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CHIPhERASER®

Model 2442

Instruction Manual

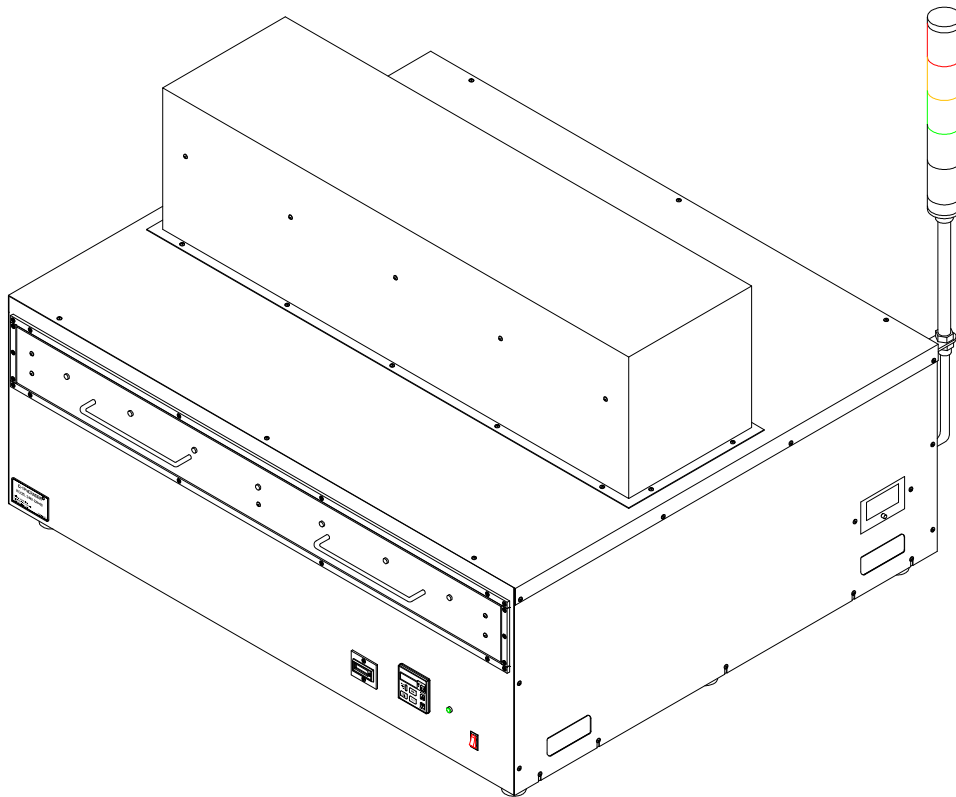


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INTRODUCTION

The CHIPHERASER, Model 2442, is a rugged, large capacity unit designed to provide many years of trouble-free service. The 2442, utilizes low-pressure mercury vapor grid lamps which produce higher UV intensities than most competitive systems, allowing for greater efficiency in production.

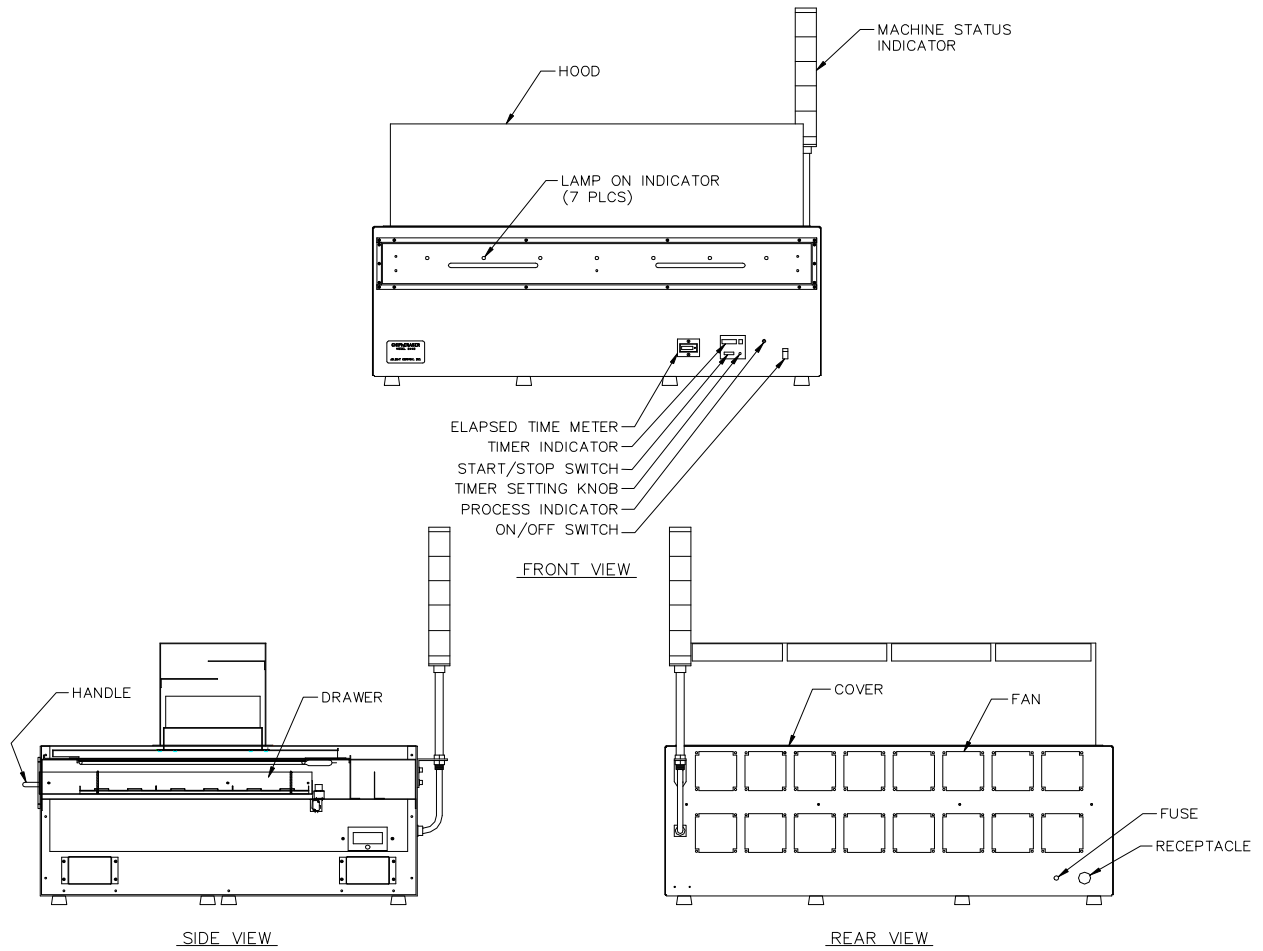


Figure 1

WARNING:
Potentially fatal voltages exist within this machine. Never remove the Cover while the Power Cord is plugged into an electrical outlet.

The Lamps in this machine emit harmful UV radiation; under no circumstances should operators expose themselves to the UV source.

DESCRIPTION

The Model 2442 is equipped with a heavy-duty aluminum powder coated Base, stainless steel Cover, stainless steel Drawer, and an adjustable stainless steel product Tray.

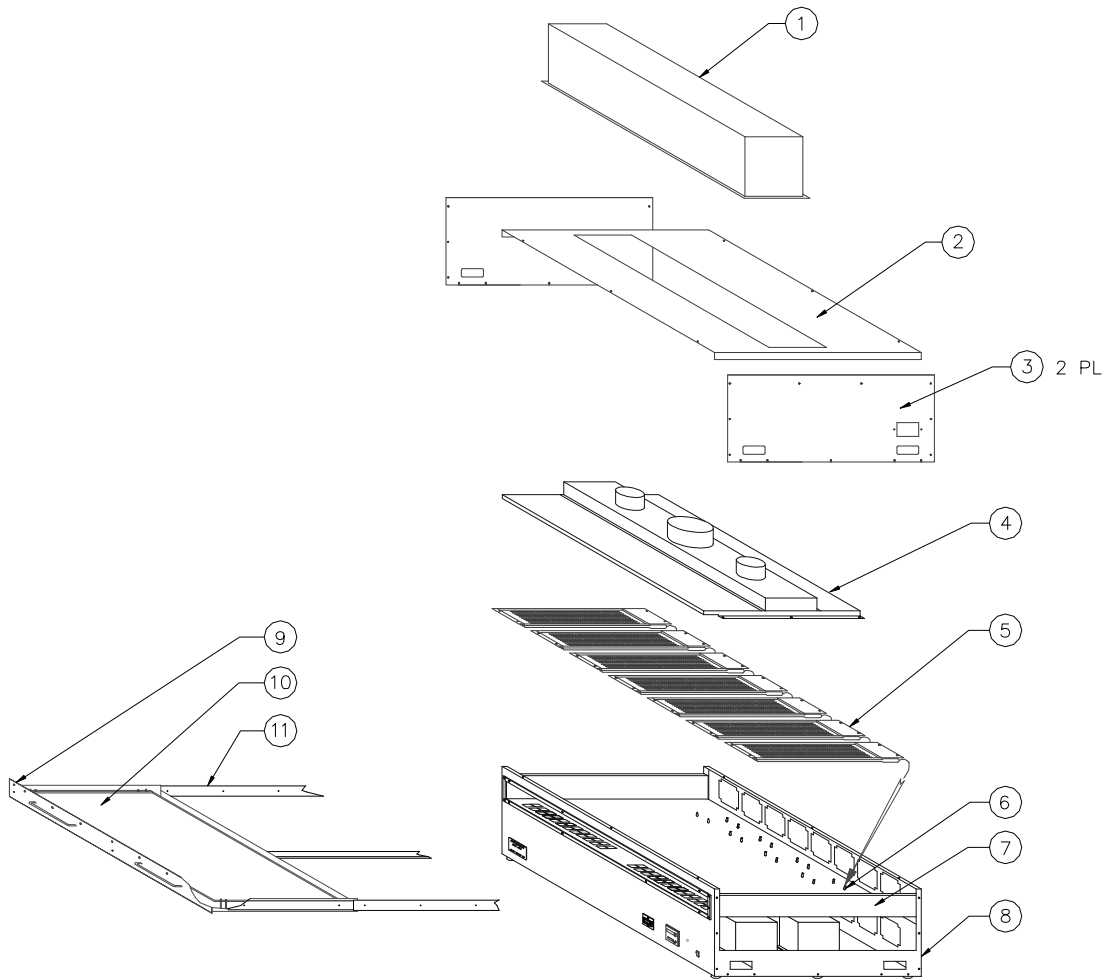


Figure 2

- | | | | | | |
|---|------------|---|-------------------|----|--------|
| 1 | Hood | 5 | UV Lamp Assembly | 9 | Drawer |
| 2 | Top Cover | 6 | Ceramic Feed-thru | 10 | Tray |
| 3 | Cover Side | 7 | Shelf | 11 | Slide |

OPERATION

To operate the Model 2442, plug the Power Cord into the appropriate receptacle and turn on the On/Off Switch. The Timer display will illuminate, the amber lamp on the Machine Status Indicator will light and the bottom row of fans at the rear of the machine will activate.

Open the Drawer and load the wafers/EPROMS onto the Tray. The red Machine Status Indicator will flash and an alarm will sound. The Tray is height adjustable and may be removed from the Drawer to expedite production throughput and facilitate cleaning. The height of the tray should be determined by testing for optimum UV uniformity. Install the Tray into the Drawer and push the Drawer to the fully closed position. The amber Machine Status Indicator will illuminate. Magnetic Catches will secure the Drawer throughout machine operation.

Model 2442 is fitted with an Elapsed Time Meter to record the length of time the UV Lamps have been in operation. The Elapsed Time Meter should be reset before first operation and at maintenance intervals whenever the UV Lamps are replaced. To reset the Elapsed Time Meter, press the small button at the right side of the display. The display will set to "zero". During machine operation, the Elapsed Time Meter will automatically record the UV Lamp run time.

The main Timer controls the erasing time. Turn the Timer Setting Knob until the desired time is shown on the Timer Indicator. Push the Start/Stop Button on the Timer to begin the erasing process. The Process Indicator will illuminate, signifying the high voltage Power Supplies are operating. The UV Lamps will light and be visible through the Lamp On Indicators located on the front of the Drawer. The green Machine Status Indicator lamp will illuminate.

The Timer has a clock function that may be utilized if Model 2442 will remain powered up for long periods of time. To set the clock, hold the button with the clock graphics down while turning the Timer Setting Knob. To display the time when the Timer is not in use, press the clock button.

The upper row of fans at the rear of the machine will turn on when the erasing process begins. This row of fans has a time delay option, adjustable between 0-10 minutes. To change the time delay, switch the machine off, disconnect the Power Cord from the power receptacle and remove the outer Cover. Locate the Delay Timer on the right hand side of the base and adjust the setting as required with a small screwdriver. Replace the Cover before connecting power and resuming operation.

When the erasing process is complete, the Timer will turn off the UV Lamps and sound an audible alarm. The amber Machine Status Indicator lamp will illuminate. The Drawer can now be opened and the Tray removed for unloading and repeat processing. The Timer does not require adjustment unless a different process time is desired.

To prevent accidental exposure to harmful UV radiation, Model 2442 is equipped with a series of safety interlocks to disable the UV Lamps if the Drawer is opened or the Cover removed during operation. The red Machine Status Indicator will flash and an alarm will sound if the interlocks become disengaged. Machine operation will resume if a cover interlock is reestablished. The amber Machine Status Indicator will illuminate when the drawer is closed; press the start/stop button on the timer to continue the erasing process.

MAINTENANCE

For optimum results, replace the lamp assemblies after every 5,000 to 10,000 hours of operation.

WARNING:
UV Lamps are fragile; handle with CARE

Refer to Figures 2 and 3

To Remove UV Lamp Assemblies;

- Switch the machine off and disconnect the main Power Cord from the power receptacle.
- Remove the Cover, the Lamp Cover and remove the screws retaining the UV Lamp Assemblies.
- Loosen the uppermost nut on the Feed-thru screws and disconnect the UV Lamp terminal rings.
- Remove the screws securing the UV Lamp Assemblies to the front and rear brackets.
- Carefully lift the lamp assemblies out, using caution not to break the electrodes below the Rear Lamp Support.

To Install New UV Lamp Assemblies;

- Install the wired end of the UV Lamp Assembly on the Rear Lamp Support so the UV Lamp electrodes and wires are below the bracket and the reflector rests on top of the bracket.
- Lower the front of the UV Lamp assembly onto the Front Lamp Support and install screws to secure the UV Lamp assemblies in place.
- Attach the UV Lamp connector at the end of each wire to the appropriate feed-thru and fasten the terminal ring with the uppermost nut.
- Replace all Covers before connecting to Power Cord.
- Switch the machine on and reset the Elapsed Time Meter.

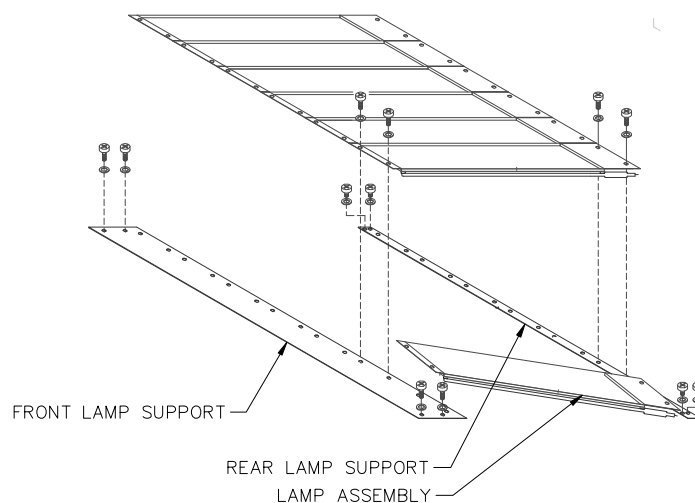


Figure 3

TROUBLESHOOTING

Symptom: No Power To The Unit, Machine Status Indicator Is Off. (Refer to Figure 4)

- Check Main Power Fuse = 3 amps.
- Check Power Supply Fuse = 7 amps.
- Check Cover Interlock Switch.

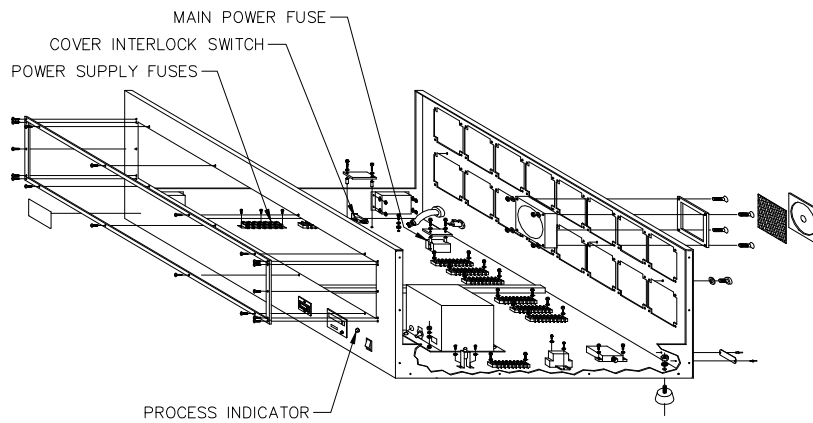


Figure 4

Symptom: Timer Does Not Function With Power To The Unit, Machine Status Indicator Is Off. (Refer to Figure 5)

- Check Drawer Interlock Switch.

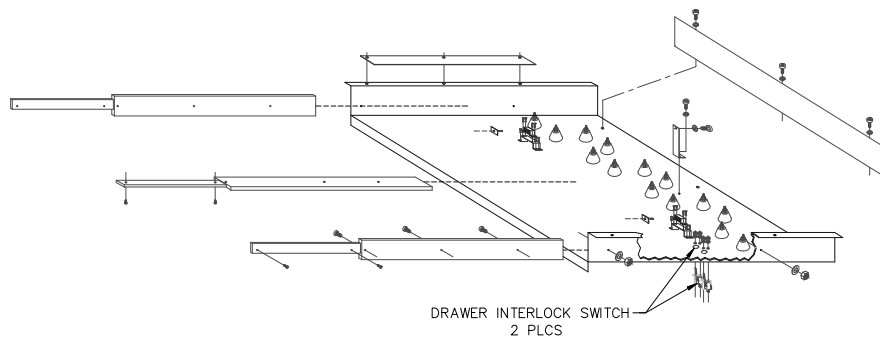


Figure 5

Symptom: Timer Functions But The UV Indicators Do Not Light, Machine Status Indicator Operates.

- Make sure the power indicator lamp is on
- Replace lamp assemblies

For further assistance contact Jelight Company, Inc.

SPECIFICATIONS

Size (Max):	42" Long, 30" High, 48" Wide
Power Requirements:	220 Volts, 50 Hz, 30 Amps
Lamp:	Low Pressure Mercury Vapor Grids
Lamp Output:	50,000 Micro Watts Per Sq. Cm. @ 6mm Distance
Drawer Size:	44.5" x 29" x 2.5" Deep
Tray Size:	24" x 42" Erasing Area

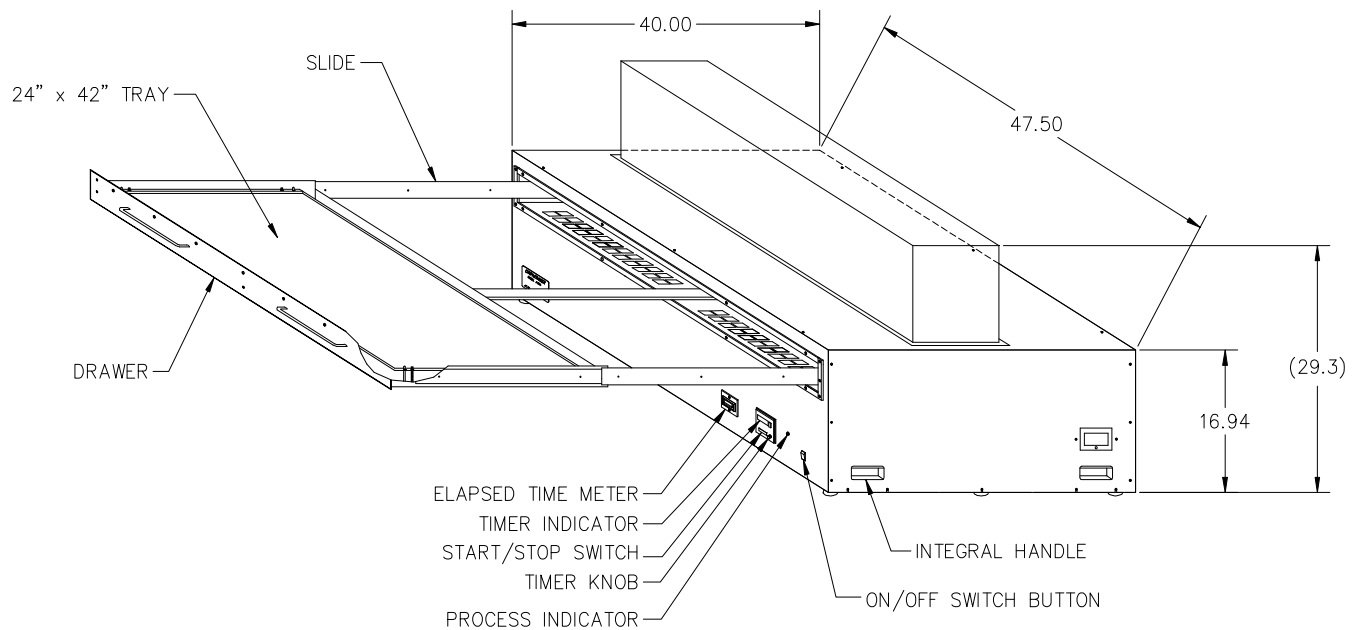


Figure 6