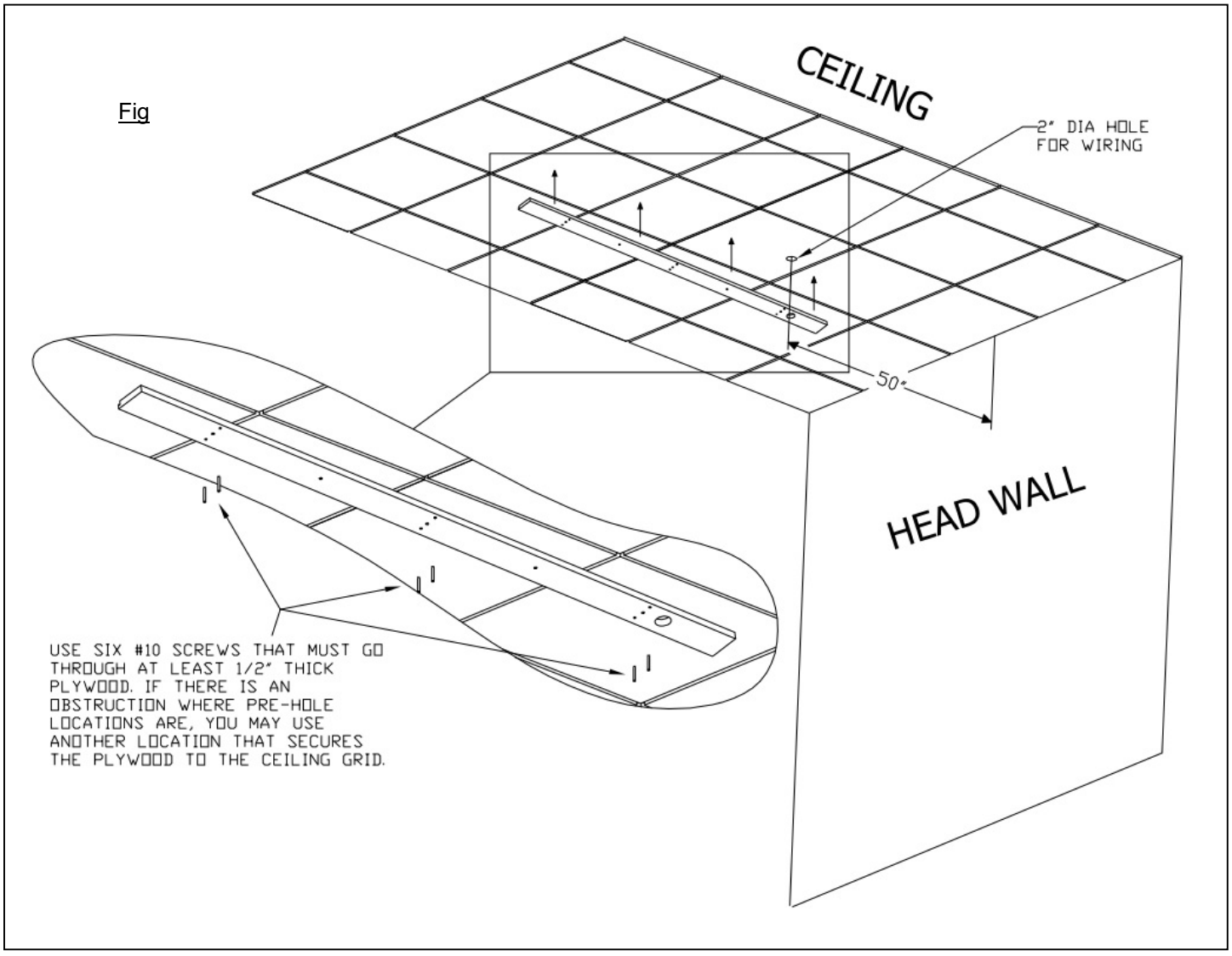


Fig

WARNING: Before making any connections, be sure all power has been disconnected. Making these connections while unit is connected to power source may result in equipment damage or injury.

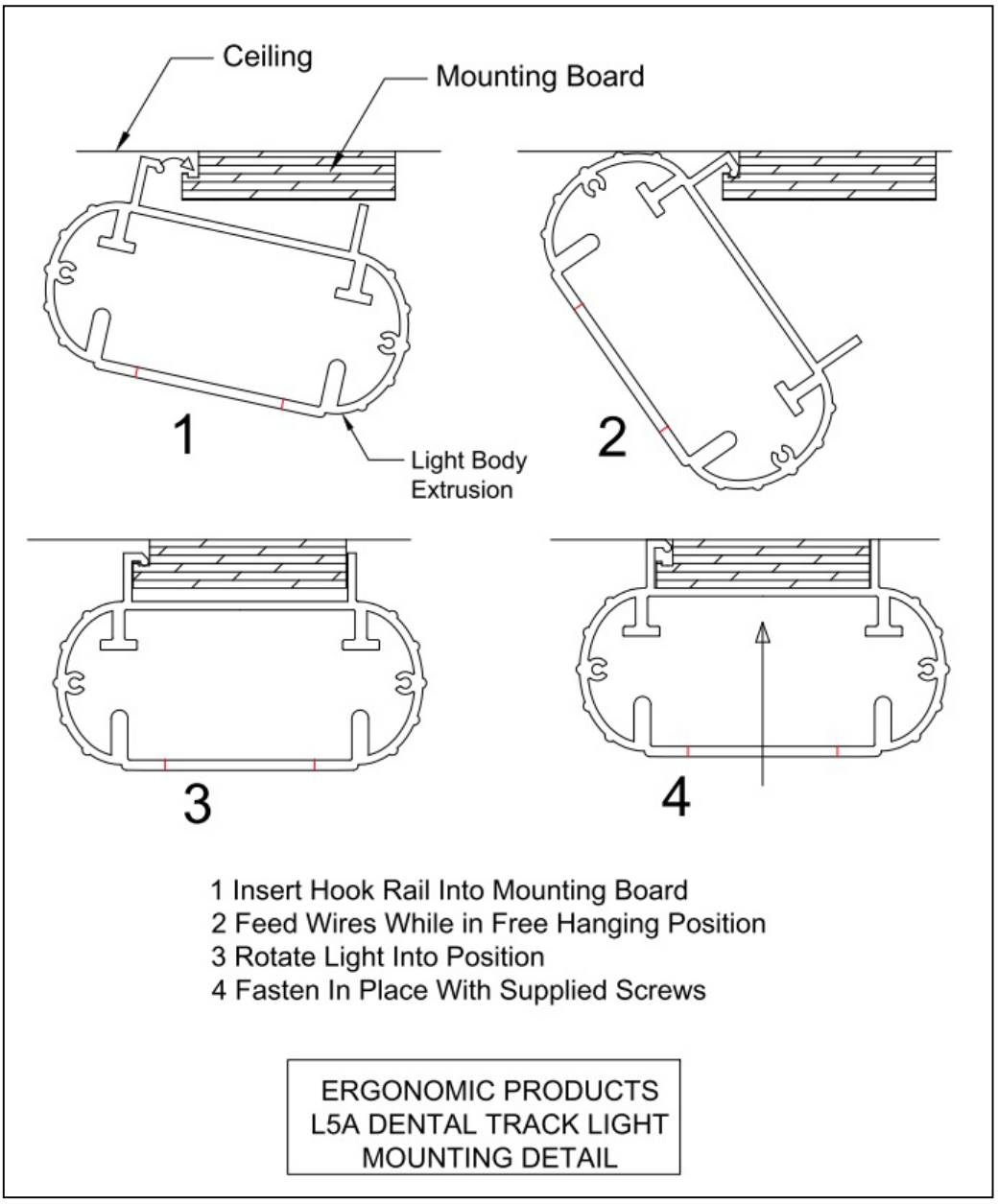
7 – TRACK INSTALLATION CONT'D

Fig 7.2 below shows the plywood and screw placement for the FastTrack LS.



7 – TRACK INSTALLATION CONT'D

Fig 7.4 below shows the mounting procedure for the aluminum track.



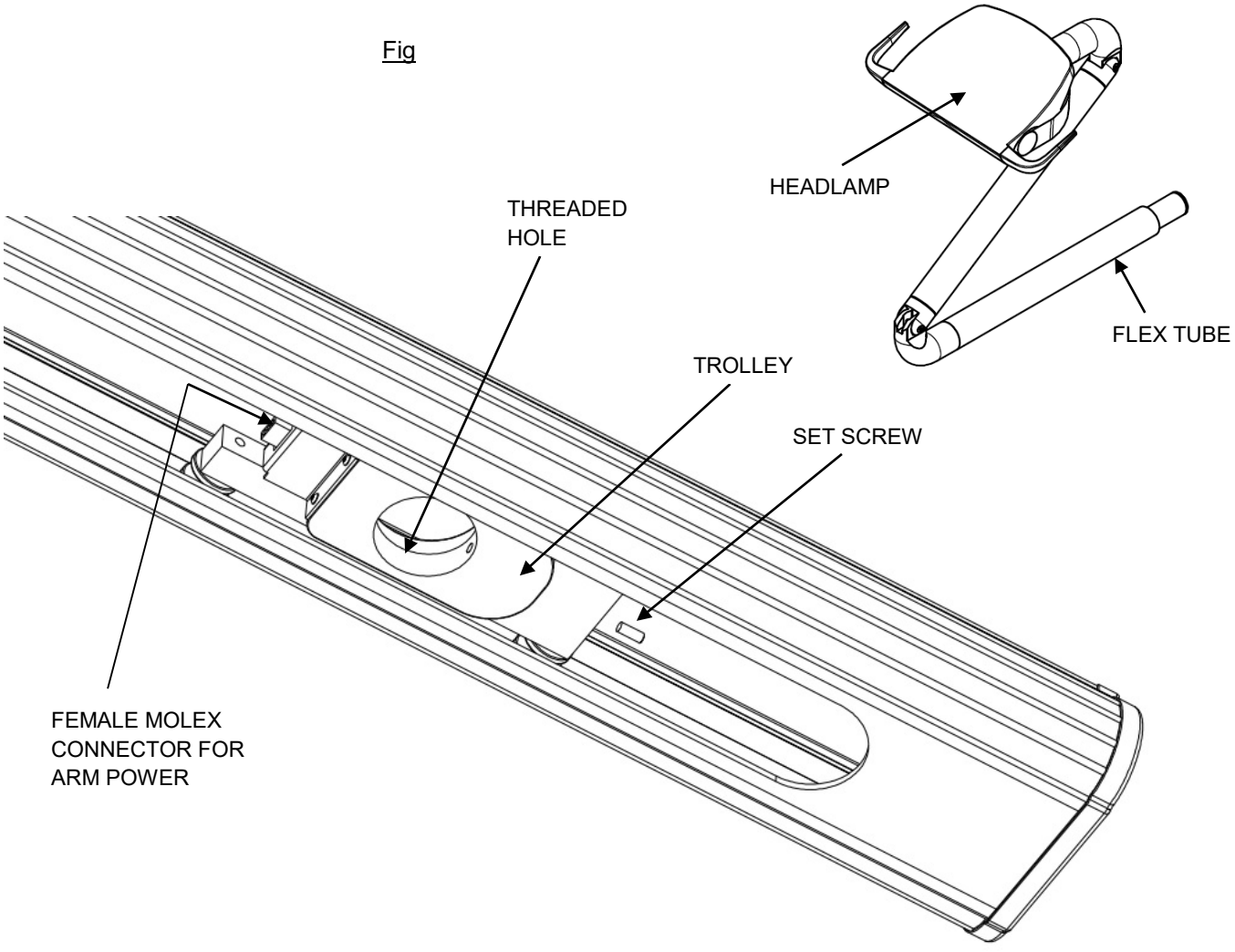
8 – ARM AND HEADLAMP INSTALLATION

Once the FastTrack is secured in place, it is ready for the FLEX TUBE to be installed into the TROLLEY and the HEADLAMP into the FLEX TUBE (Fig 9.1).

The TROLLEY is pre-installed into the track and has a threaded hole for the FLEX TUBE to screw into, a SET SCREW to prevent un-threading during operation and a plug to energize the FLEX TUBE to power the HEADLAMP (Fig 9.2).

Fig 9.1

Fig



8 – ARM AND HEADLAMP INSTALLATION CONT'D

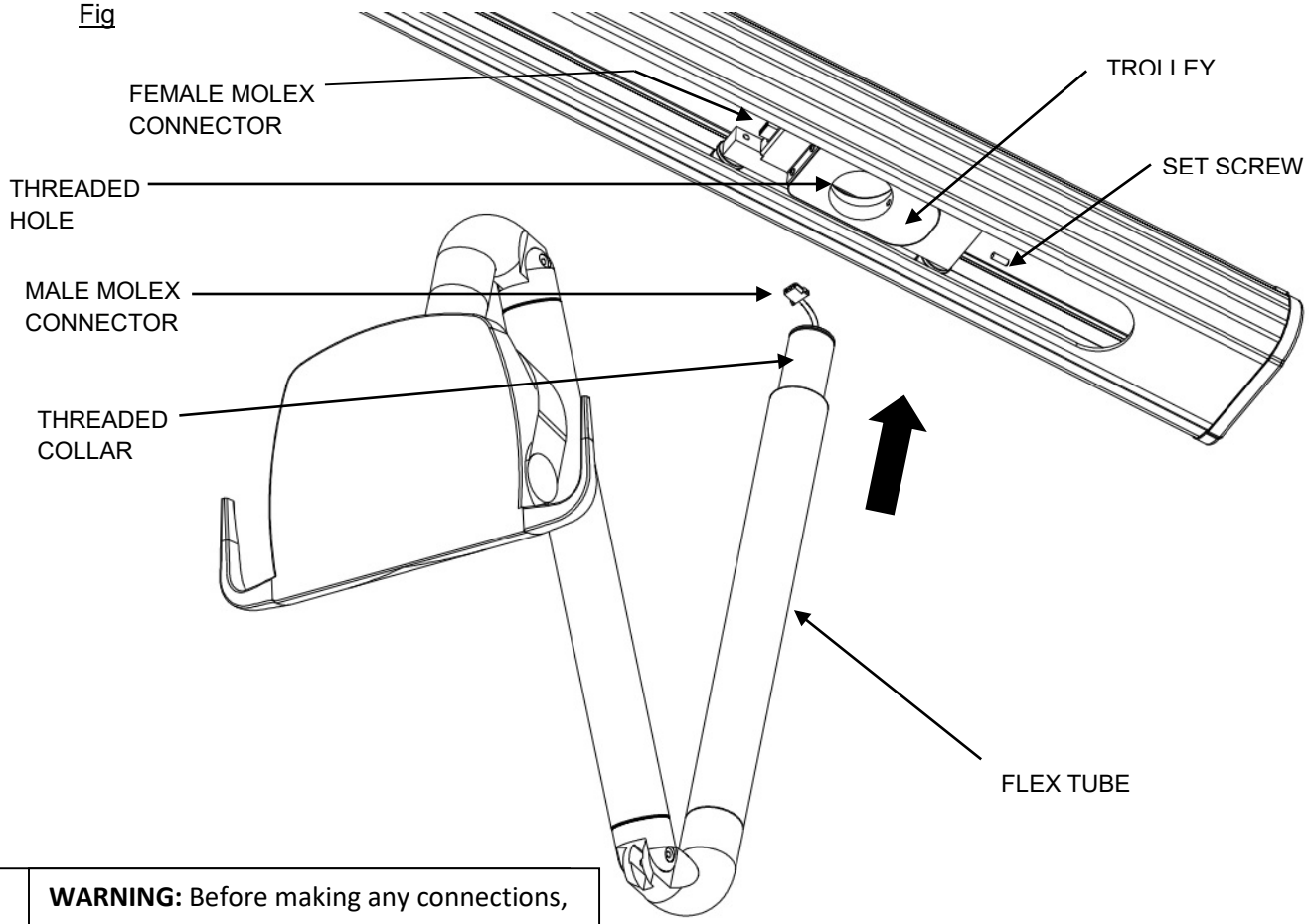
1. The FLEX TUBE has a THREADED COLLAR and a MALE MOLEX connector. Feed the MALE MOLEX connector through the THREADED HOLE (Fig 9.3).

2. Insert and screw the THREADED COLLAR into the THREADED HOLE in the TROLLEY and tighten to secure (Fig 9.3).

3. Tighten the SET SCREW until it presses against the THREADED COLLAR. Do not over tighten.

⚠	**WARNING:** If set screw is not tightened, collar may unthread causing light to fall leading to possible patient injury and light damage.

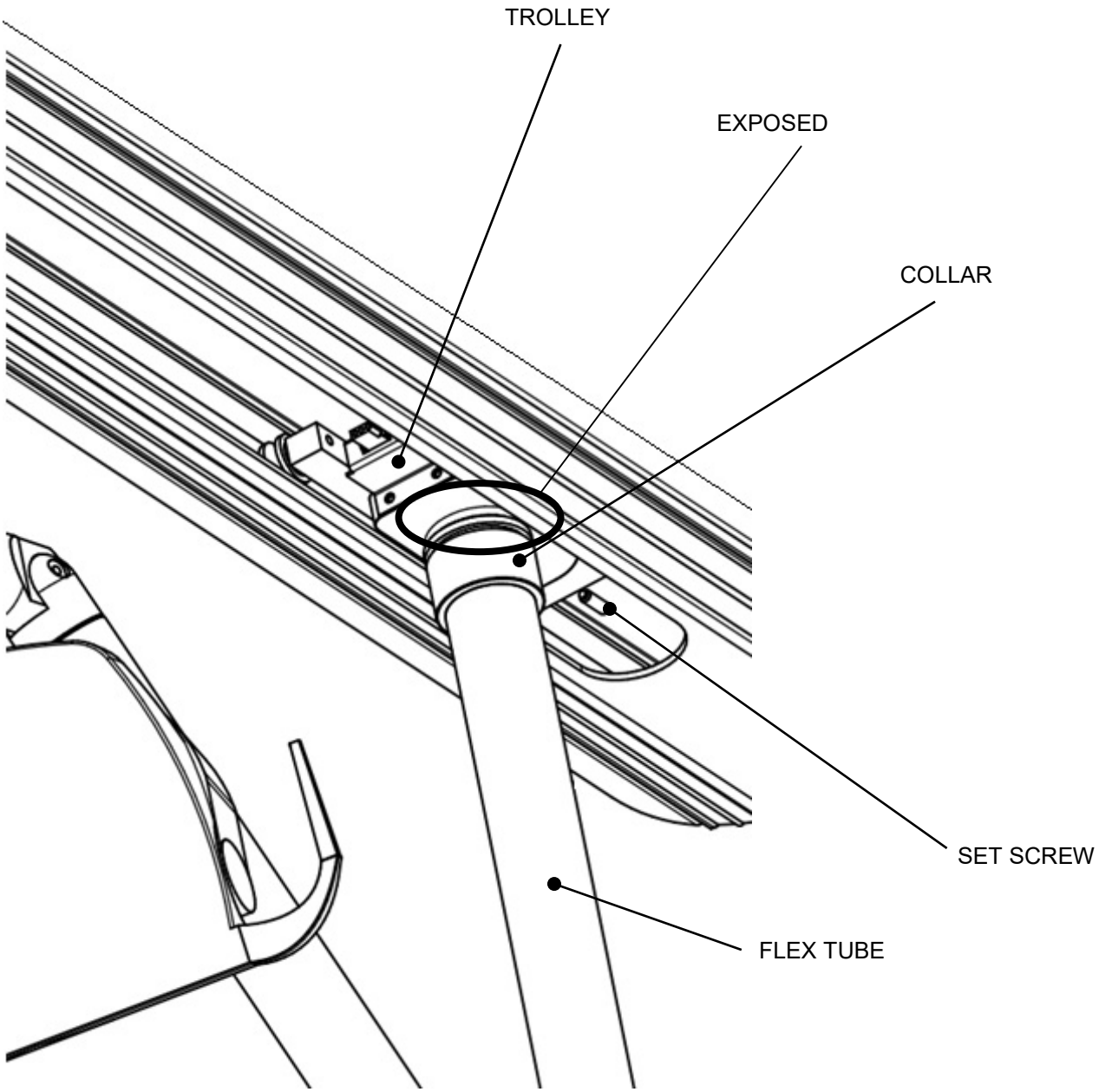
Fig



⚠ ⚡	**WARNING:** Before making any connections, be sure all power has been disconnected. Making these connections while unit is connected to power source may result in equipment damage or injury.

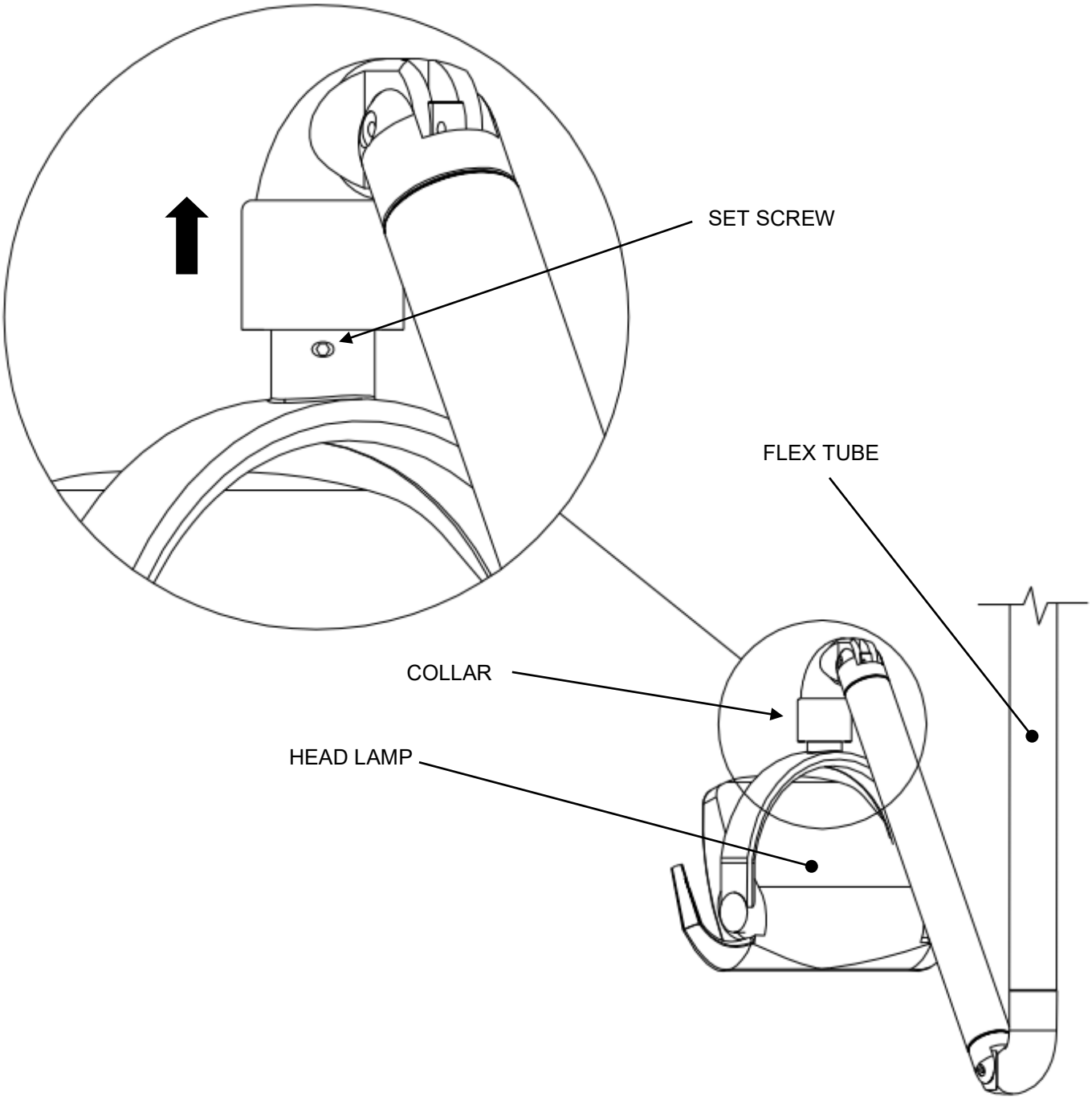
9 – SERVICING AND MAINTAINENCE

Check TROLLEY to FLEX TUBE threaded connection monthly. If any space is noted back off SET SCREW, thread COLLAR tight and re-tighten SET SCREW.



9 – SERVICING AND MAINTAINENCE CONT'D

Check the HEAD LAMP to FLEX TUBE connection. If loose or notchy feeling, raise the COLLAR and check SET SCREW for tightness.



10 – CLEANING AND DISINFECTING

GENERAL GUIDELINES

To prevent cross contamination disinfect all touch points on the light between each patient. Barriers are recommended for handles.

After treatment of each patient and at the completion of daily work activities, countertops and dental unit surfaces that might have been contaminated with patient material or when the surface is contaminated with biological material must be cleaned with disposable toweling (for example PDI Super Sani Cloth) and water as necessary. Then disinfect surfaces with a suitable chemical germicide (for example DisCide Ultra Disinfectant Spray).

The CDC recommends using a chemical germicide registered with the EPA as a “hospital disinfectant” and labeled for “tuberculocidal” (i.e., mycobactericidal) activity to disinfect surfaces that have been soiled with patient material. These intermediate-level disinfectants include phenolics, iodophors, and chlorine-containing compounds. Because mycobacteria are among the most resistant groups of microorganisms, germicides effective against mycobacteria should be effective against many other bacterial and viral pathogens.

Low-level disinfectants—EPA-registered “hospital disinfectants” that are not labeled for "tuberculocidal" activity (e.g., quaternary ammonium compounds)—are appropriate for general housekeeping purposes such as cleaning floors, walls, and other housekeeping surfaces. The CDC does not recommend using intermediate- and low-level disinfectants to reprocess critical or semicritical dental instruments.

Note: CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008; Centers for Disease Control and Prevention. Guidelines for Infection Control in Dental Health-Care Settings— 2003. MMWR 2003;52 (No. RR-17):[inclusive page numbers]. FDA Processing/Reprocessing Medical Devices in Health Care Settings: Validation Methods and Labeling *DRAFT GUIDANCE* May 2, 2011.

CLEANING

Metal Components

Use mild detergent and water or any of the commercially available sprays, such as 409, Fantastic, or others, with a soft cloth or sponge. DO NOT USE ABRASIVES as these will permanently scratch the finish.

Plastic, Rubber and Painted Surfaces

Use mild detergent and water or any of the commercially available sprays, such as 409, Fantastic, or others, with a soft cloth or sponge. DO NOT USE ABRASIVES as these will permanently scratch the finish.

Corian

Your *Corian* surfaces are delivered with a matte/satin finish and any of the above cleaners are acceptable. Minor surface blemishes can be brought back to a like-new finish with the use of a mild abrasive cleaner such as Comet on their own or in conjunction with a green or white Scotch-Brite Pad. Dried composites can be scraped off using a single-edged razor blade or equivalent, being cautious not to dig into the surface. If the surface becomes too scarred to be renewed with the above procedures, a resurfacing can be done. Please contact us or any Corian-certified installer for the correct procedure. The FDA recommends that Items contaminated with blood or body fluids, which might contain bloodborne pathogens, must receive intermediate level disinfection with a product having an EPA-registered claim for activity against hepatitis B after cleaning.