# SolaSpot 3000



**Color**
CMY / CTO + Color Wheel

**LED Engine**
1000 W Ultra-Bright
or High Fidelity

**Weight**
47 kg / 103 lb

**Output**
37,000 / 25,000 Lumens

**Zoom**
7°-55°

**Gobos**
7 + 7 Rotating and 7 Fixed

**Frost**
Light and Heavy
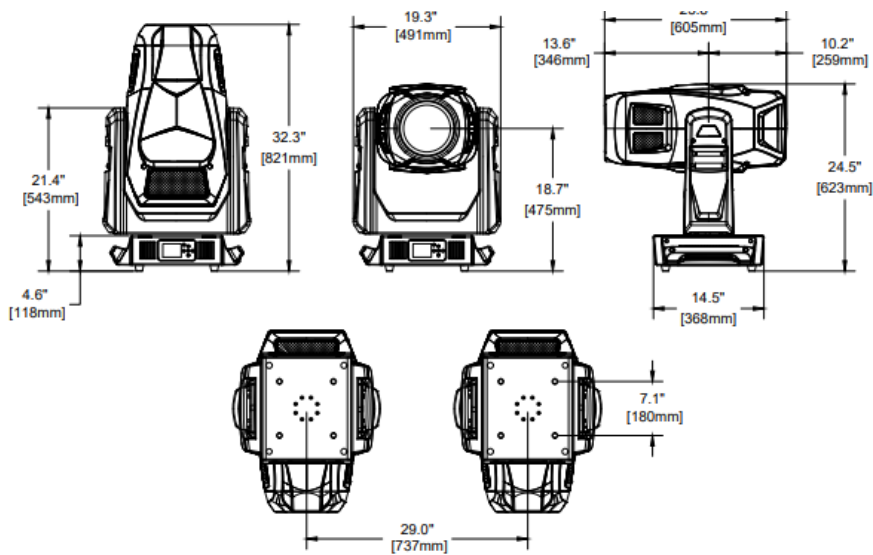
**Prism**
3-facet and 8-facet

**Animation**
Graphical and Glass Textured

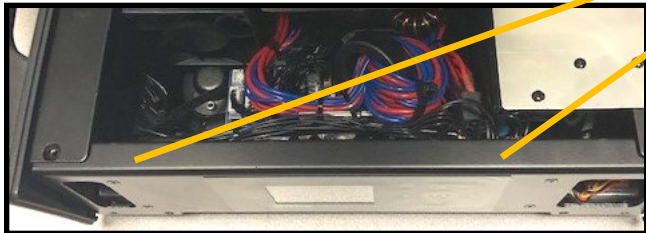# SolaSpot 3000

## Accessing the Electronics

Remove 4X Philips head screws on each cover

Remove 4X Philips head screws on the front and rear panels

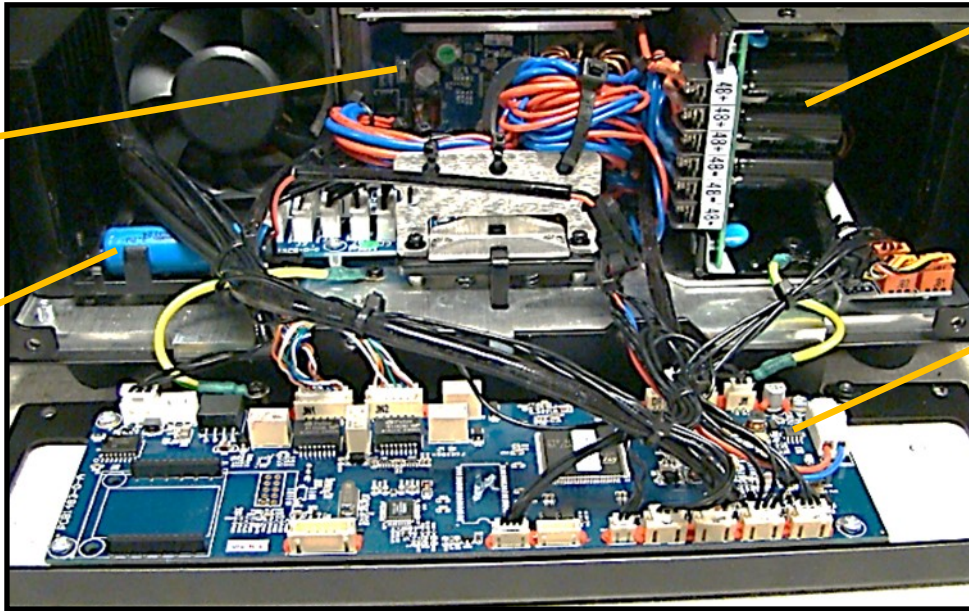Remove 2X inner Philips head screws on front and rear panels behind the Display Assembly

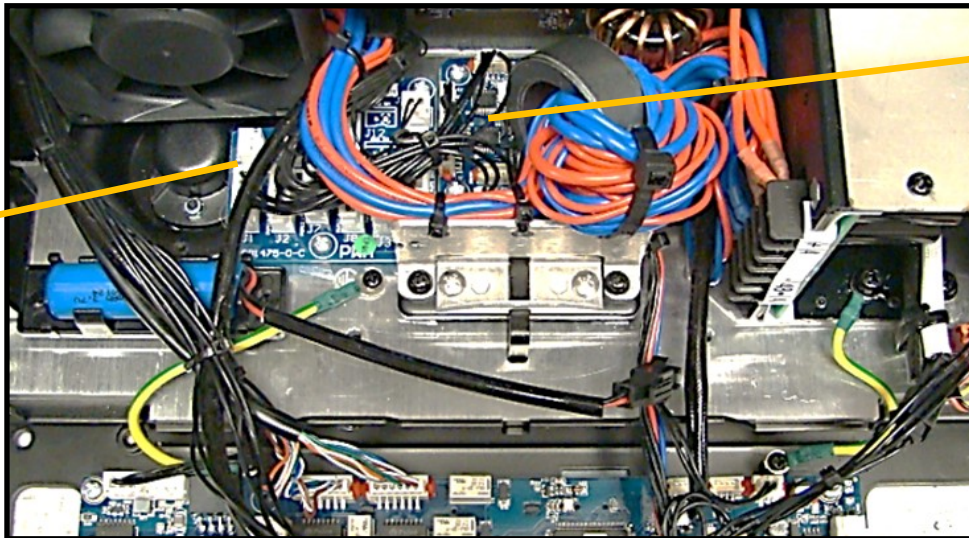# SolaSpot 3000

## Front Panel Components

Power Supply (48VDC Output)

Power Supply Converter
(48VDC to 28VDC)

Display Battery

Display PCB

LED Control PCB

LED Distribution PWM

# SolaSpot 3000

## Rear Panel Components

LED Junction PCB

LED Distribution PCB Assembly

Main Fuse (20A 250V 6X32
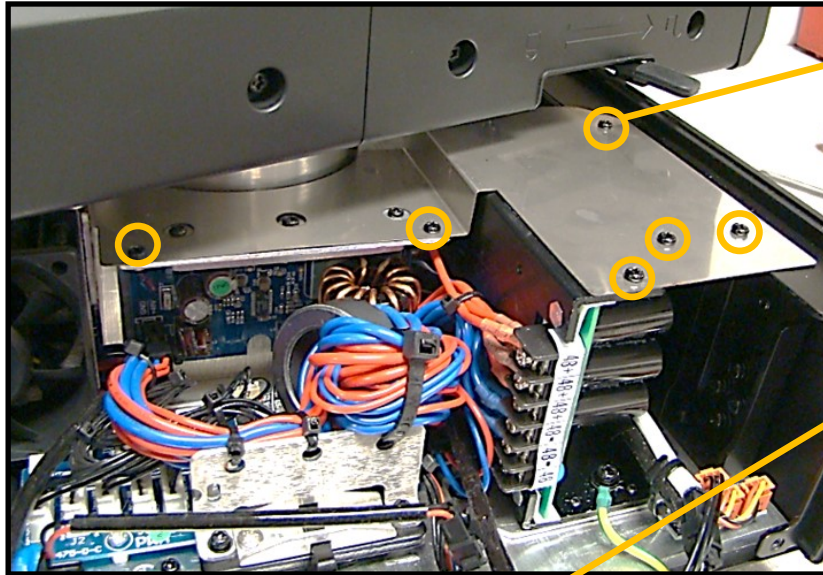Slow Blow Ceramic)

CAT5 Connectors

USB PCB

TRU1 Connector

XLR Connectors
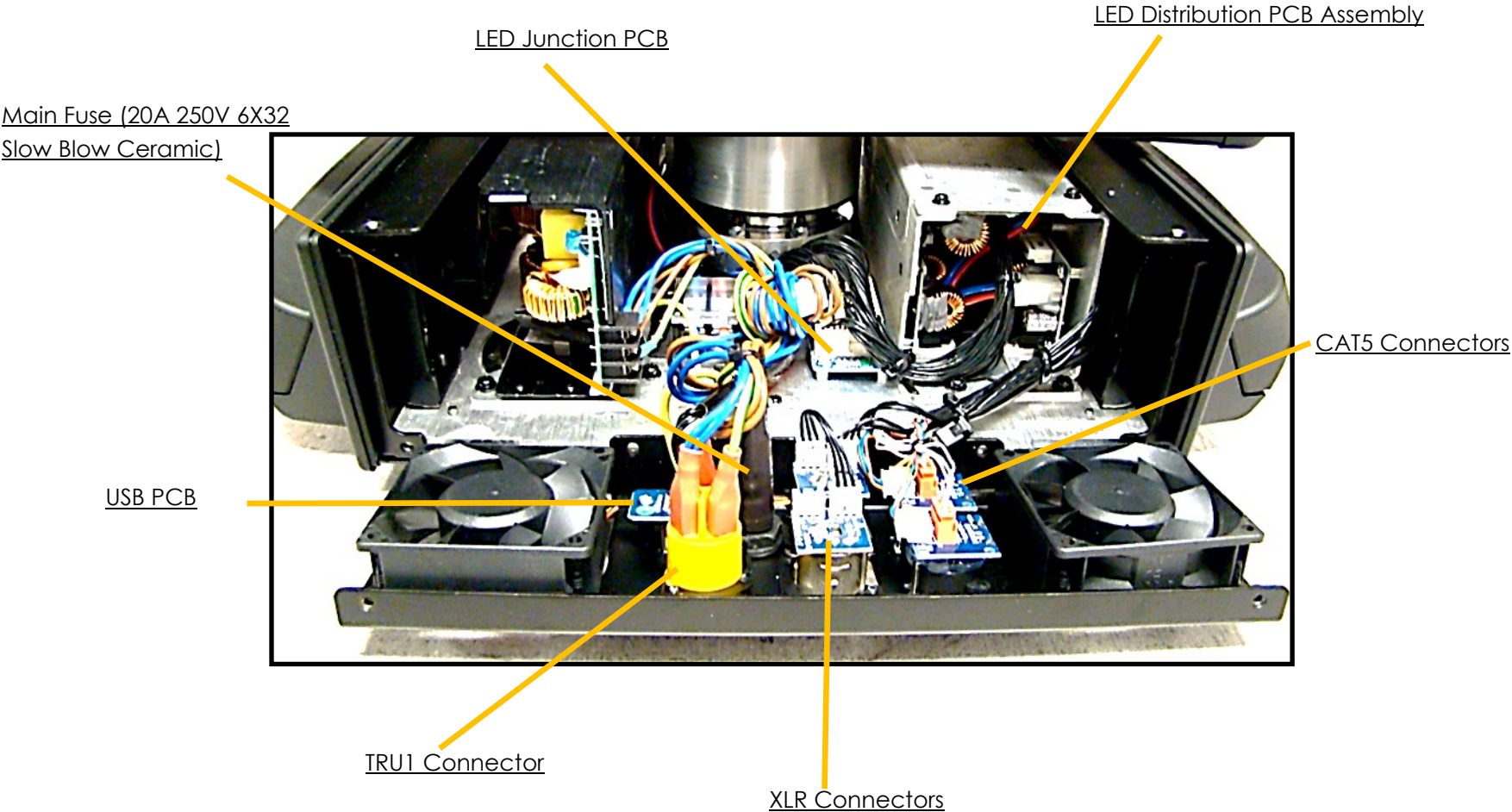
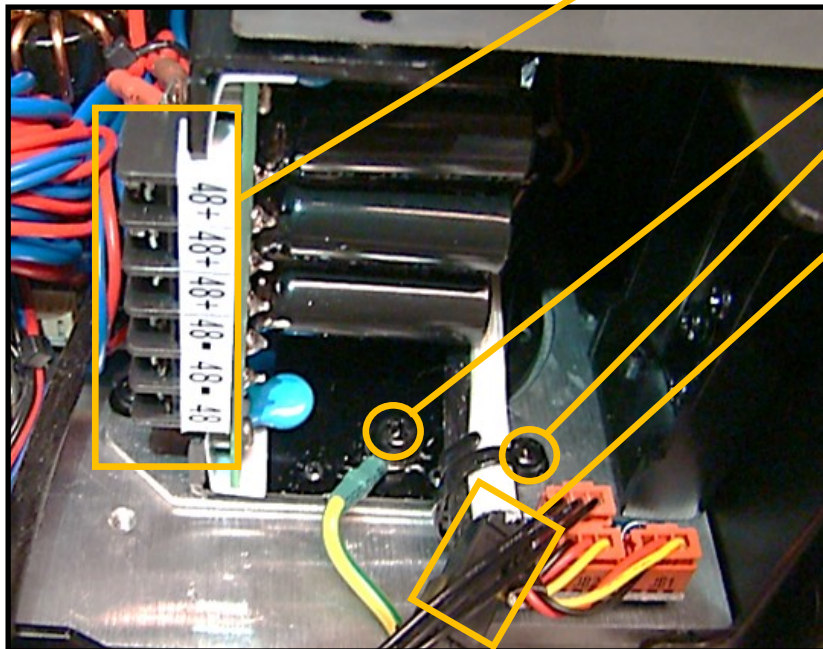# SolaSpot 3000

## Removing the Power Supply

Remove 8X (*2 not pictured*) to remove the metal cover

Loosen screws and remove output wires
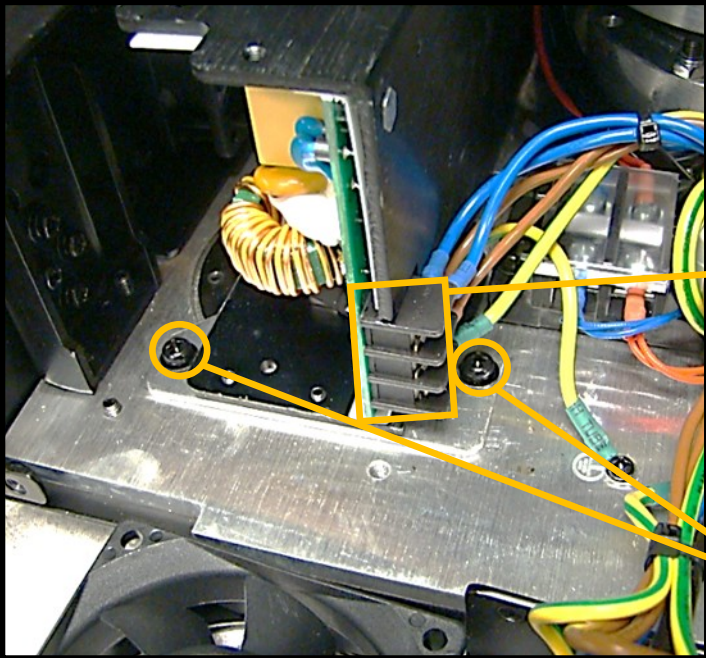
**DC Wiring:**

Blue is -

Red is +

Remove 1X ground wire screw

Remove 1X mounting screw

Disconnect thermal sensor

# SolaSpot 3000

## Removing the Power Supply



Loosen screws and remove input wires,

**be sure to note locations of each wire**
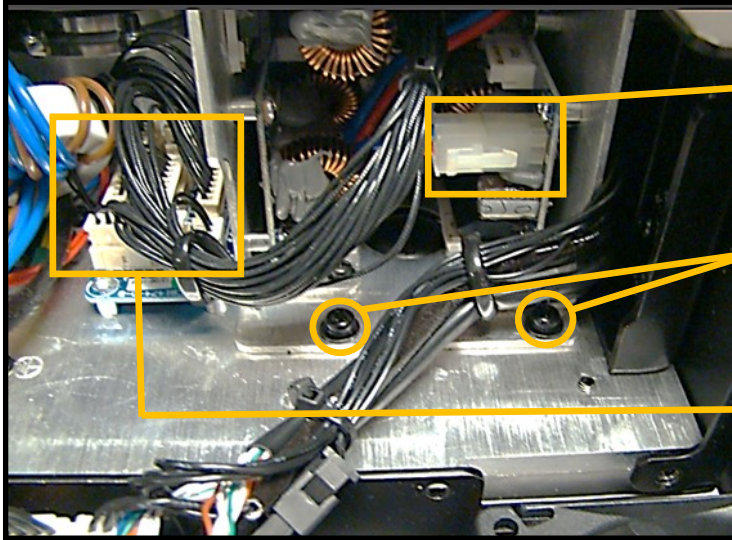
*Remove 2X Philips head screws*



Power Supply is now free to be removed

# SolaSpot 3000

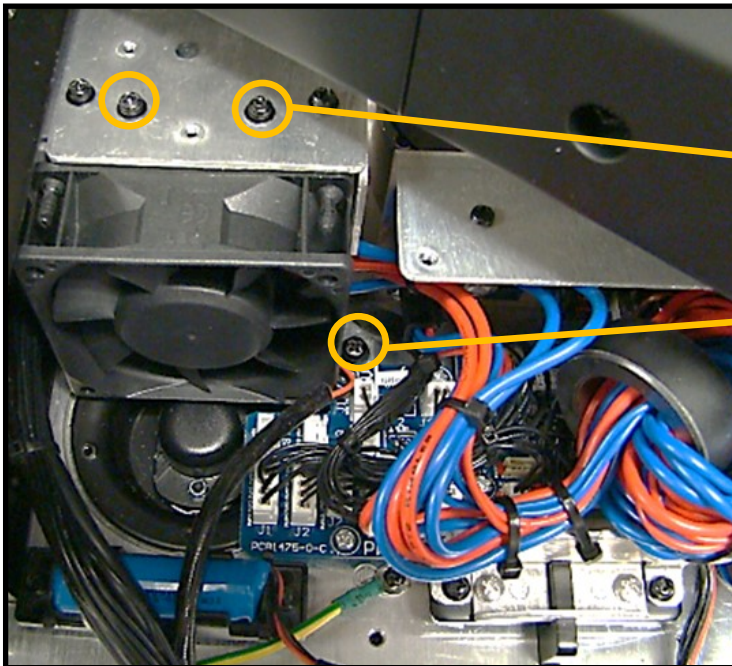## Removing the LED Distribution Assembly

### Rear Panel

Unseat power connector

Remove 2X Philips head screws

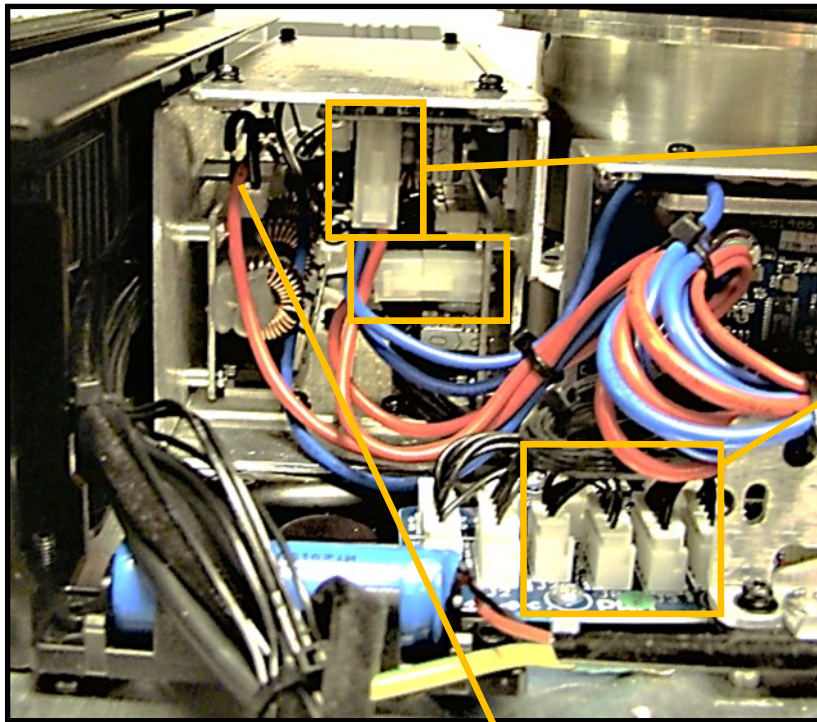Unseat 5X connectors from junction PCB

### Front Panel

Remove 2X Philips head screws to remove fan mount

Remove 1X Philips head screw

# SolaSpot 3000

## Removing the LED Distribution Assembly



Unseat 2X power connectors

Disconnect 3X junction PCB wires
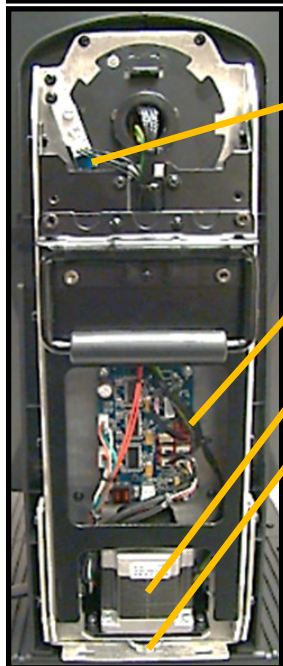
Carefully feed rear power connector through front

Remove assembly by lifting and pulling towards the rear panel

# SolaSpot 3000

## Accessing the Yoke Components



Remove 2X yoke arm cover screws, *2 on each side*
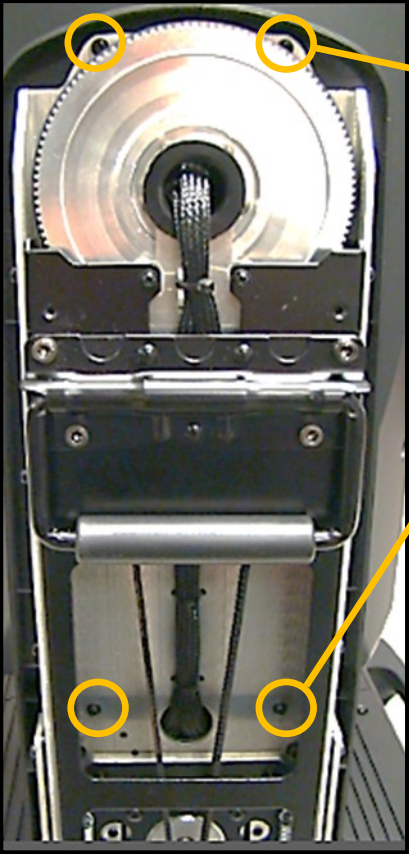


Tilt Homing Sensor

Pan/Tilt PCB 2U
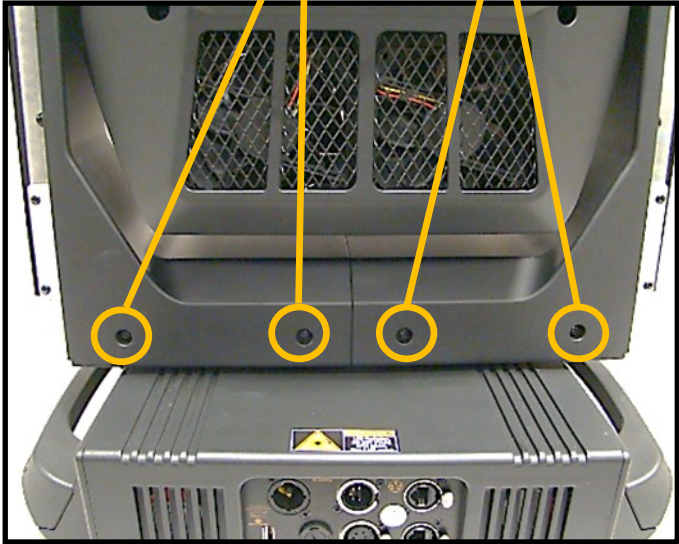
Pan Motor

Pan Encoder Sensor

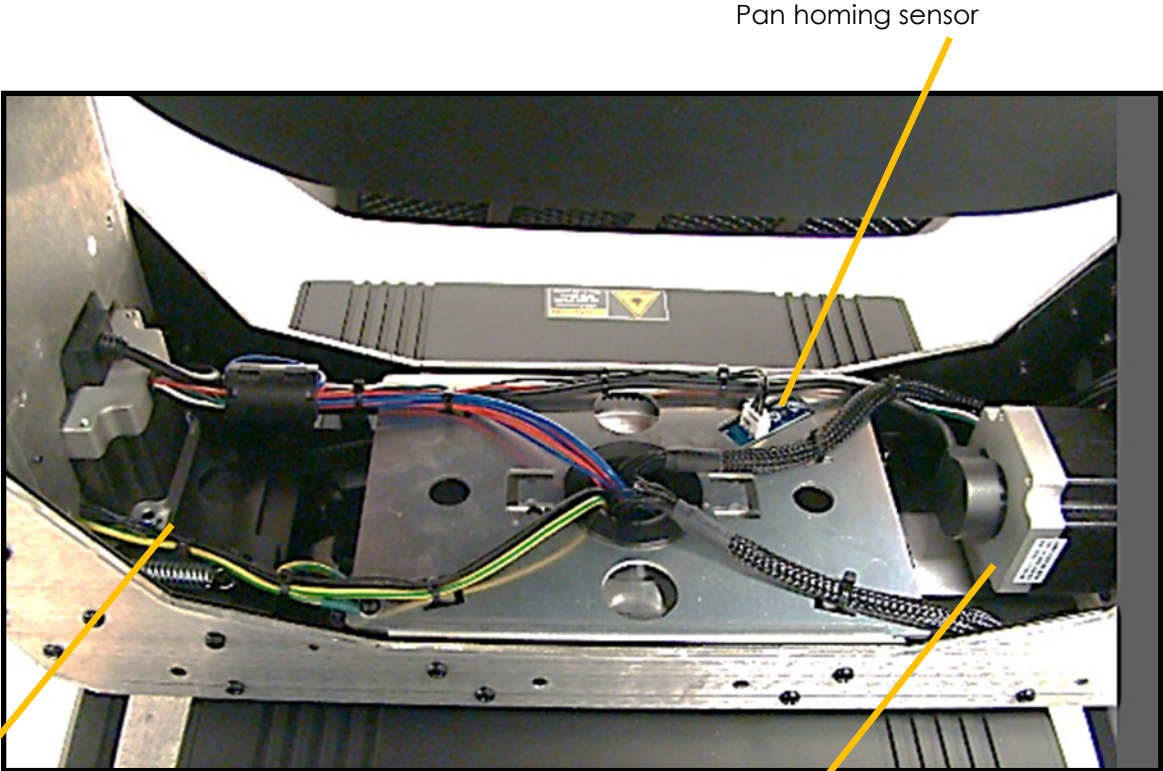# SolaSpot 3000

## Accessing the Yoke Components



Remove 4X internal Philips head screws *on each side*

Remove 4X external Philips head screws *on each side*

# SolaSpot 3000

## Accessing the Yoke Components

Pan homing sensor



Pan motor with attached encoder sensor

Tilt motor with attached encoder sensor
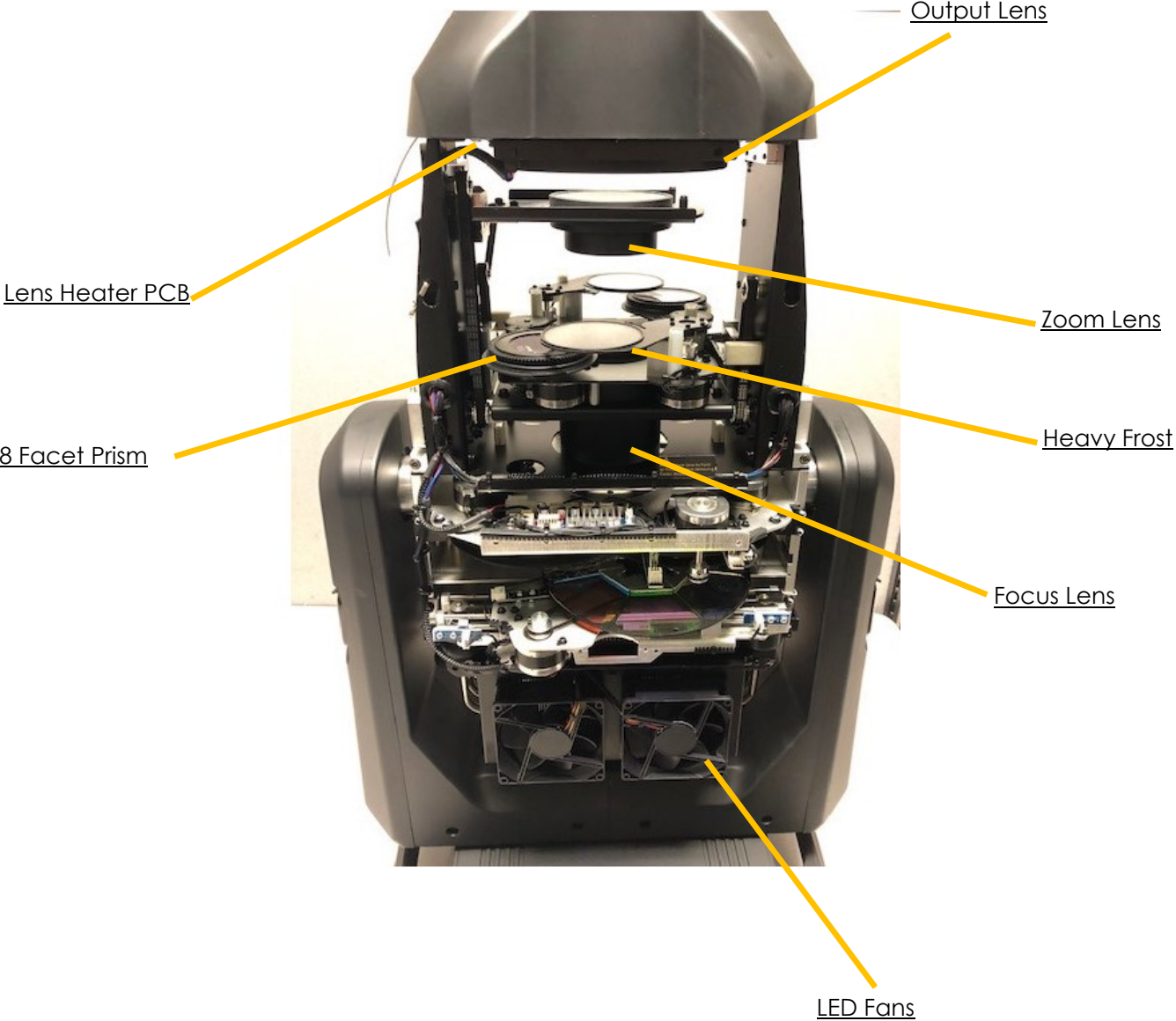
# SolaSpot 3000

## Accessing Head Components



Loosen 2X captive 1/4 turn screws on each side
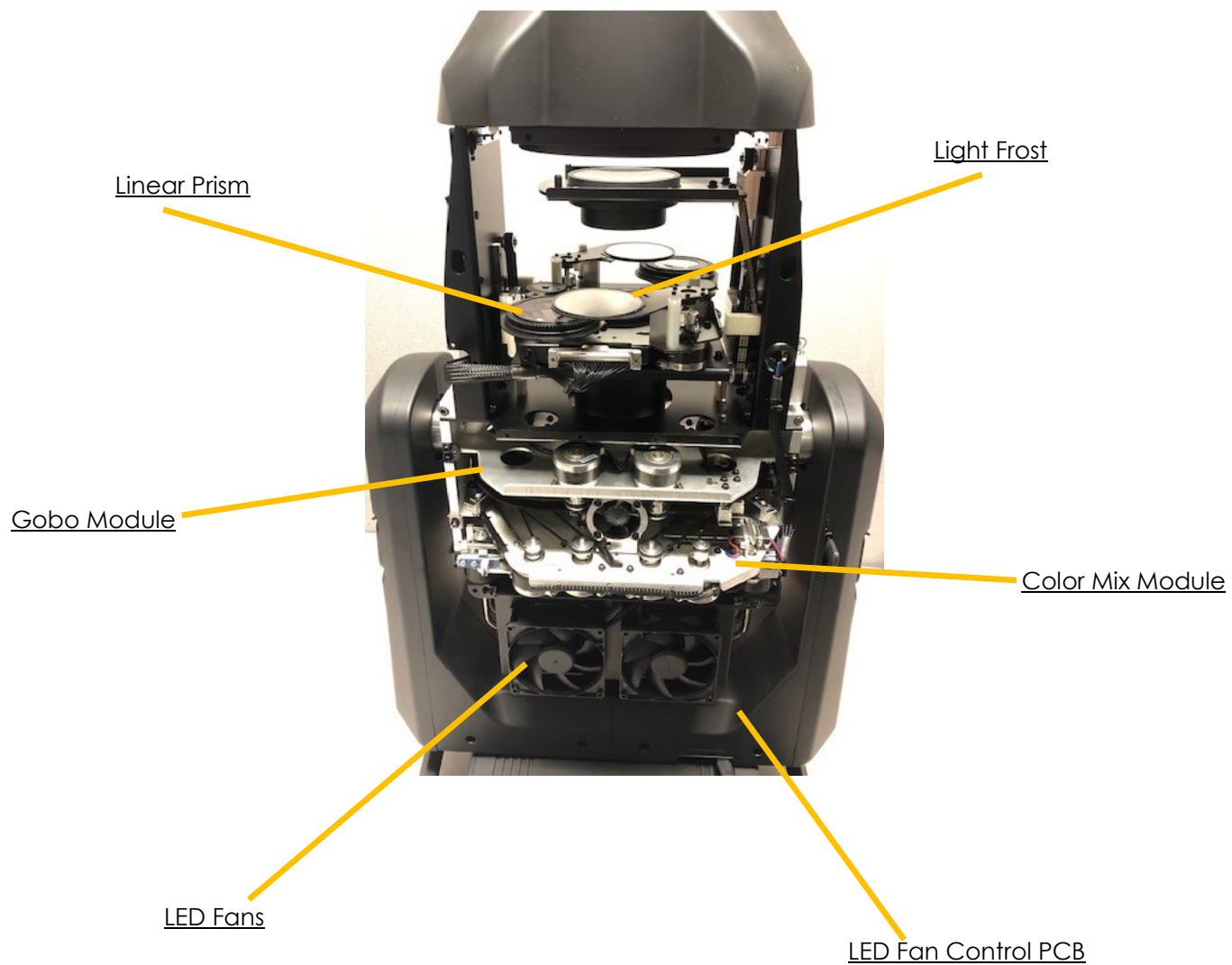
Unhook safety cable on each head cover

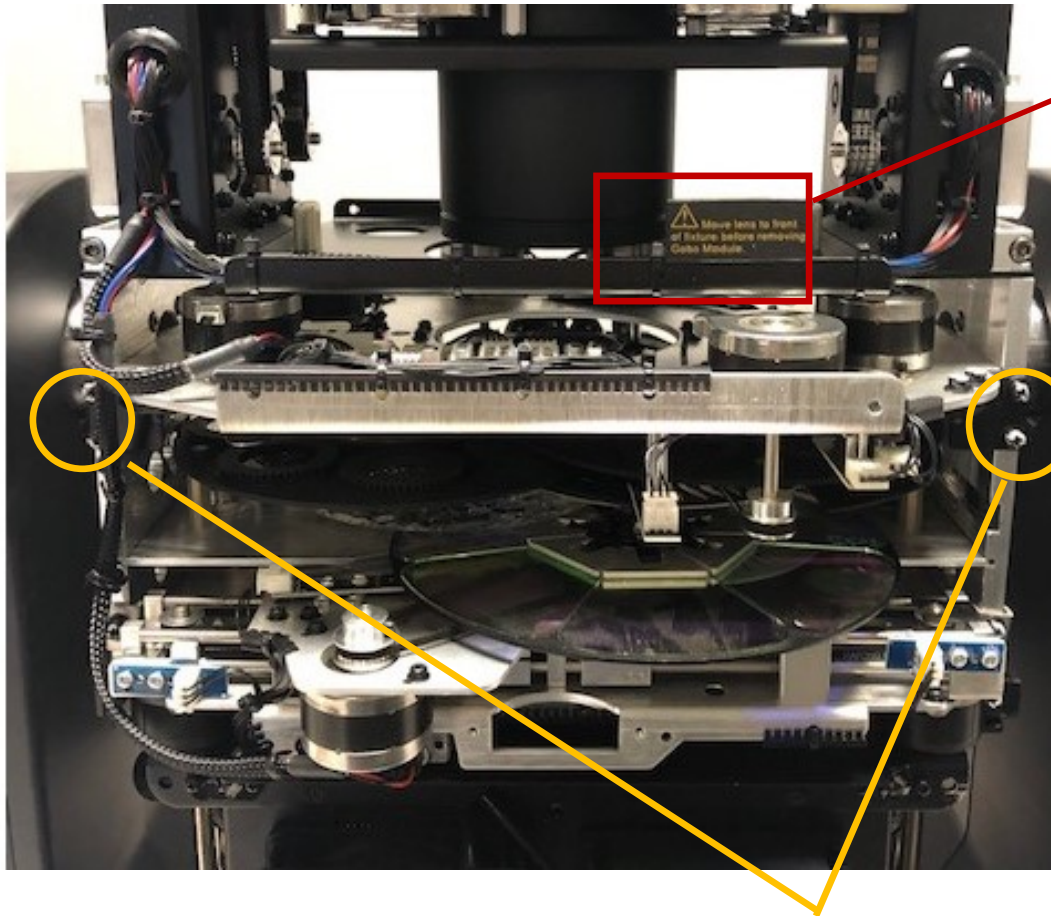# SolaSpot 3000

## Head Components



Output Lens

Lens Heater PCB

Zoom Lens

8 Facet Prism

Heavy Frost

Focus Lens

LED Fans

# SolaSpot 3000

## Head Components

Light Frost

Linear Prism

Gobo Module

Color Mix Module

LED Fans

LED Fan Control PCB

# SolaSpot 3000

## Removing Gobo Module



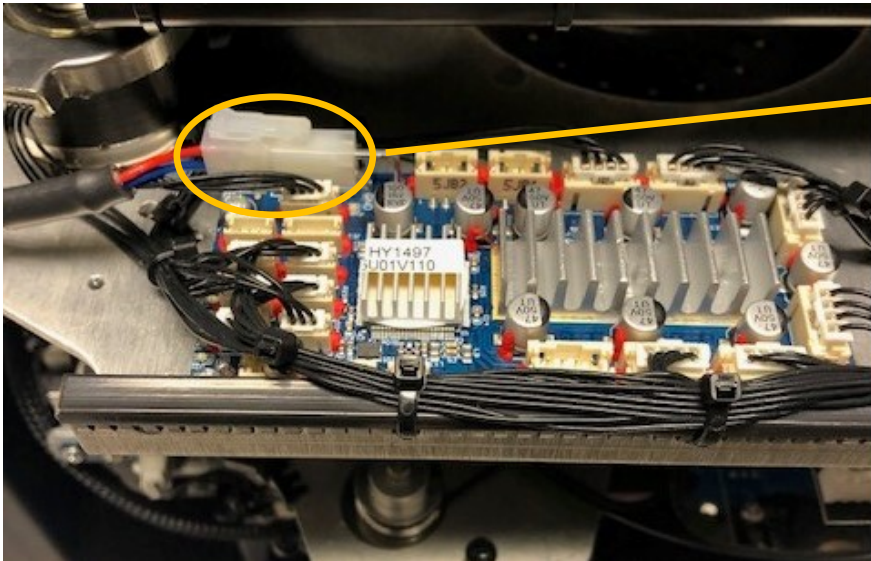*Pull up the focus lens or tilt the head forward before removing the framing module*

Gobo PCB **5U** is on the bottom of the module

Remove 4X Philips head screws

See next step before attempting to pull out module

# SolaSpot 3000

## Removing Gobo Module



Remove these two connectors from PCB
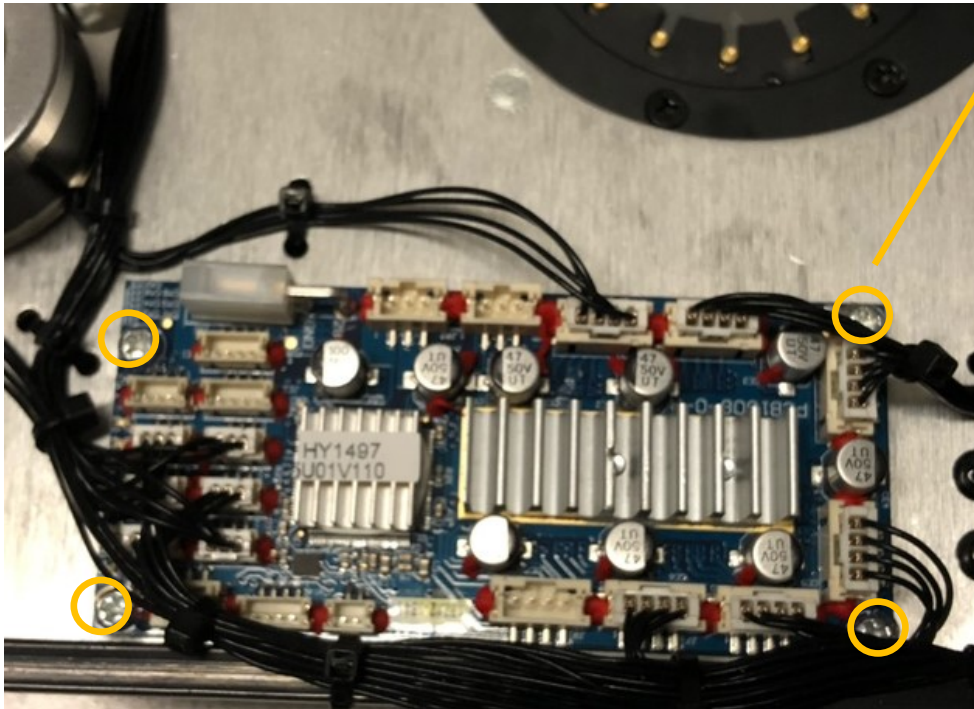
Carefully pull out module

# SolaSpot 3000

## Access Gobo PCB

Unseat all PCB connectors

Remove 4X Philips head screws

Carefully pull up on PCB

# SolaFrame 3000

## Gobo Replacement



To remove both the static and rotating gobos from the wheel, removing the module is not required

Simply push from the top or bottom (whichever way pushes the holder out of its wheel position)

And slide the holder out towards you





*Seashell  and Starvolver gobo holders contain the homing magnet and must remain in the same location in the rotating gobo wheel*
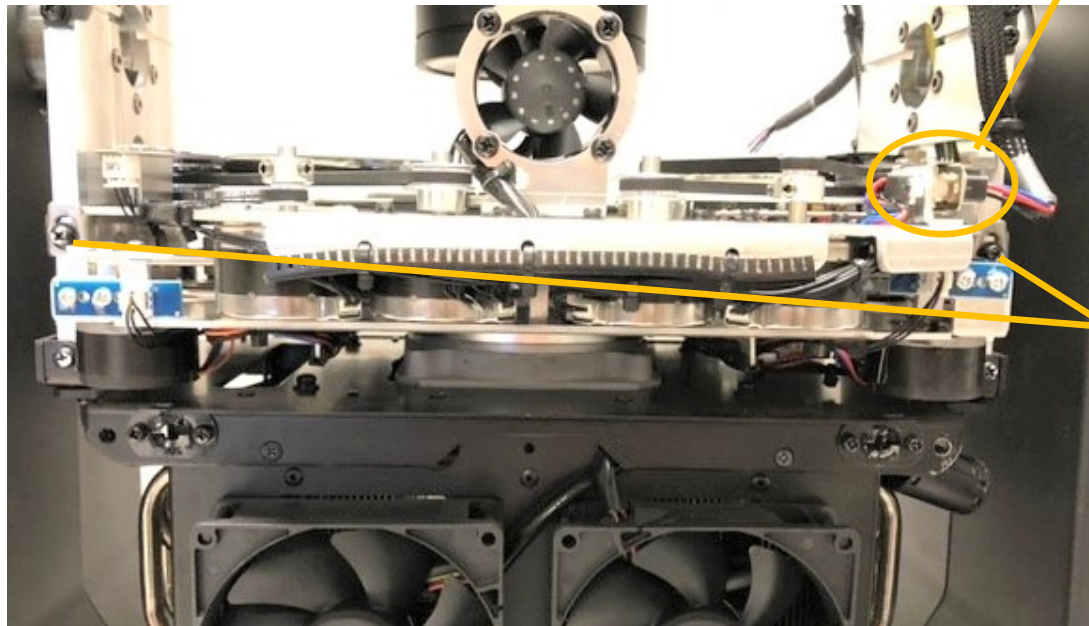




Each gobo is held in by a retaining spring, remove this and be sure to install the gobo with the coated (black side) **away** from the LED source

18

# SolaSpot 3000

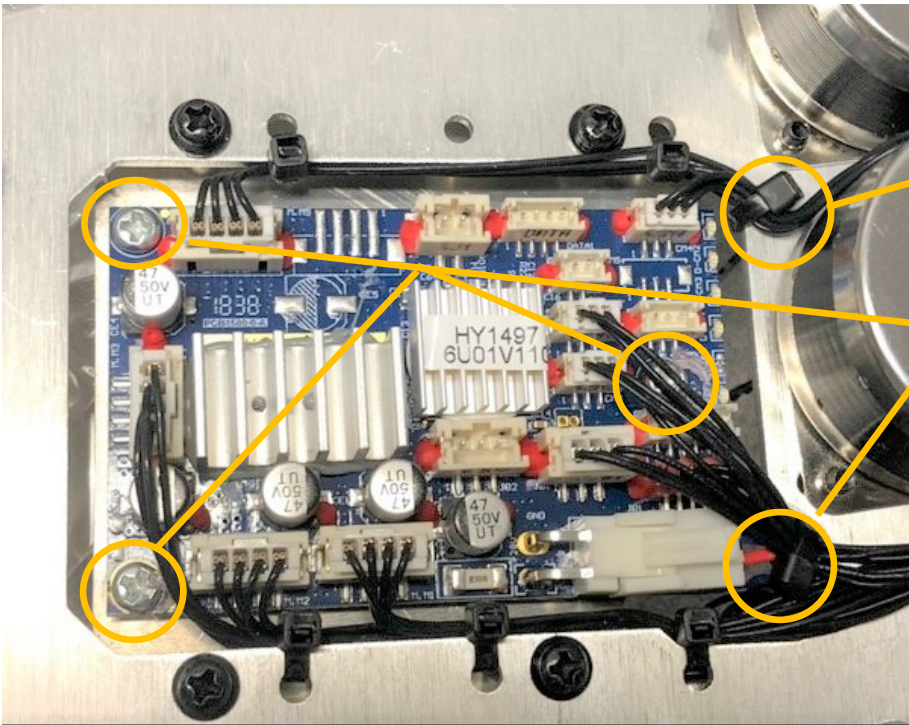## Removing Animation Module

Remove module harness connector



Loosen 2x module clips (1X Philips head screw each

Carefully pull out module

Animation PCB **6U** is on the bottom of the module

# SolaSpot 3000

## Removing Animation PCB



Carefully flip over and support the module to prevent damage to the animation wheels

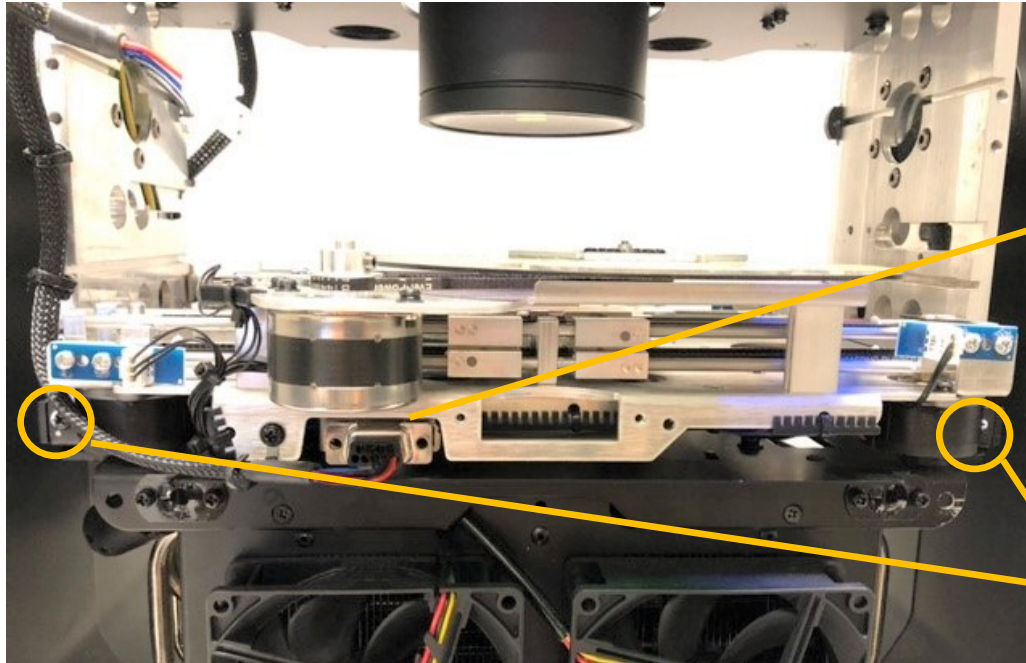Remove wire ties to gain slack in the harness

Unseat all PCB connectors

Remove 3x Phillips head screws

PCB is now free to remove

# SolaSpot 3000

## Removing Color Mix Module



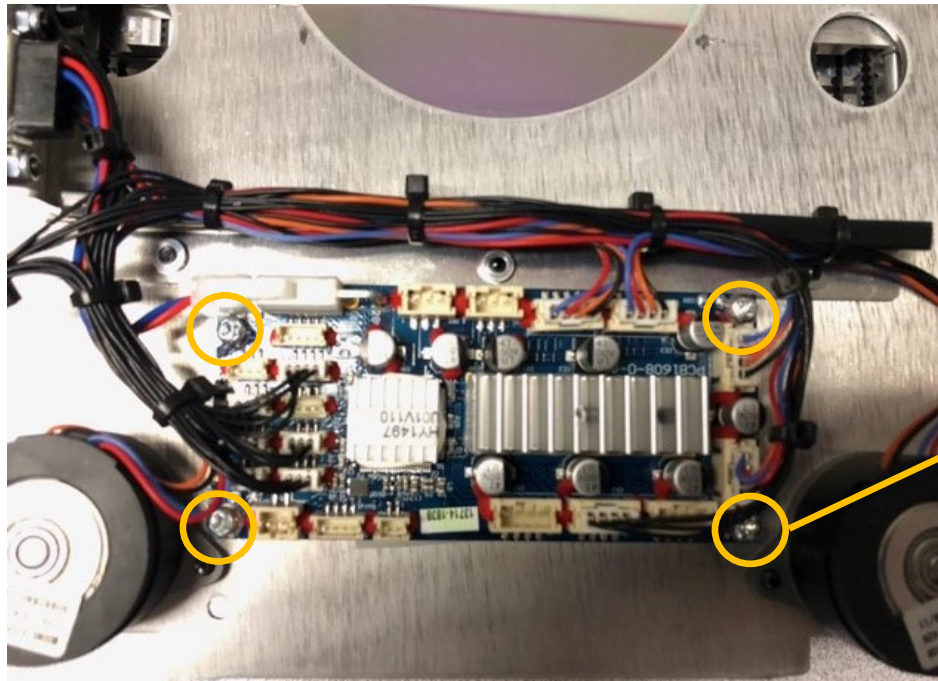Remove module harness connector

Remove 2x Phillips head screws

Carefully remove module

Color mix PCB **7U** is on the bottom of the module

# SolaSpot 3000

## Removing Color Mix PCB



Carefully flip over and support the module to prevent damage to the color wheel
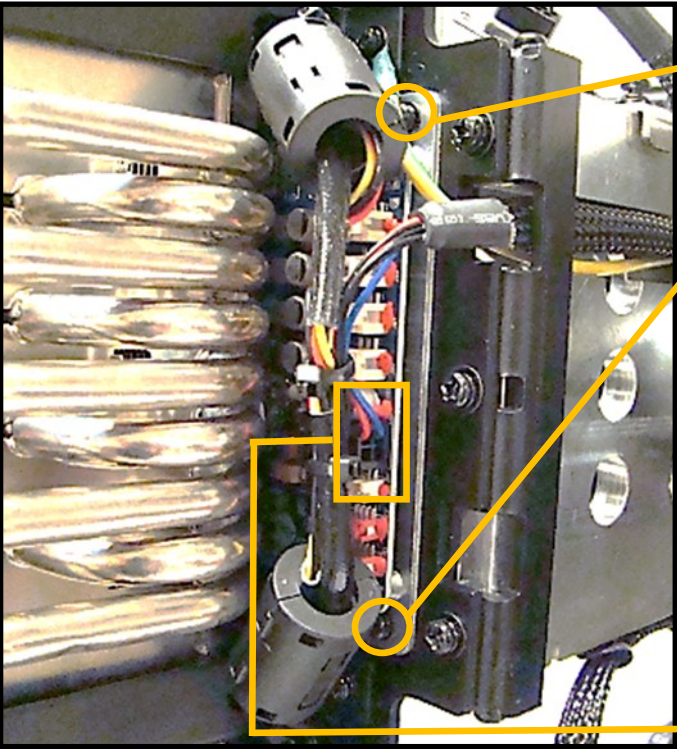
Unseat all PCB connectors

Remove 4x Phillips head screws

PCB is now free to remove

# SolaSpot 3000

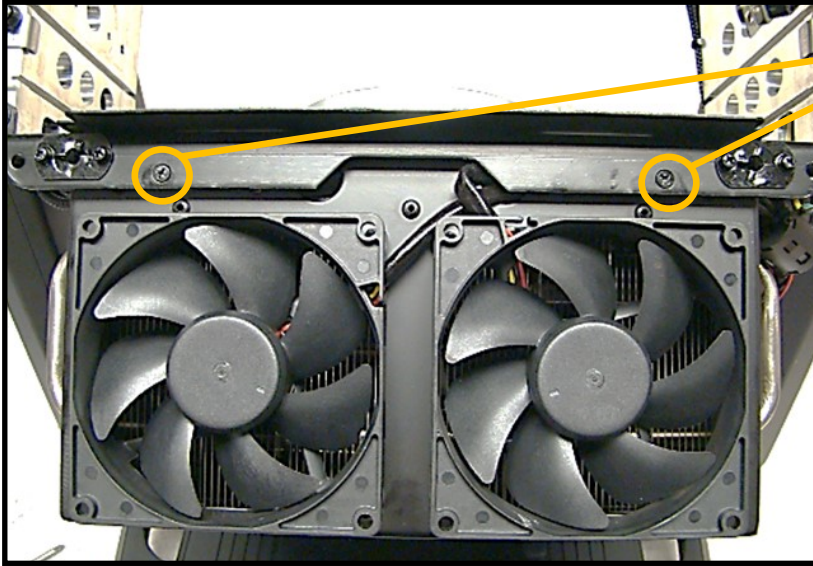## Removing LED Light Engine



Remove 4X Philips screws, 2 on each side
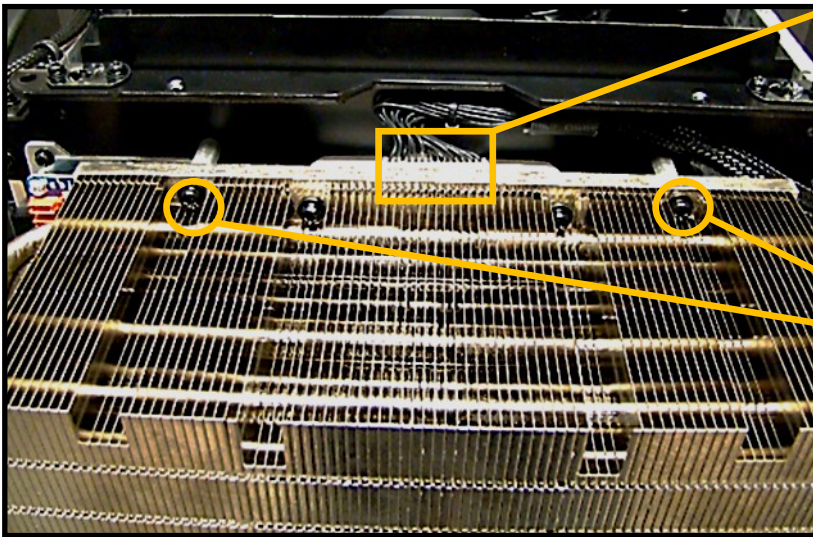
Carefully cut 2Xwire ties

Disconnect fan wires from PCB

# SolaSpot 3000

## Removing LED Light Engine



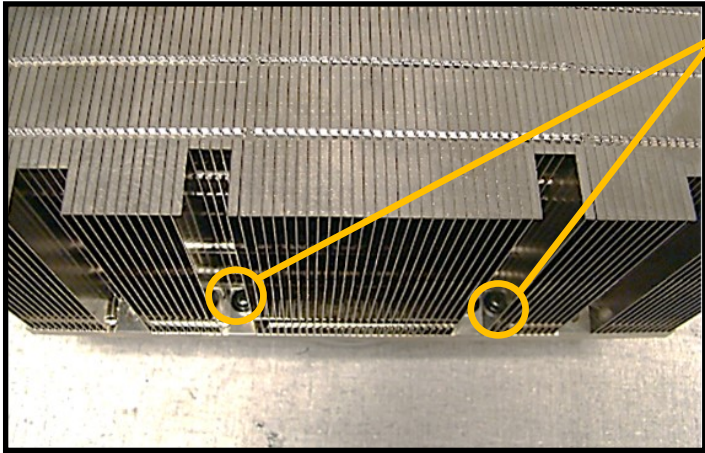Remove 4X Philips screws, *2 on each side*

Disconnect LED wire harness, *1 on each side*



Remove 4X Philips screws, *2 on each side*

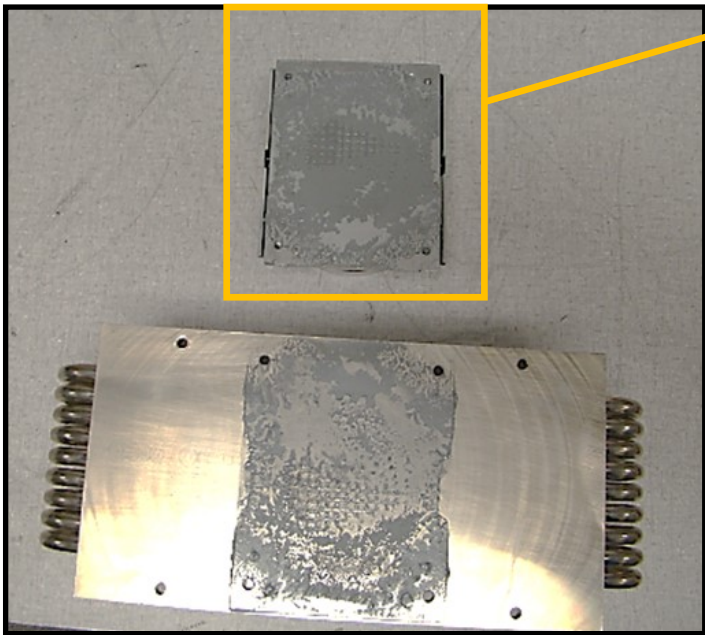**Be sure to support heatsink during this process**

# SolaSpot 3000

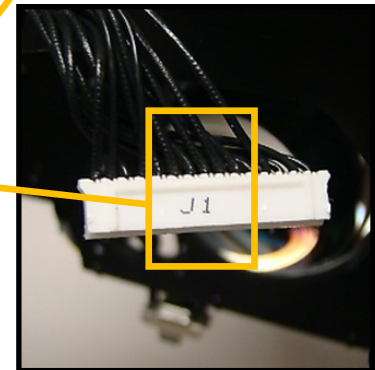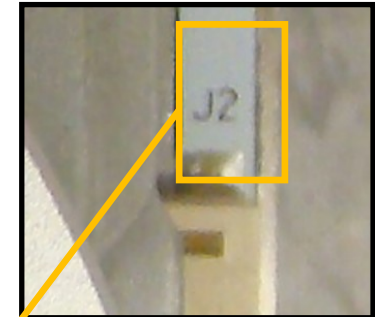## Removing LED Light Engine



Remove 4X Philips screws, *2 on each side*

LED Light Engine is now free



Add heatsink compound to the new LED Light Engine

**NOTE: connection labels at the engine and on the harness connector, if plugged in backwards it could damage the engine**

# SolaSpot 3000

PCB Identifiers

| PCB Software ID | Controls |
|:---:|:---|
| **1U** | Display |
| **2U** | Pan, Tilt |
| **3U** | LED Control |
| **4U** | Focus, Frost, Prism, Zoom |
| **5U** | Gobos |
| **6U** | Animation Wheels |
| **7U** | Color Mix |
| **8U** | LED Fan Control |