
ALU-29CF

Portable Light

NSN: 6520-01-446-4170

COMMAND•AIR



**OPERATION / MAINTENANCE
MANUAL & PARTS LIST**



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PURPOSE:

The Aseptico ALU-29CF Command Air Portable Light contains a halogen operating light which provides brilliant white light ensuring excellent visibility for field dentistry. The dual-voltage ALU-29CF features a compact lamp head, flexible gooseneck, telescoping tripod stand and padded carrying case. This light is highly portable and will fit in the mil-spec hard shell case included with the ADC-01CS Command Air Portable Dental Chair for easy deployment.

PERFORMANCE CHARACTERISTICS:

LAMP: FTB 20watt/12volt 10°

LAMP LIFE: 2000 hrs. average life.

HEIGHT: 36-64 inches

ARM LENGTH: 32 inches

VOLTAGE: 110-220VAC, 50/60Hz switchable

LIGHT INTENSITY: 1,000 ft. candles at 24" (61 cm)

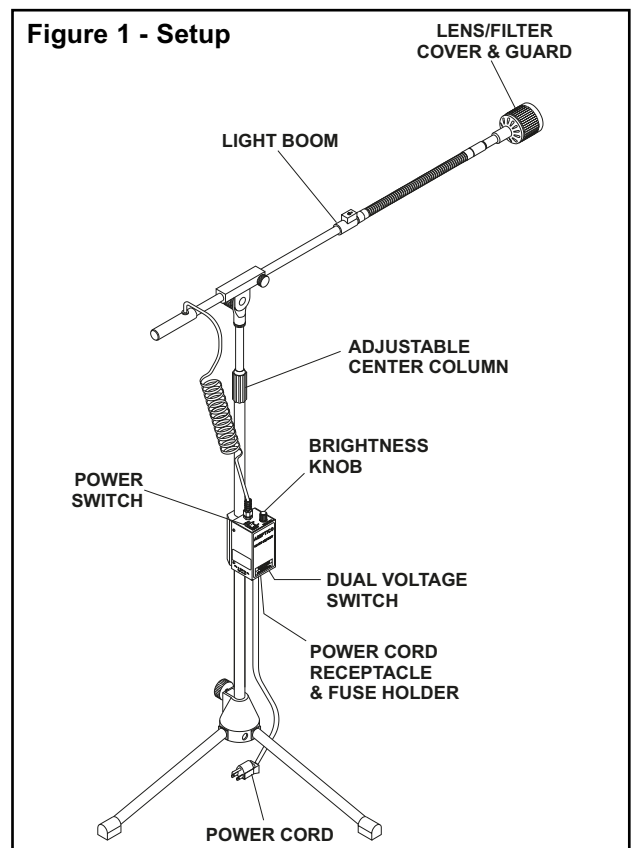
WEIGHT: 15 lbs.

ITEMS FURNISHED

- One (1) ALU-29CF Command Air Portable Light
- One (1) Soft padded carrying case
- One (1) Operation and Maintenance Manual
- One (1) Spare Halogen bulb
- One (1) 160mA Fuse (for 220V operation)
- One Each 110V & 220V Power Cord

SETUP (Fig. 1):

1. Remove the ALU-29CF Light from its packing and carrying case. Unfold the tripod legs to a horizontal position, slide to the bottom of the center post, and secure in position by firmly tightening the thumb screw. Set light on a stable, even floor surface.
2. Loosen knob on horizontal boom and position where desired. Tighten to set. Rotate handle counterclockwise on telescoping center column and adjust to desired operating height. Rotate clockwise to secure.
3. Ensure that the correct fuse is installed for the power source used (refer to Changing Fuse, Page 5). Set the dual voltage switch to 110V for 110-120V 50/60 Hz power sources and to 220V for 220V 50/60 Hz power sources. Attach power cord to receptacle on bottom of electrical housing and plug cord into a grounded electrical outlet. **NOTE:** USA style 110V and 220V power cords are shipped with unit. Power plug adapters for the specific country of usage must be purchased separately.



LAMP CONTROLS:

1. **POWER SWITCH** - On/Off control of ALU-29CF Light. Lamp should illuminate when turned on.
2. **BRIGHTNESS KNOB** - Provides variable intensity control of lamp. Turn clockwise to increase lamp intensity, or counterclockwise to decrease intensity.
3. **DUAL VOLTAGE SWITCH** - Allows this light to be used with either 110 or 220 VAC power sources. Rotate switch to the proper voltage-source position.

MAINTENANCE:

LAMP REPLACEMENT

IMPORTANT: Turn power off and unplug ALU-29CF from power source before replacing lamp. Prior to handling unit, allow Lamp Head and internal components to cool for several minutes to room temperature.

Step 1 - Remove Guard Assembly:

1. Grasp the Guard Assembly as shown. Unscrew (turn CCW) to remove Guard from Rear Casing and set aside. Do not touch the Lens - fingerprints on the Lens surface will attenuate the light beam. Do not remove the two retaining clips and screws which attach the Lens and O-ring to the Guard.

Step 2 - Uncover Lamp:

1. Grasp the Heat Shield Tube as shown and gently screw inwards (turn CW) until it makes contact with the inside surface of the Rear Casing. **IMPORTANT:** Stop turning when the Shield Tube first touches the Rear Casing - forcing it beyond the "contact point" could result in damage to Disk and Lamp Socket!

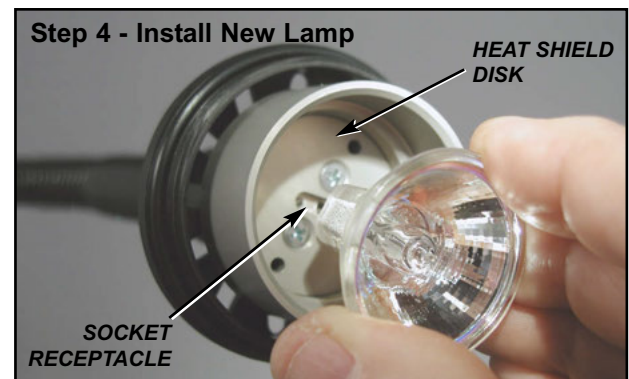
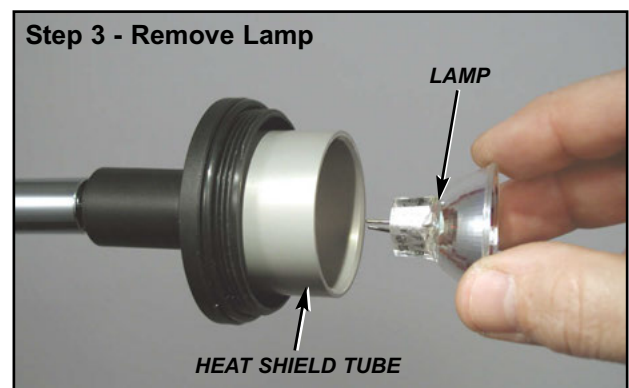
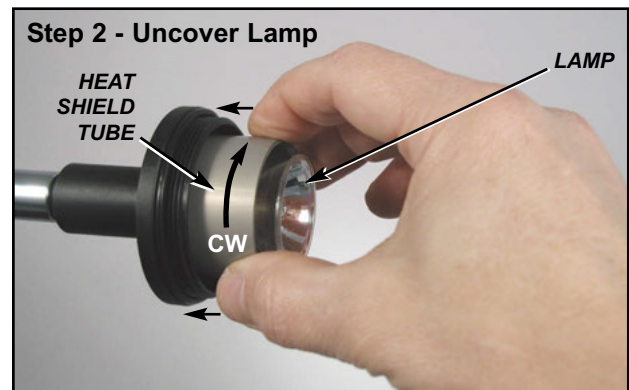
Step 3 - Remove Lamp:

1. Carefully grasp the exposed edge of the Lamp reflector and gently pull the Lamp straight out of the socket - keep Lamp centered in the Shield as you pull.
WARNING: Do not touch the glass bulb portion of the halogen Lamp. Oils left by finger contact can cause the glass to bubble and possibly explode.
2. Discard the old Lamp. **CAUTION:** To prevent injury from broken glass, wrap the Lamp in heavy paper or cardboard, or secure in a container before discarding.

Step 4 - Install New Lamp:

1. When installing the replacement Lamp, ensure that its pins align with the socket receptacles, which are accessible through the opening in the Heat Shield Disk. Carefully press the pins straight into the receptacles until the base of the Lamp is firmly seated against the Disk. If the Lamp pins are properly aligned, the Lamp will seat easily. **CAUTION:** Do not press hard on Lamp - it could break and cause injury. **NOTE:** The pin receptacles are offset at a slight angle. Do not twist the Lamp when inserting into socket - pins could bend and damage Lamp and socket.

Replacement Lamp: Use only USHIO 20MR11 20watt/12volt. Use of any other lamp may degrade the operation of the ALU-29CF and/or cause a safety hazard.



WARNING: Do not turn the halogen Lamp ‘On’ without the Guard/Lens Assembly installed. The Lamp emits harmful UV radiation and damage to eyes and skin could result if Assembly Lens (UV Filter) is not in place.

WARNING: Halogen bulb is HOT ! Operating the Lamp without the Guard installed can cause burns!

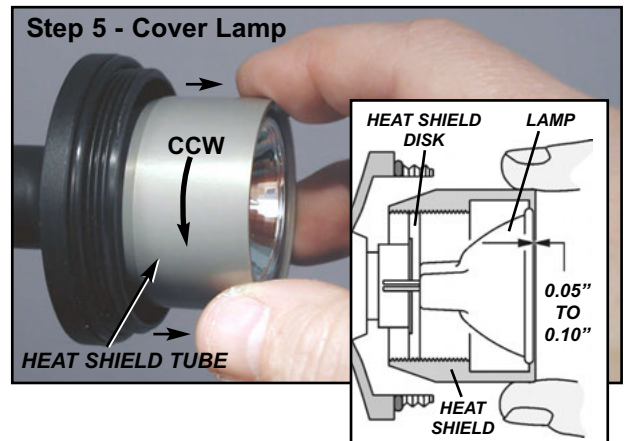
Step 5 - Cover Lamp:

1. Retract (turn CCW) the Heat Shield Tube away from the Rear Casing to enclose the Lamp. Back the Tube out until its forward lip protrudes approx. 0.075 inch beyond the front edge of the Lamp. **IMPORTANT:** Not retracting the Shield Tube forward may cause the Lamp to come in contact with the glass Lens on the Guard Assembly. Ensure that the Lamp reflector is centered within the Shield and does not contact any part of the Shield Tube or glass Lens on the Guard.

Step 6 - Replace Guard Assembly:

1. Grasp the Guard Assembly as indicated and carefully match screw threads with those on the Rear Casing. **IMPORTANT:** Do not touch or apply pressure on the front surface of the Guard Assembly Lens. Fingerprints left on the Lens will attenuate the light beam. Do not remove the two retaining clips and screws which attach the Lens and O-ring to the Guard.

Install (turn CW) Guard Assembly onto the Casing. If the Guard does not easily screw onto the Casing, the threads are likely misaligned - Do Not Force! Back the Guard off and try again. **IMPORTANT:** When the



Guard Assembly Lens comes in contact with the Heat Shield Tube, stop tightening! Damage to Lens and other internal components may occur if overtightened.

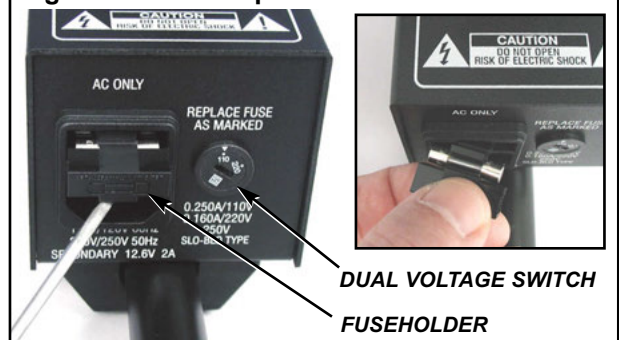
CHANGING THE FUSE (Fig. 2)

1. **IMPORTANT:** Turn ALU-29CF Power Switch ‘Off’ and unplug unit from power outlet before changing the fuse. Use a slot-head screwdriver to pry the Fuseholder out of the Power Inlet Connector, located on bottom of the electrical housing. Install new fuse (see type below) and replace holder in Connector, applying pressure on holder until it firmly snaps into position. Set Dual Voltage Switch to proper voltage.

110VAC FUSE: 5x20mm 250 mA, slo-blo type

220/250VAC FUSE: 5x20mm 160 mA, slo-blo type

Figure 2 - Fuse Replacement

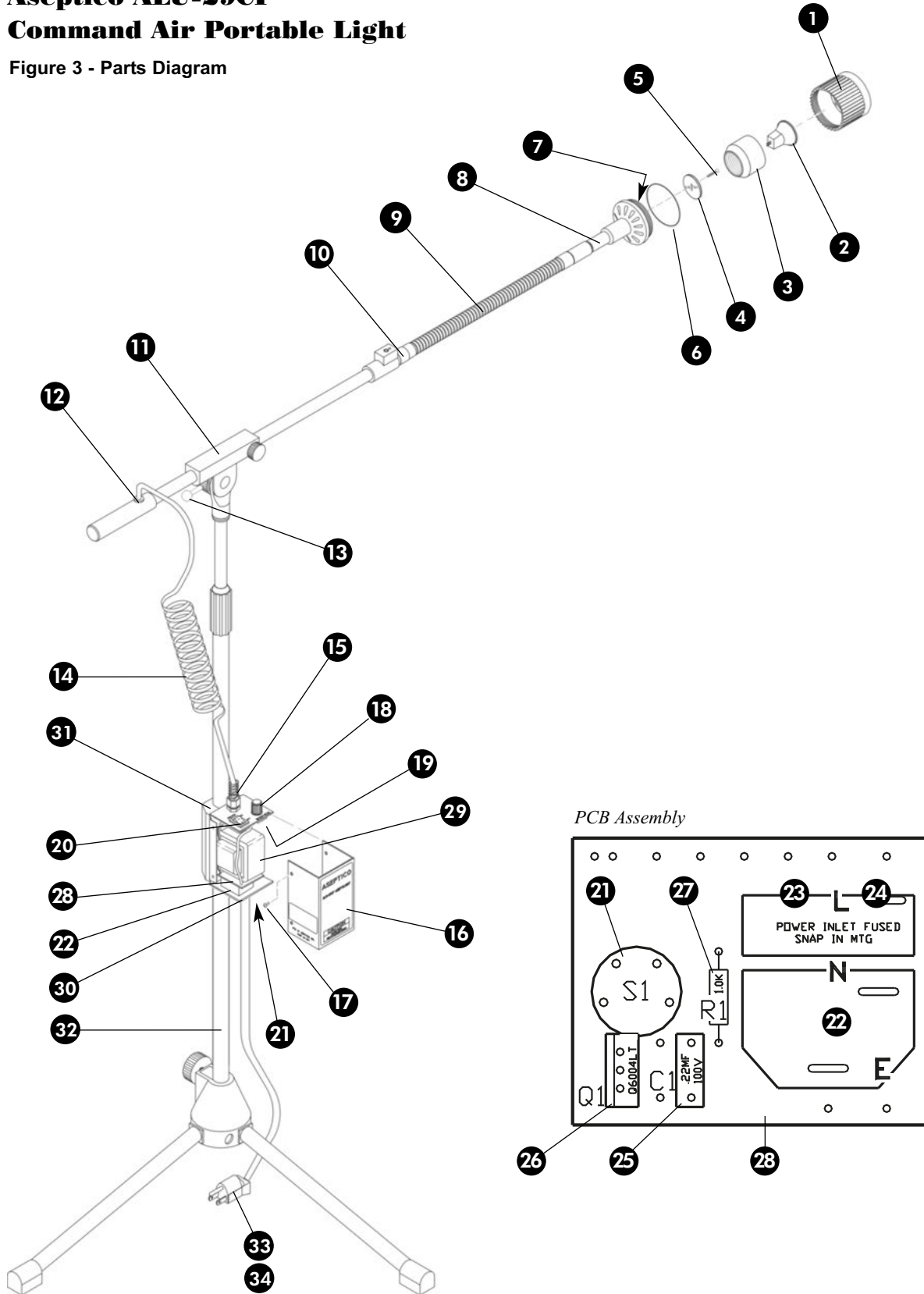


TROUBLESHOOTING:

Problem:	Correction:
Power is 'ON', but lamp does not light:	<ul style="list-style-type: none"> -Replace Fuse: 5 x 20mm 250 mA (for 110V), or 5x20mm 160 mA (for 220V) -Replace Lamp. -Check plug and electrical source.
Light intensity appears dimmer than normal:	<ul style="list-style-type: none"> -Turn intensity up. -Check that voltage switch matches power source -Clean Lens (Note: Before cleaning, turn Unit ‘Off’ and allow to cool. Do not remove the retaining clips and screws which attach the Lens to the Guard)
Blown fuse:	<ul style="list-style-type: none"> -Check that Lamp pins are straight and are not bent. (Bent pins can cause a short circuit and blow the fuse if they make contact with the Heat Shield Disk.)

Aseptico ALU-29CF Command Air Portable Light

Figure 3 - Parts Diagram



PARTS LIST

	Item	Part Number	Quantity
1	Lamp Head, Guard & Lens Assy w/Clips	820002	1
2	Lamp, FTB 20watt/12volt 10°	820001	1
3	Heat Shield Tube	461355-08	1
4	Heat Shield Disk	461356-08	1
5	SMS Stnls PhdPhl 10x3/4	510305	4
6	O-Ring, 2.0 OD x 0.093	520045	1
7	Socket, Porcelain	820025	1
8	Adapter, Goose-neck/Lamp	460257-08	1
9	Goose-neck, 13" Black	730084	1
10	Adapter, Boom/Goose-neck	460258-08	1
11	Boom, Complete	460259-01	1
12	Strain Relief, 1/4 Black	840048	1
13	Nut, T-Bar Torque Handle	510381	1
14	Cable, 2-Conductor Coil	870225	1
15	Strain Relief, Flex	840003	1
16	Chassis, Top	460660-08	1
17	C/S BtnSoc Stnls 6-32x1/4	510037	4
18	Knob, 1/4 Blk w/ Gray Insert	850032	1
19	Pot, 100K Linear	810123	1
20	Switch, Rocker SPST	830002	1
21	Voltage Selector Switch	840042	1
22	Power Inlet , Fused Snap In	840035	1
23	Fuse, 5x20mm 250 mA (for 110V)	830049	2
24	Fuse, 5x20mm 160 mA (for 220V)	830046	1
25	Capacitor, 100V, 0.22MFD	810108	1
26	Transistor, R6004LT Triac	880037	1
27	Resistor, 1/4 w 5% 1.0K	810006	1
28	PCB, ALU-29CF	550043	1
29	Transformer, 115/230V 13.6V, 2A	800100	1
30	Chassis, Base	460661-08	1
31	Bracket, Nylon Mounting	460329	1
32	Stand, Black Folding Tripod	730252-08	1
33	Line cord, Remote 110V	840008	1
34	Line cord, Remote 220V	840007	1
Not Shown	Case, Gray Carrying	410125	1
Not Shown	Resistor, 1/4 w 5% 100K	810008	1

WARRANTY

Aseptico warrants its products against defects in material or workmanship for a period of two (2) years, from date of original invoice. Some handpieces are warranted for one year under the same conditions. Other handpieces and expendable components, such as air turbines and light bulbs, are covered by shorter warranty periods, or have no warranty. Aseptico's sole obligation under product warranty is (at its sole option and discretion) to repair or replace any defective component or product in part or whole. Aseptico shall be the sole arbiter of such action.

In the event of alleged defect under warranty, the purchaser is to notify Aseptico's Customer Service Department promptly. Customer Service will provide instructions, usually directing that the product be returned for service. Shipment to Aseptico and the cost thereof is always the responsibility of the purchaser.

Accidental misuse, inappropriate installation, or failure to perform directed maintenance voids the warranty.

Aseptico does not assume, under this warranty, any risks or liabilities arising from the clinical use of its products, whether or not such use involves coincidental utilization of products manufactured by others.

