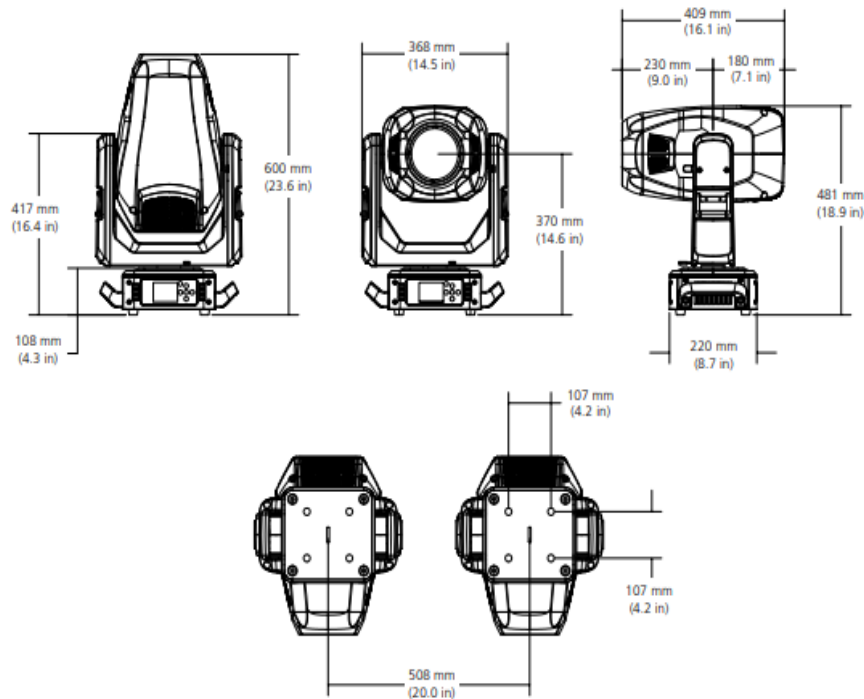




# HIGH END SYSTEMS

**Lonestar**

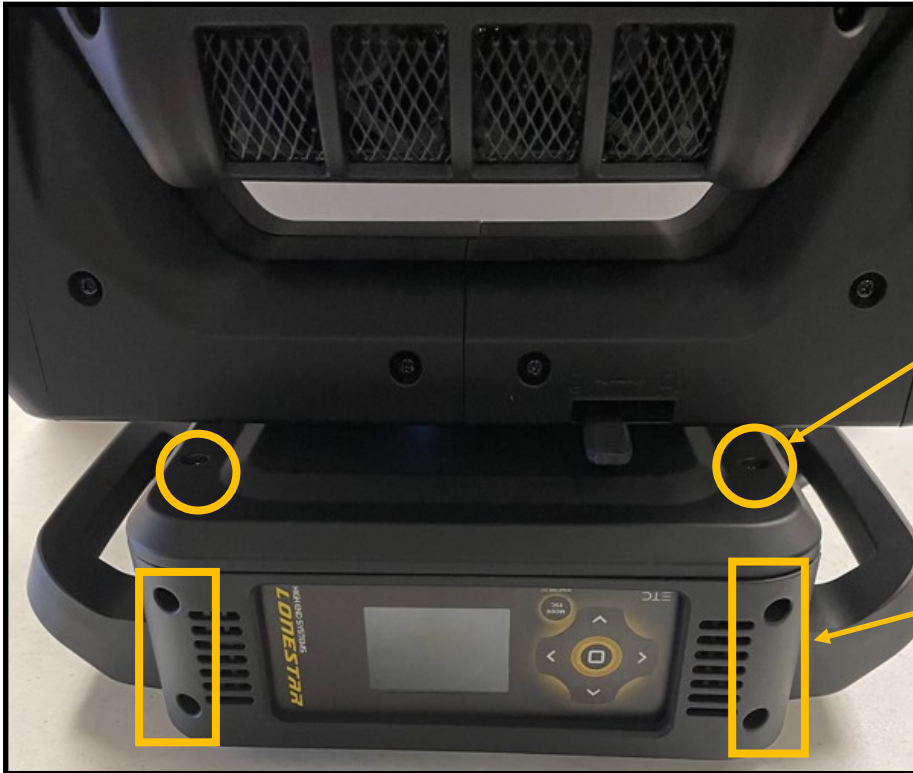


## Lonestar



# Lonestar

## Accessing the Electronics Front Panel



Remove 4X Philips head screws from back and front top covers

Remove 8X Philips head screws from front panel plastic cover

Carefully remove both covers and set aside

*Follow the same steps for the rear top cover and rear panel cover*

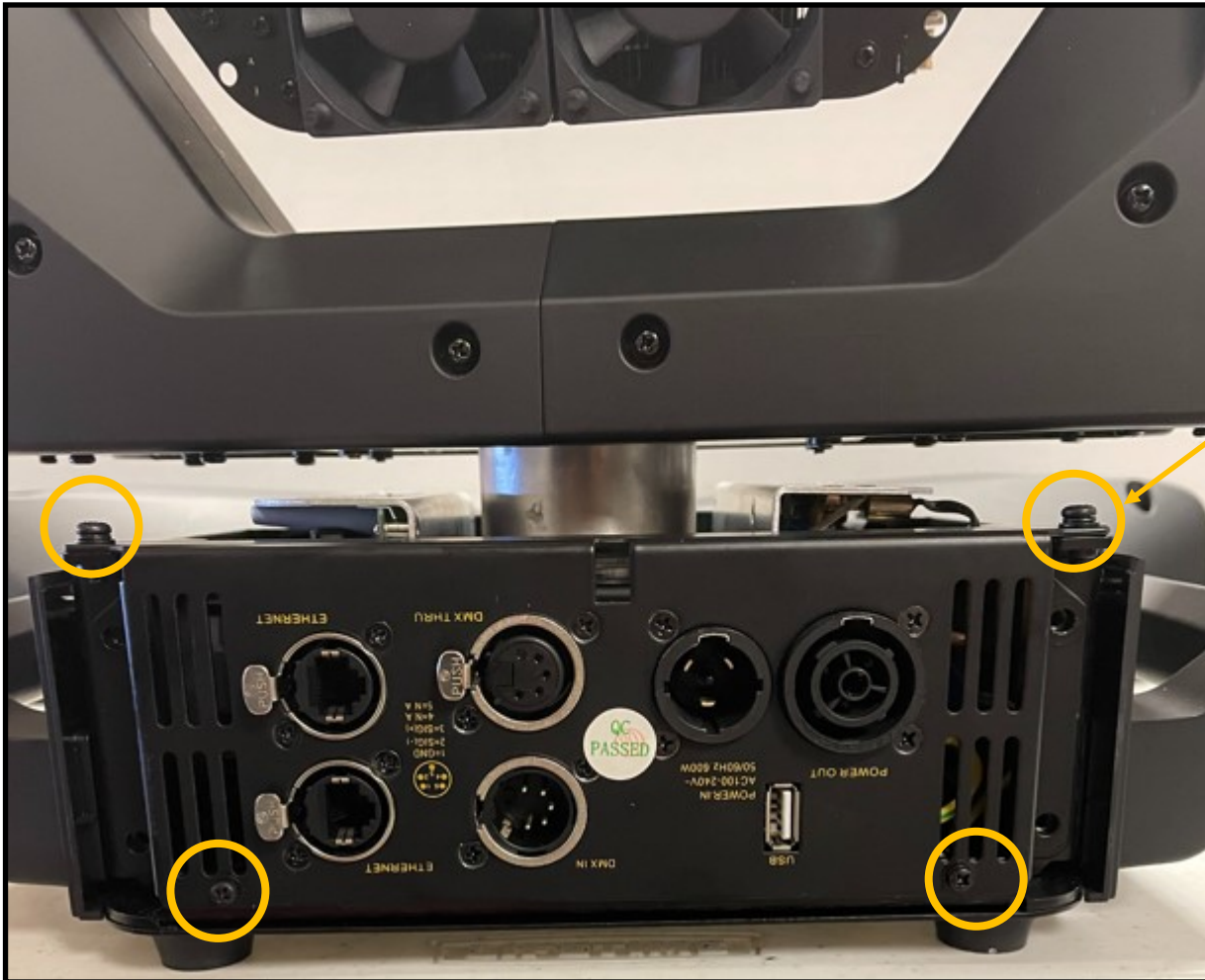


Remove 4X Philips head screws to lower the front panel

*Note the different screw types*

# Lonestar

## Accessing the Electronics Rear Panel

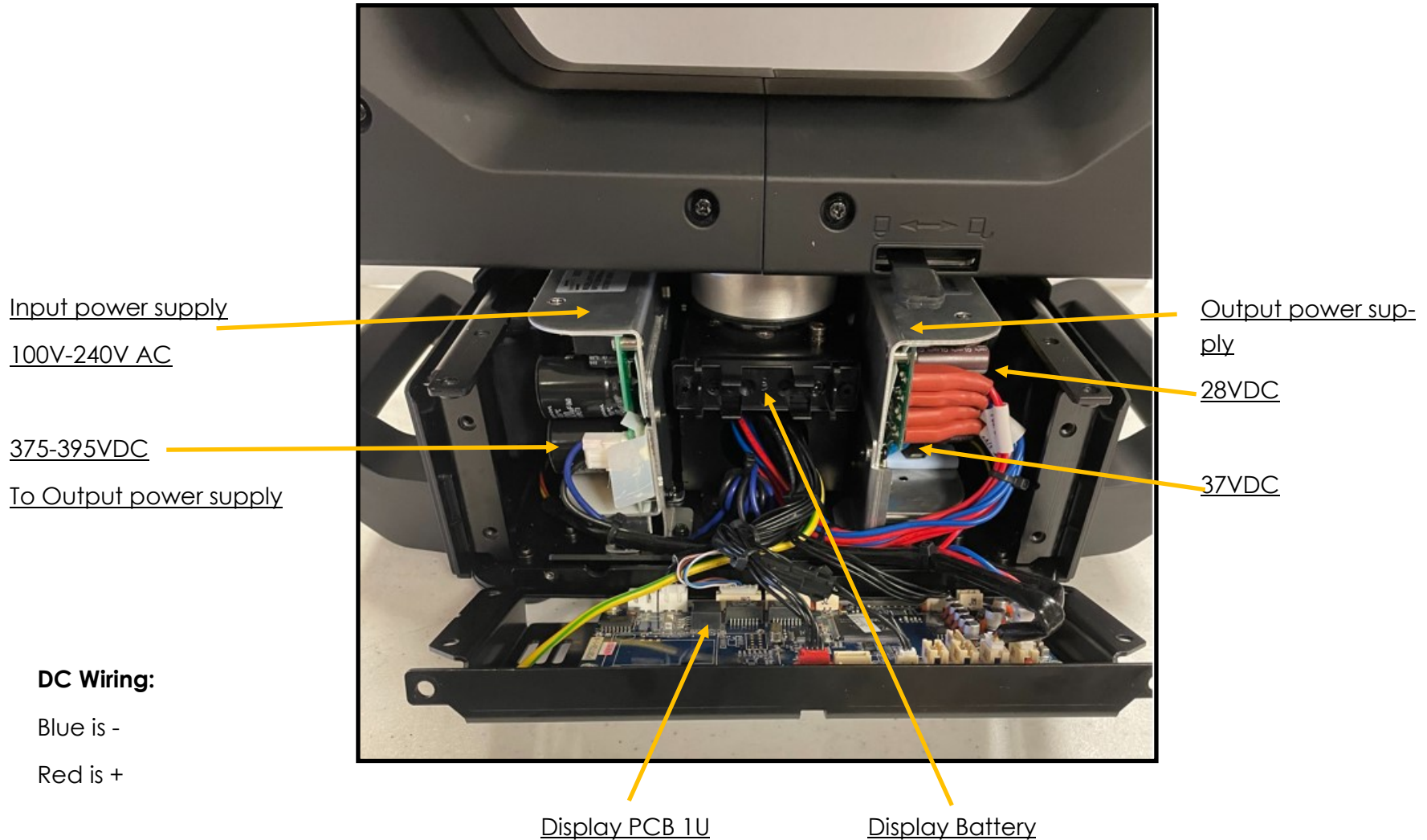


Remove 4X Philipps head screws to lower the front panel

*Note the different screw types*

# Lonestar

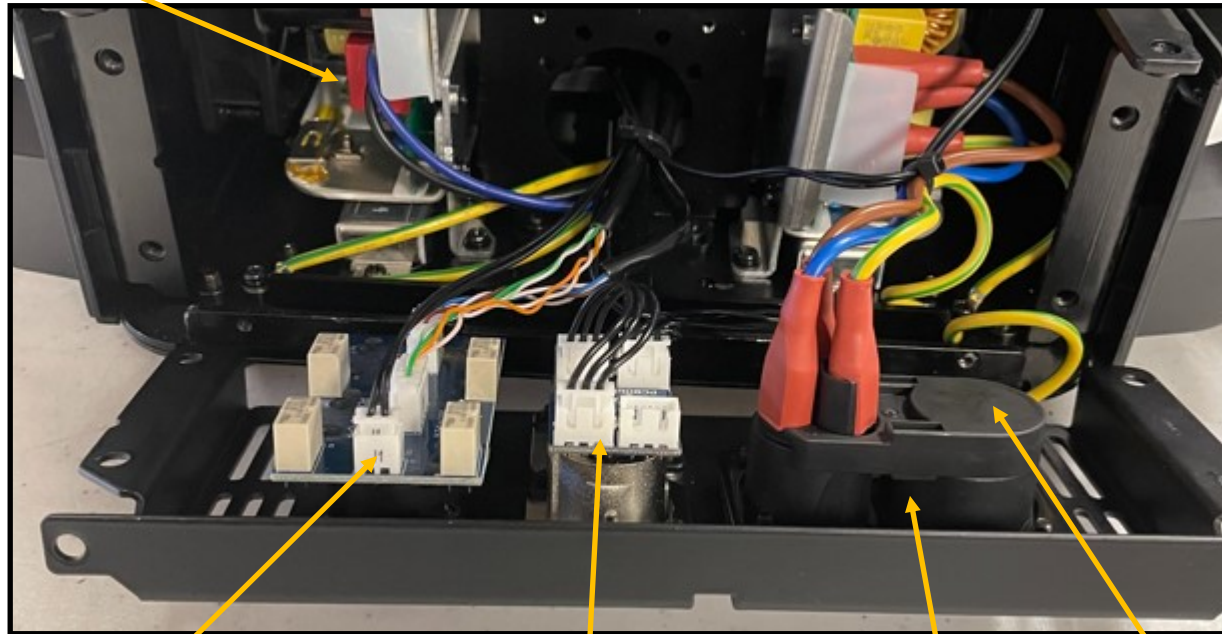
## Front Panel Components



# Lonestar

## Rear Panel Components

From Input power  
supply: 375-395VDC



CAT 5 Connectors

XLR Connectors

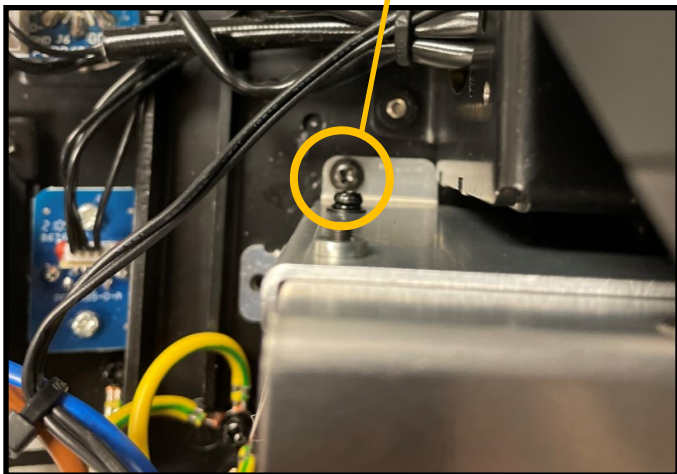
USB

TRU1 Connectors

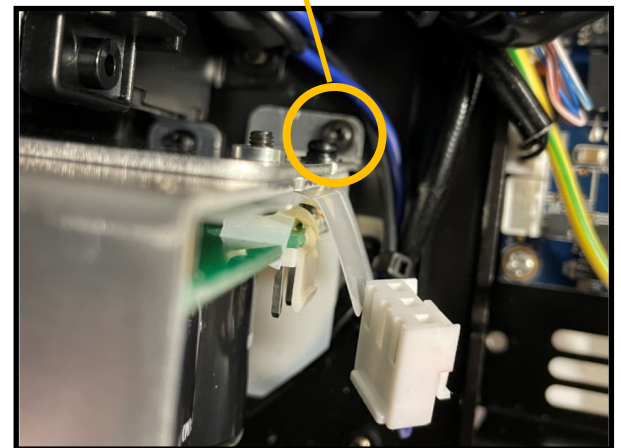


# Lonestar

## Removing the Input Power Supply



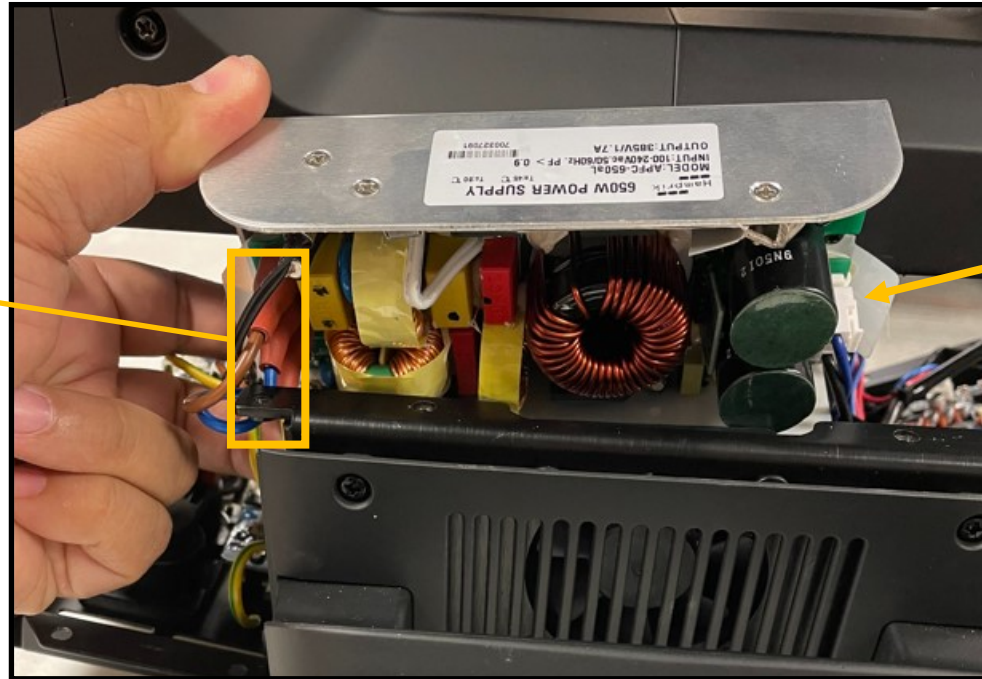
Remove 2X Philips head, behind the input power supply at the bottom.



# Lonestar

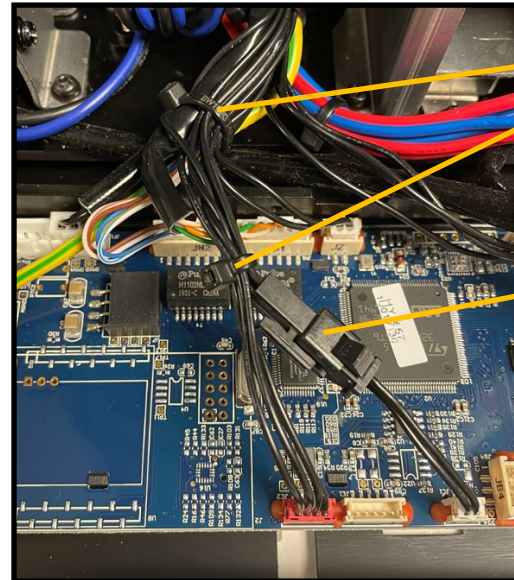
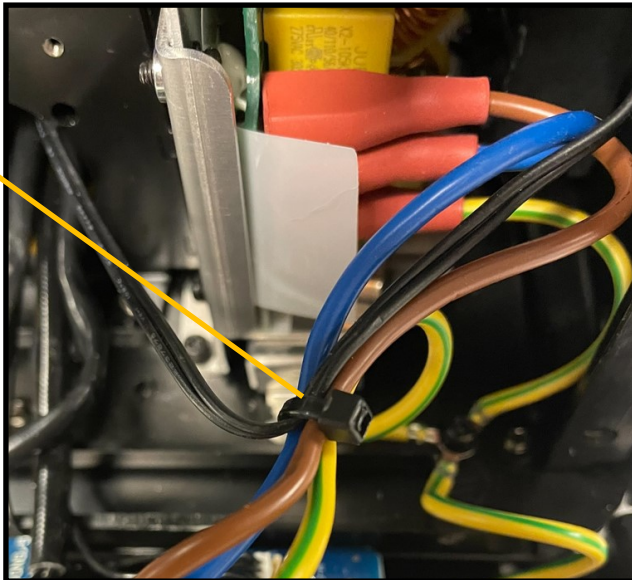
## Removing the Input

Disconnect brown, blue, and green wires. Wires must be replaced in the same order



Disconnect white connector

Cut zip ties



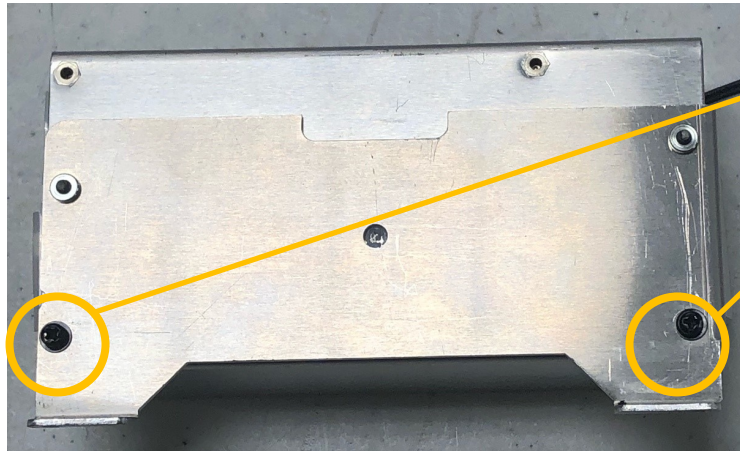
Cut zip ties

Disconnect black connector and run wires to the backside of the power supply

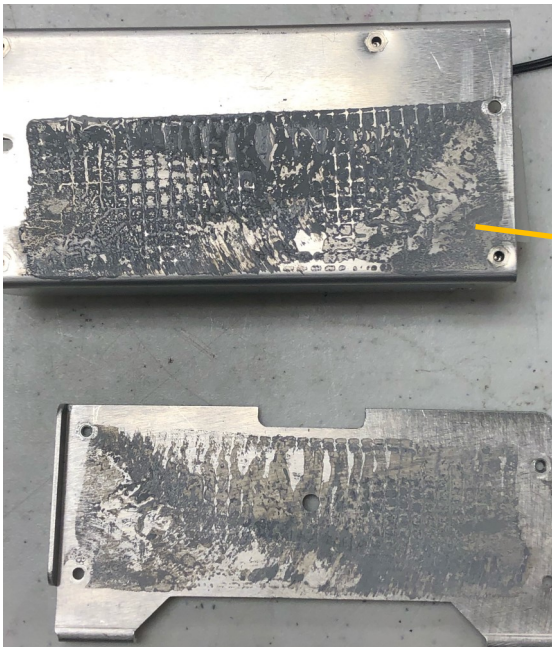
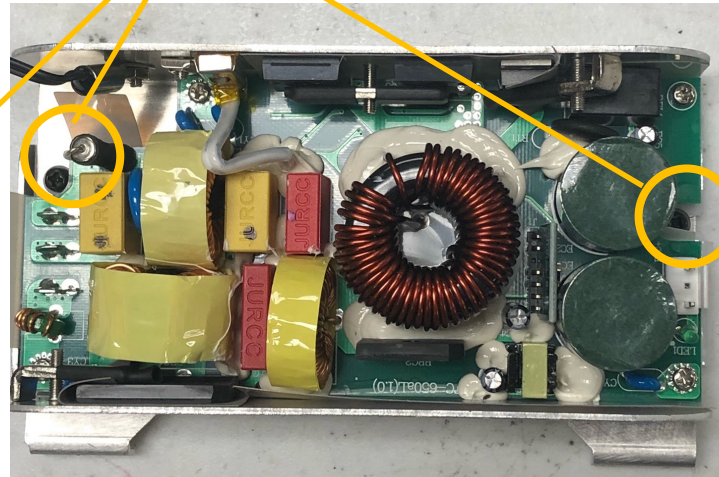


# Lonestar

## Removing the Input Power Supply



Remove 4X Philips head screws  
on mounting plate



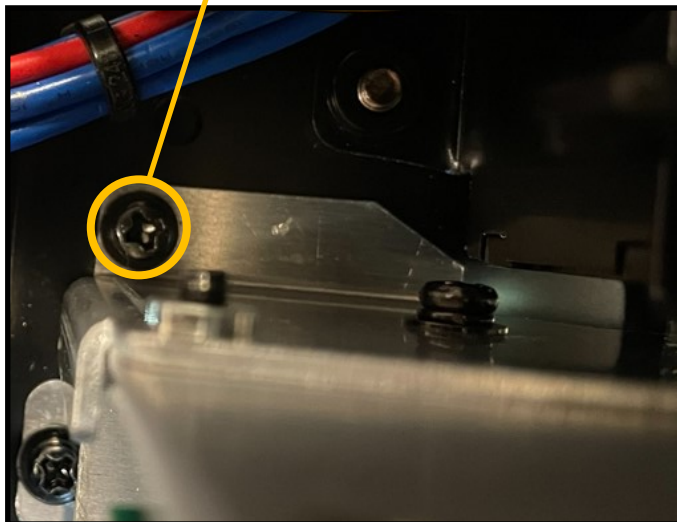
Add a thin layer of heatsink compound to the new power supply

Install mounting plate onto new  
power supply and install into fixture

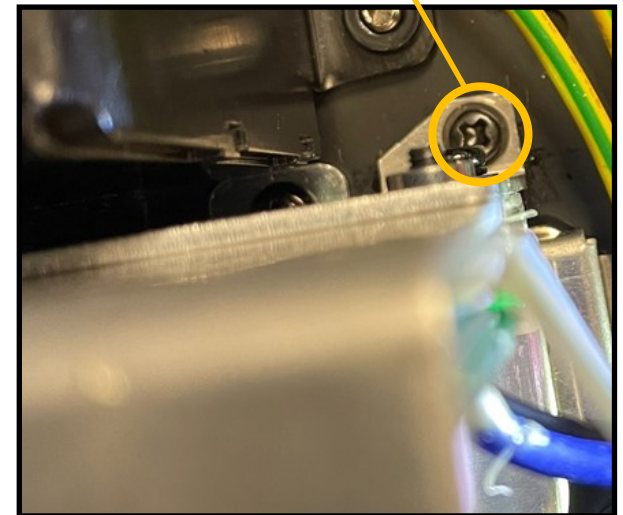


# Lonestar

## Removing the Output Power Supply

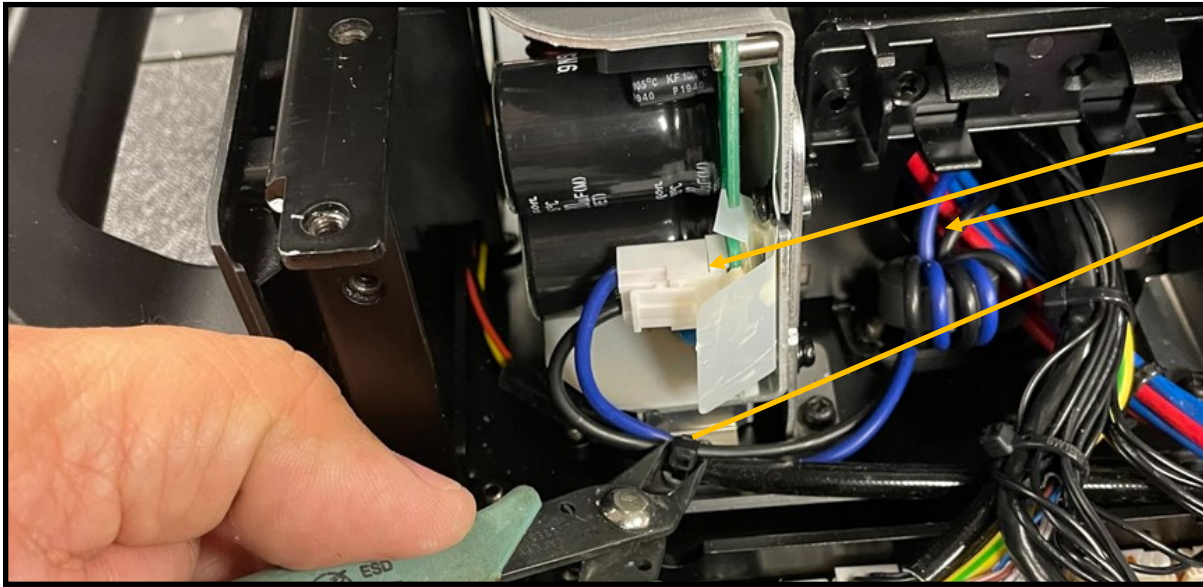


Remove 2X Philips head, behind the input power supply at the bottom.



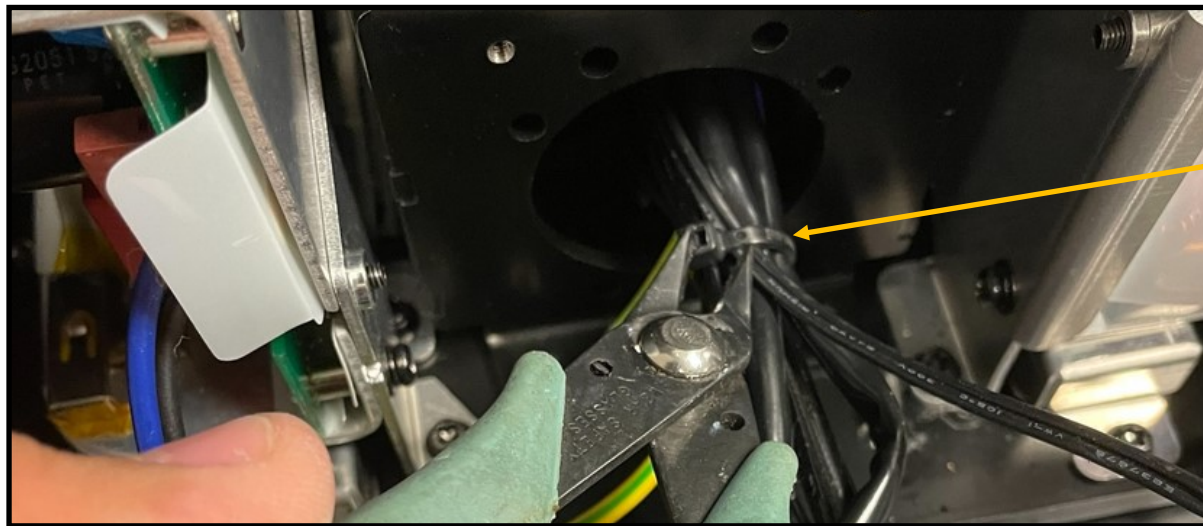
# Lonestar

## Removing the Output Power Supply



Disconnect connector

Cut zip ties

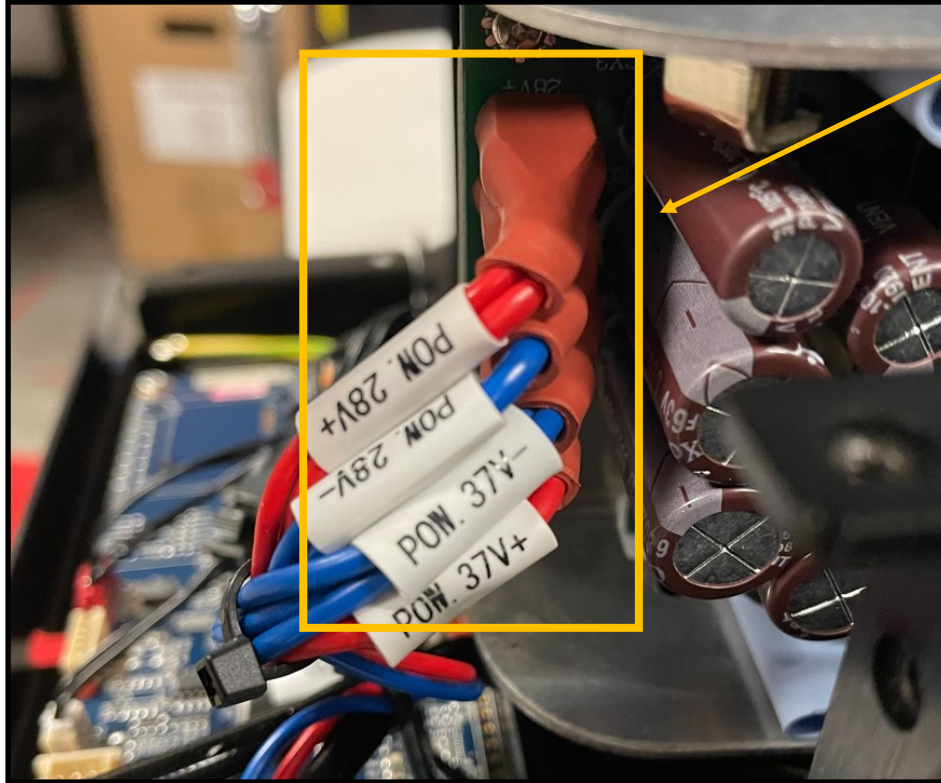


Cut zip tie



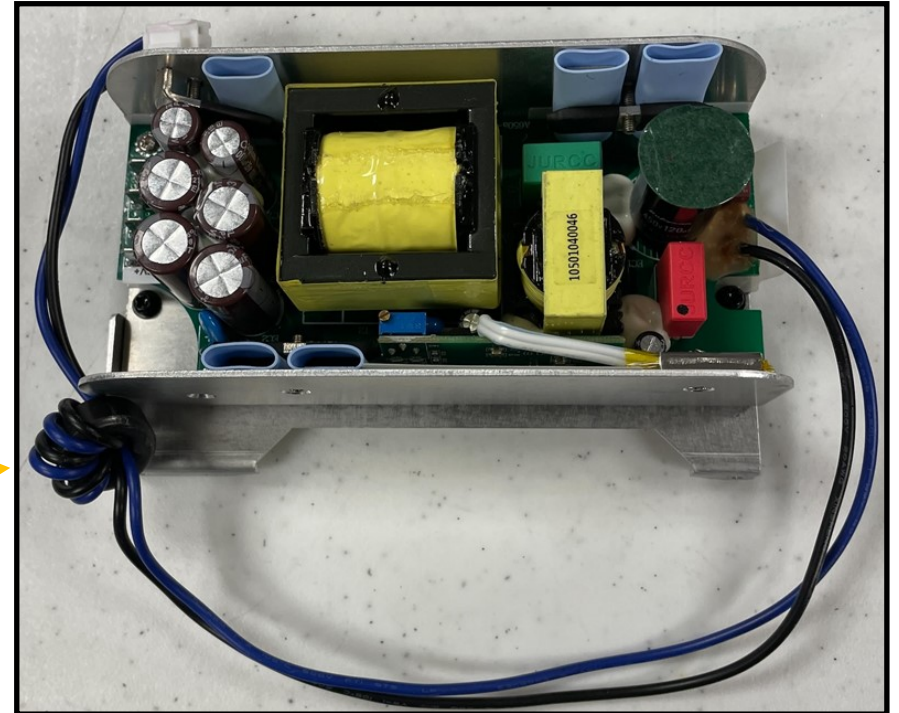
# Lonestar

## Removing the Output Power Supply



Disconnect red and blue wires. When reconnecting wires, connect in the correct order and placement

Run wires thru pan tub assembly and remove output power supply



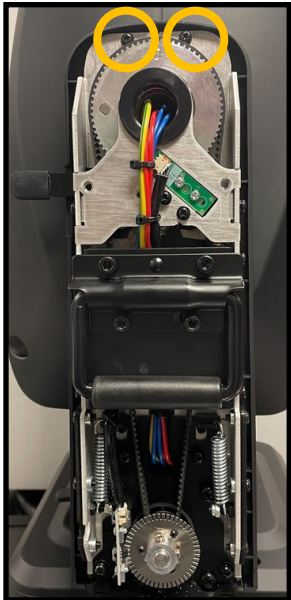


# Lonestar

## Accessing the yoke components



Remove 2X yoke arm cover screws on each side



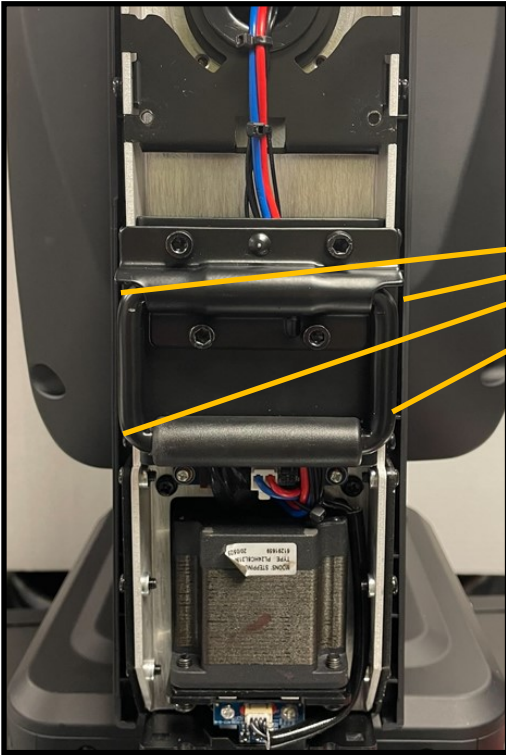
Remove 4X internal yoke cover screws on each side



Remove 4X yoke cover screws on each side

# Lonestar

## Accessing the yoke components

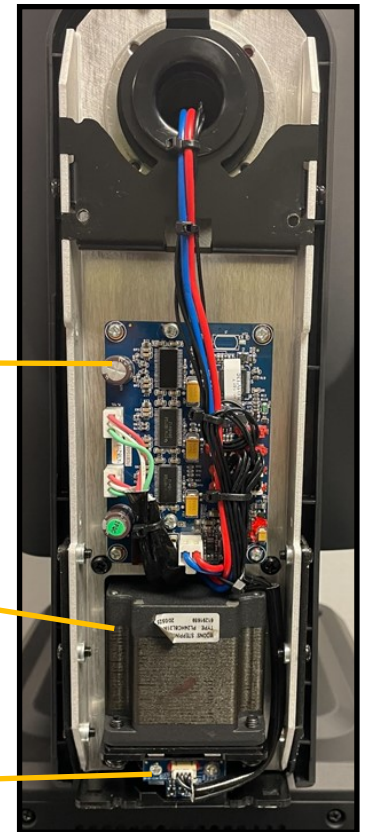


*Remove 4X yoke screws on each side  
to access pan and tilt board*

**PCB 2U:** Pan and Tilt board

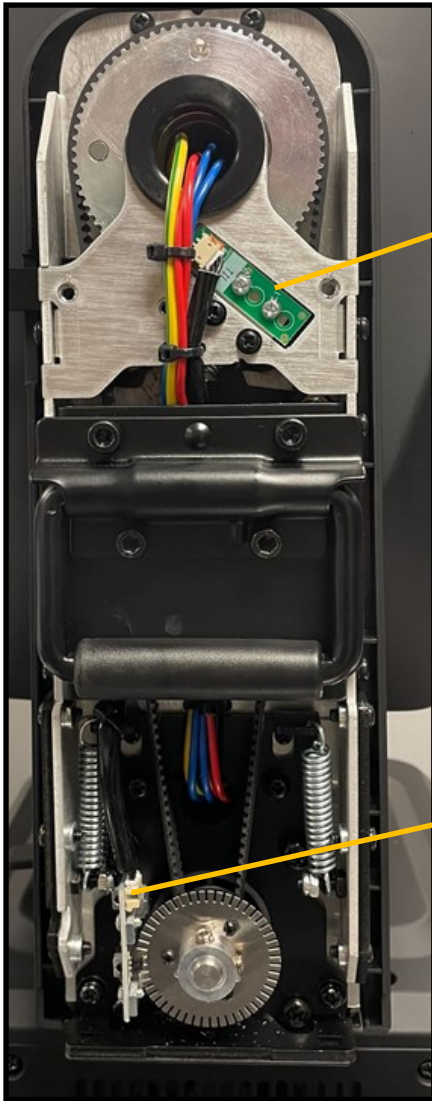
Pan motor

Pan Encoder Sensor



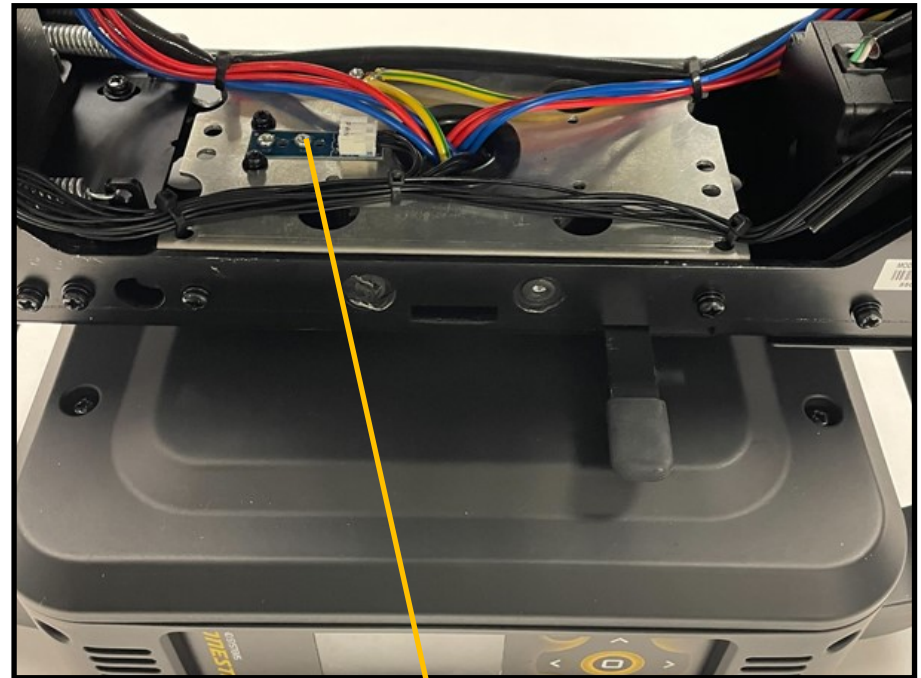
# Lonestar

## Accessing the yoke components



Tilt Homing Sensor

Tilt Encoder Sensor



Pan Homing Sensor



# Lonestar

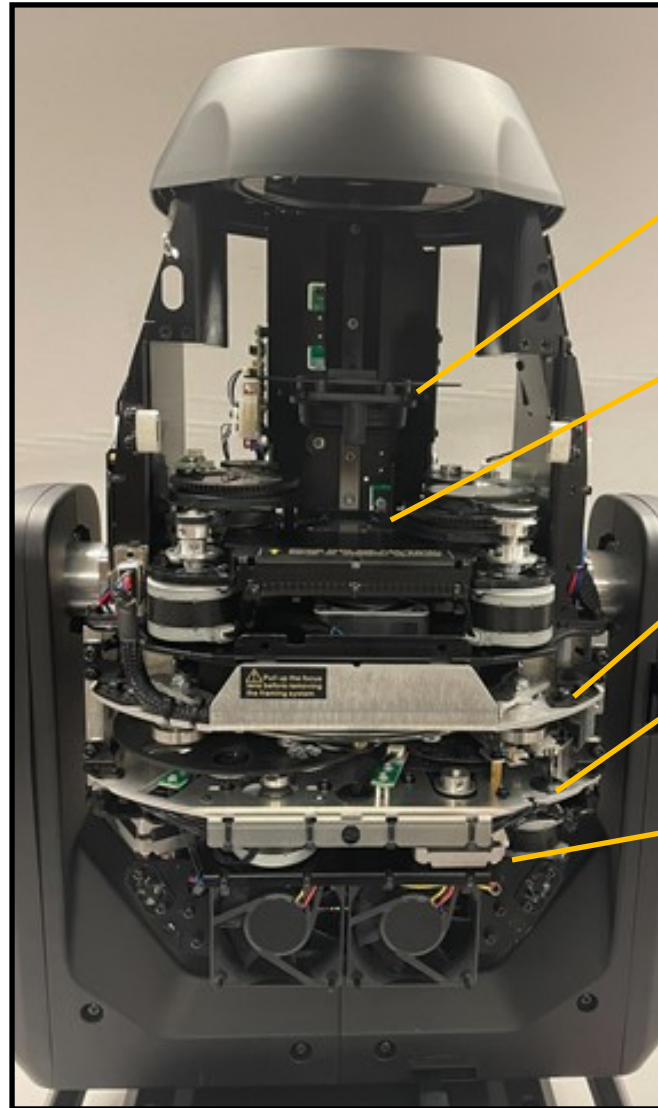
## Access Head Components



Loosen 2X Philips head 1/4 turn semi-captive screws on each side

# Lonestar

## Head Components



Zoom lens

Focus lens

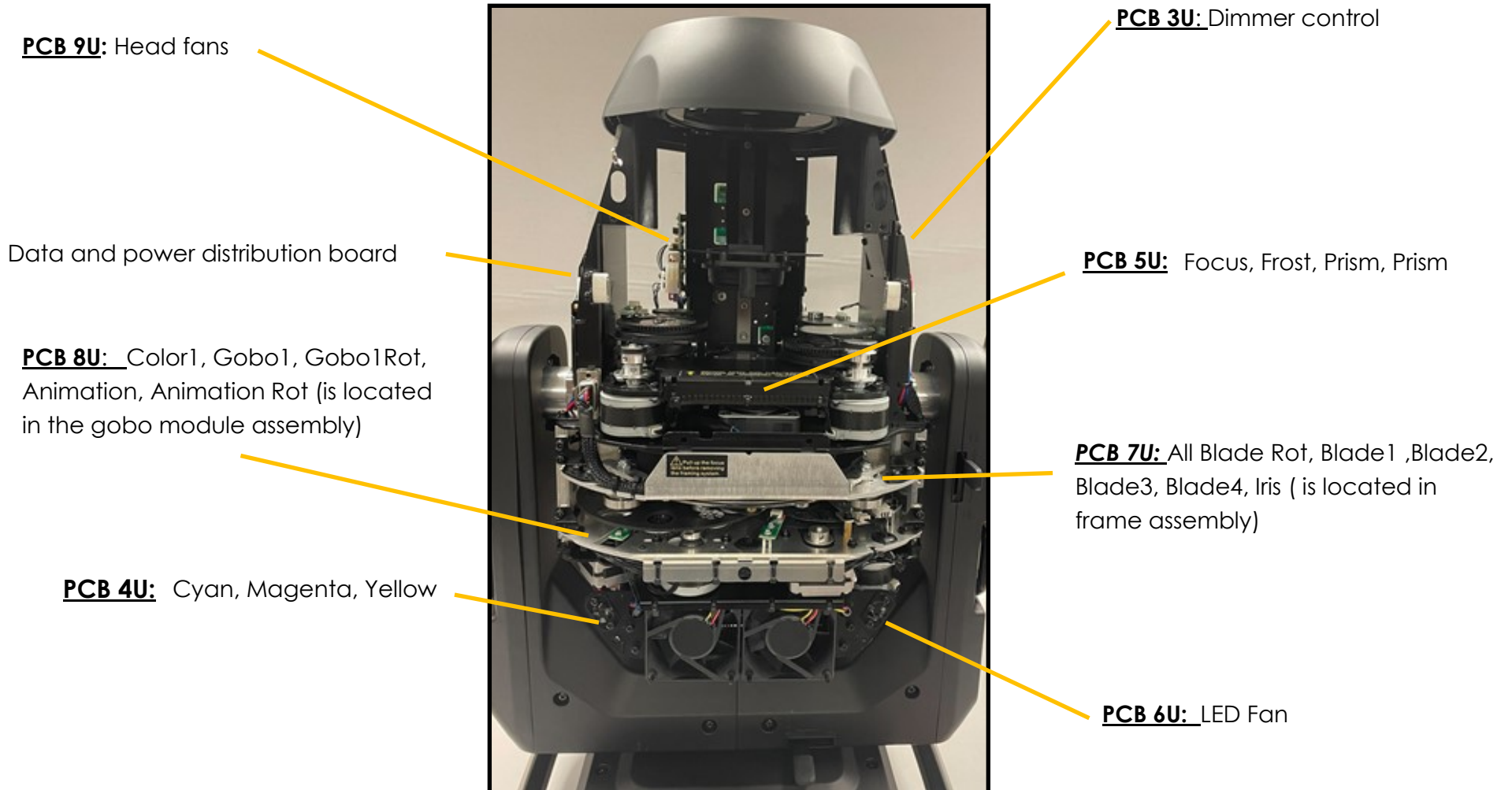
Framing Module

Gobo. Color module

Color mixing Module  
(Module is part of the LED assembly)

# Lonestar

## Head Components





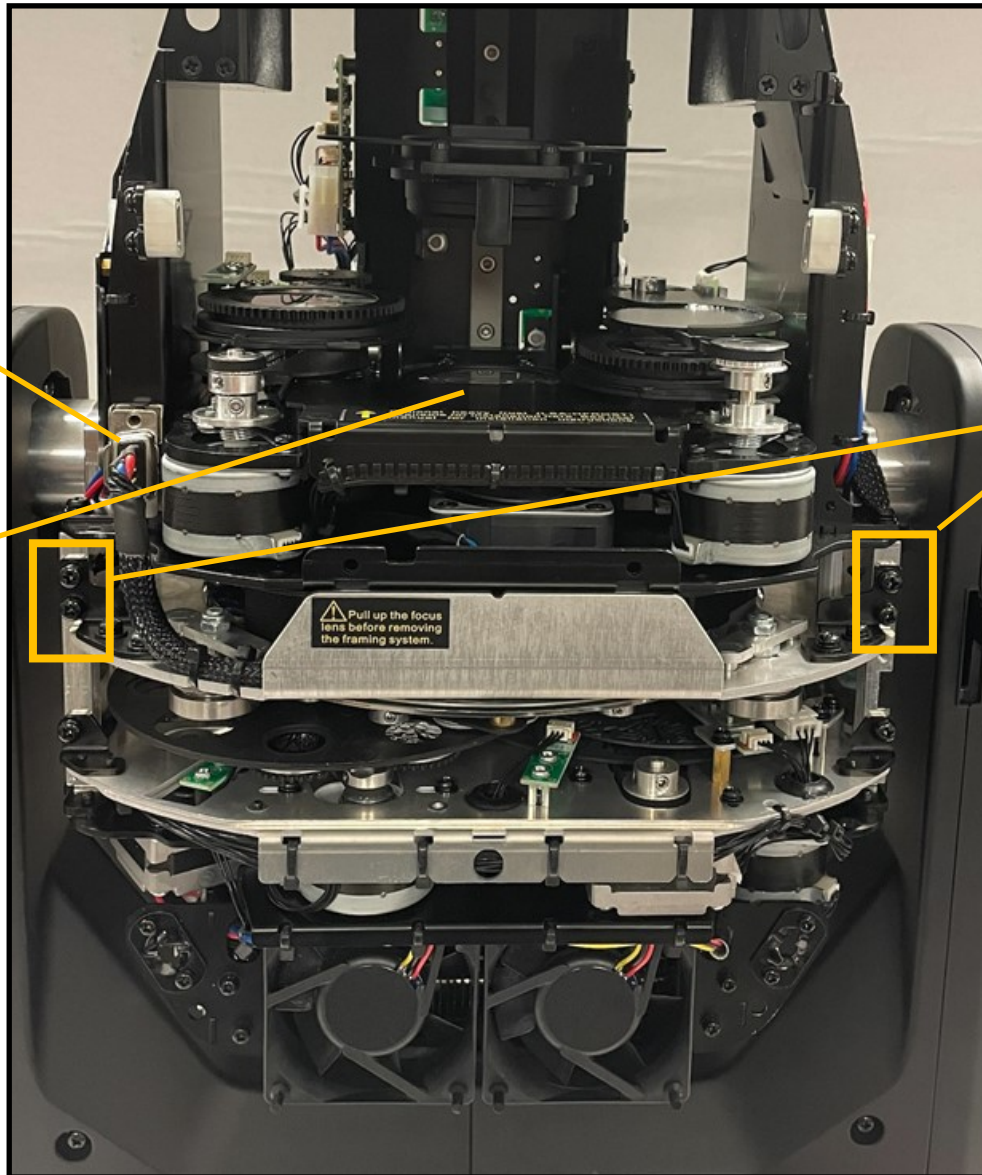
# Lonestar

## Removing the framing module

Disconnect harness  
connector

Lift the focus lens to take  
module out

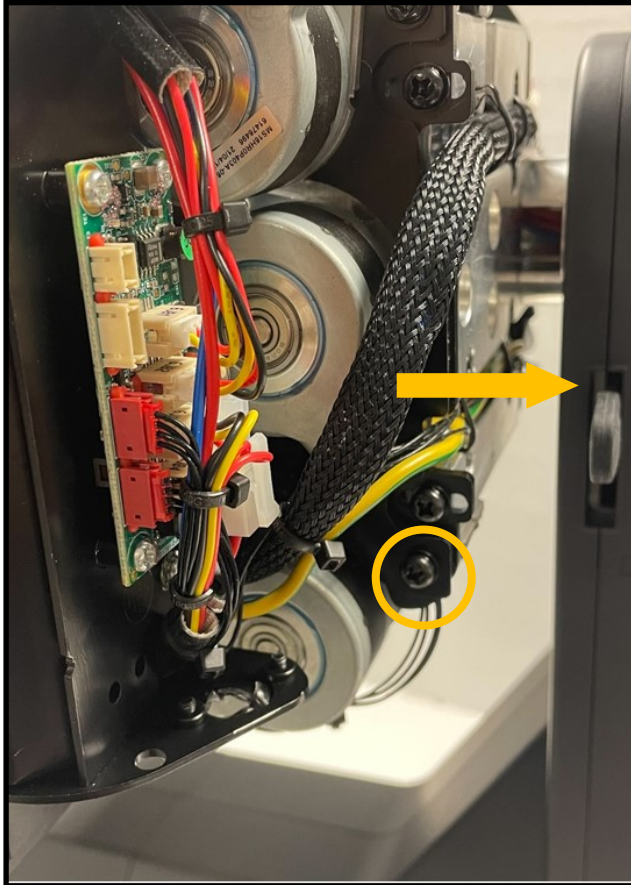
Carefully remove module



Remove 4X mounting  
screws

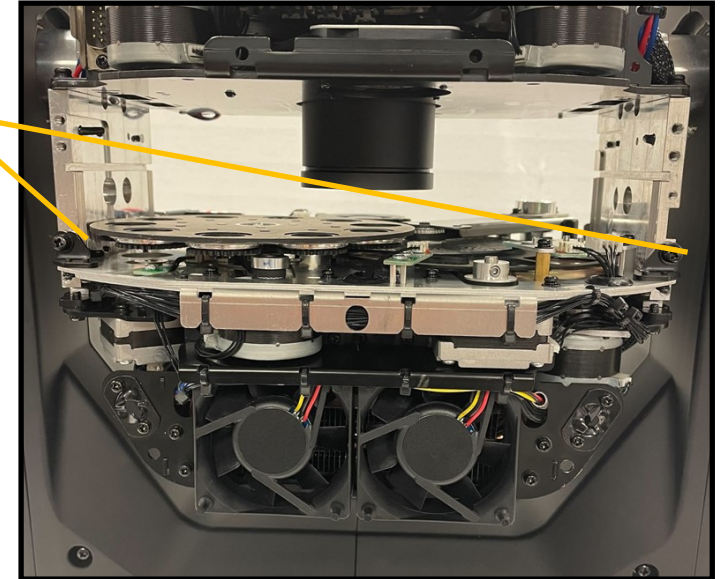
# Lonestar

## Remove Color/Gobo Module



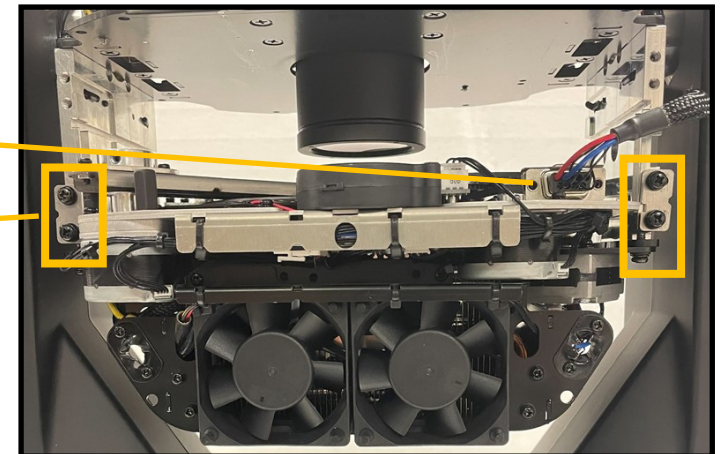
Remove the screw and move bracket to the right.

With the framing module out,  
remove 2X screws



Disconnect connector

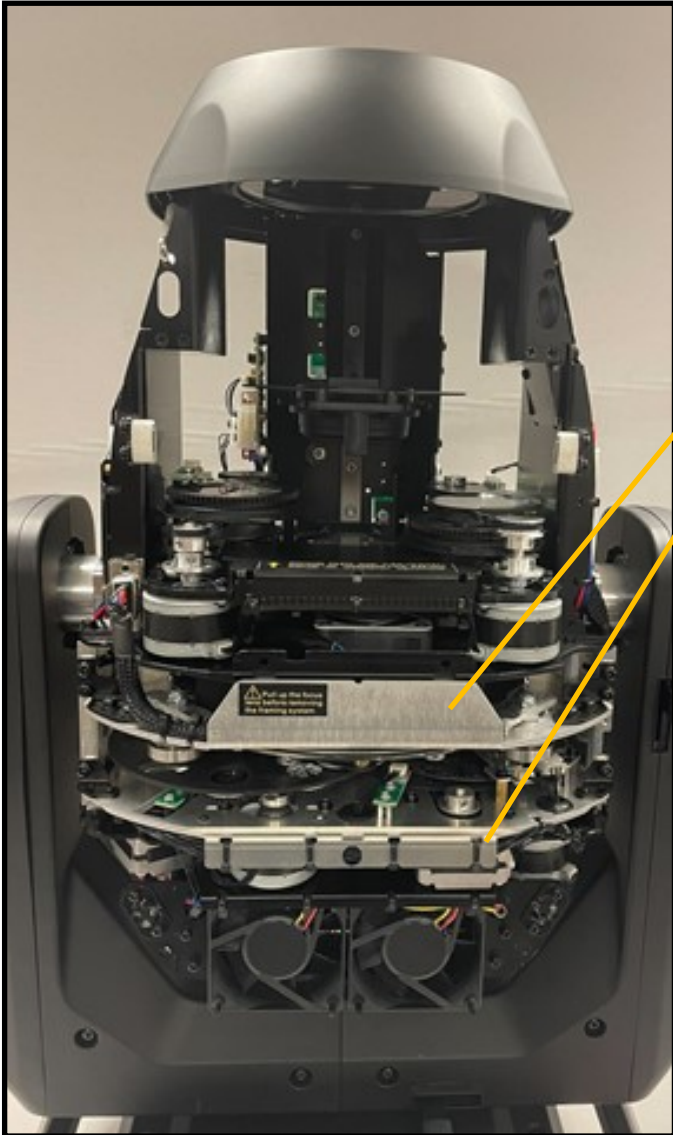
Loosen 4X screws



Lifting the focus lens, carefully remove the  
color/gobo module following the same  
path as the framing module.

# Lonestar

## Removing LED Light Engine



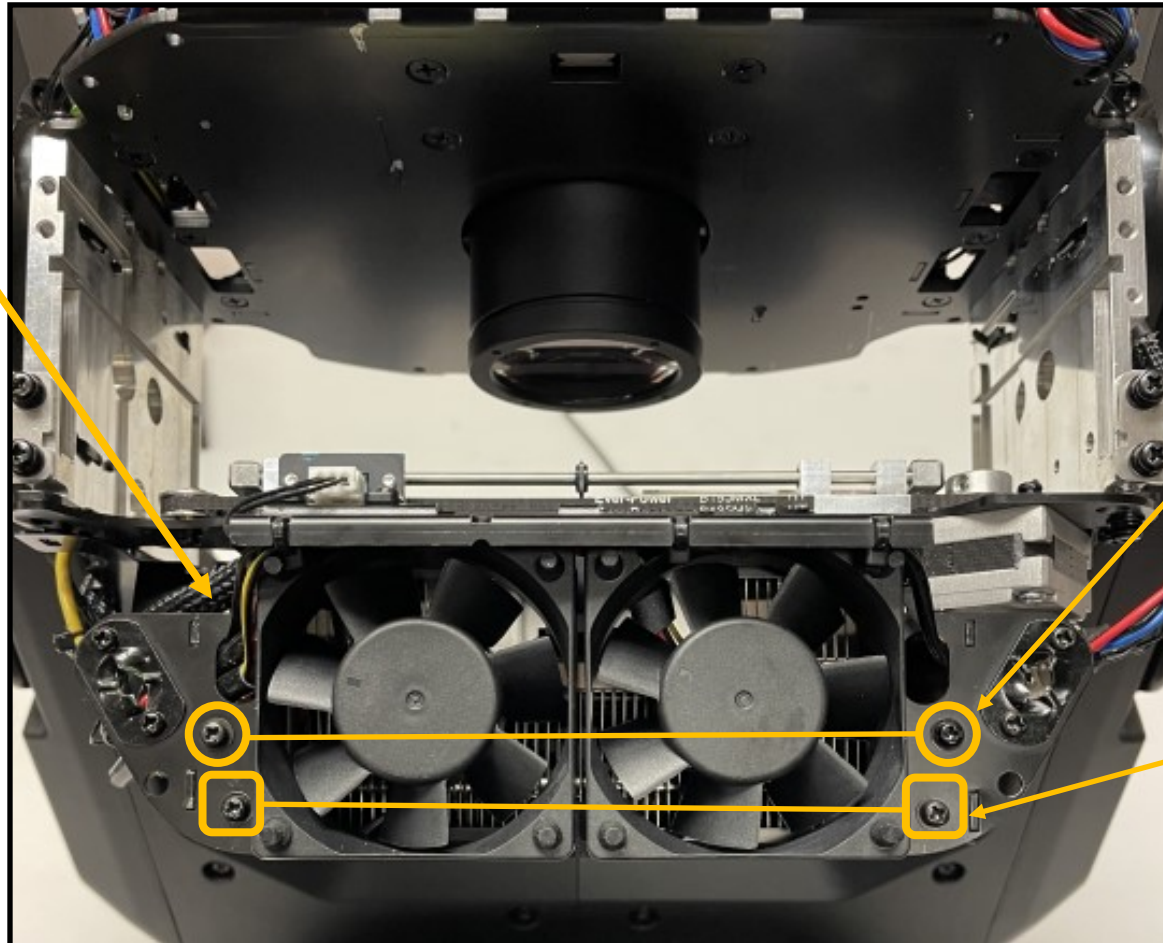
Begin by removing the framing module and the gobo module. Make sure that the color flags are in the open position. This is done to make sure the light engine is in the aperture correctly when reinstalled.



# Lonestar

## Removing LED Light Engine

Keep side with  
harness up.

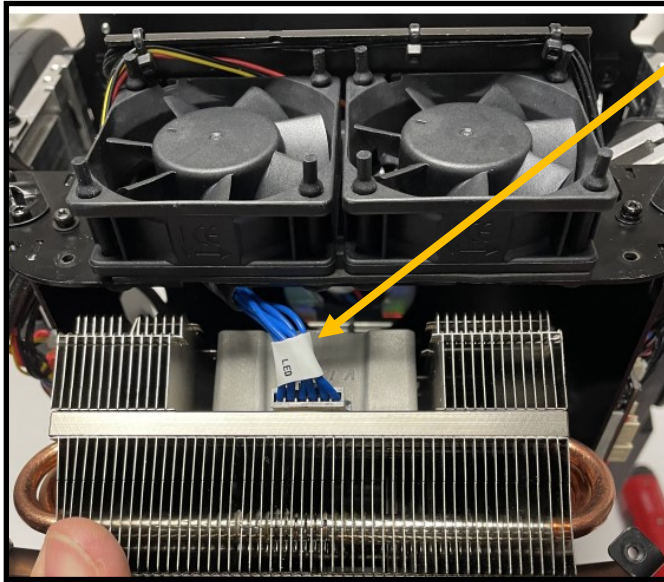


Loosen 4X screws

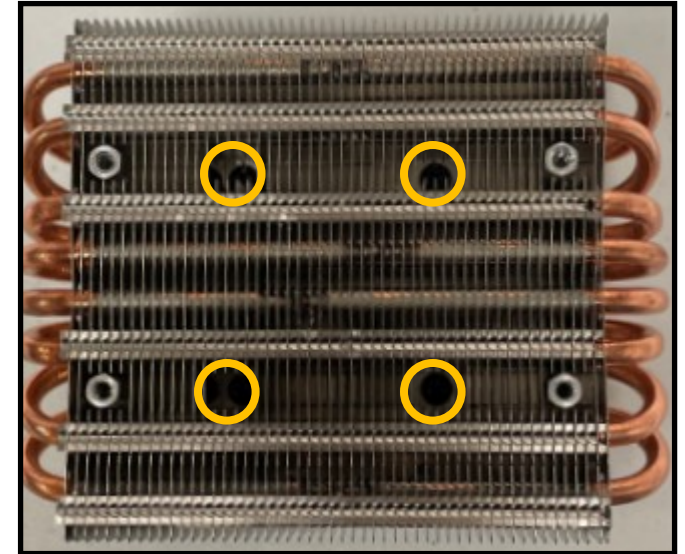
Remove 4X screws

# Lonestar

## Removing LED Light Engine



Disconnect connection carefully and remove light engine assembly



Remove 4X screws to remove the light engine from the heat sink



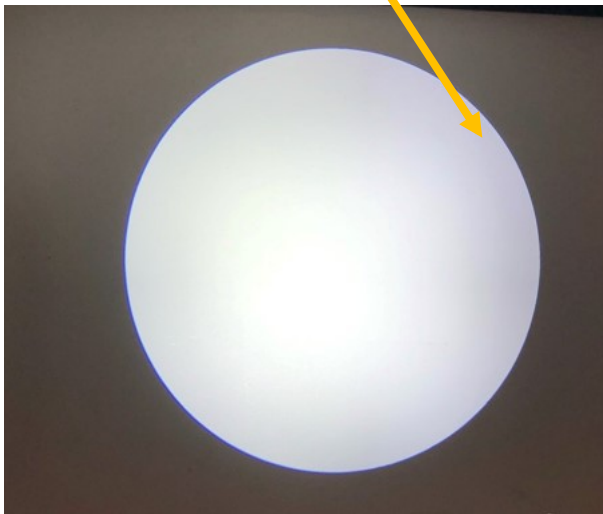
Once the light engine is removed. Remove 4X screws to remove the light engine from the mount

# Lonestar

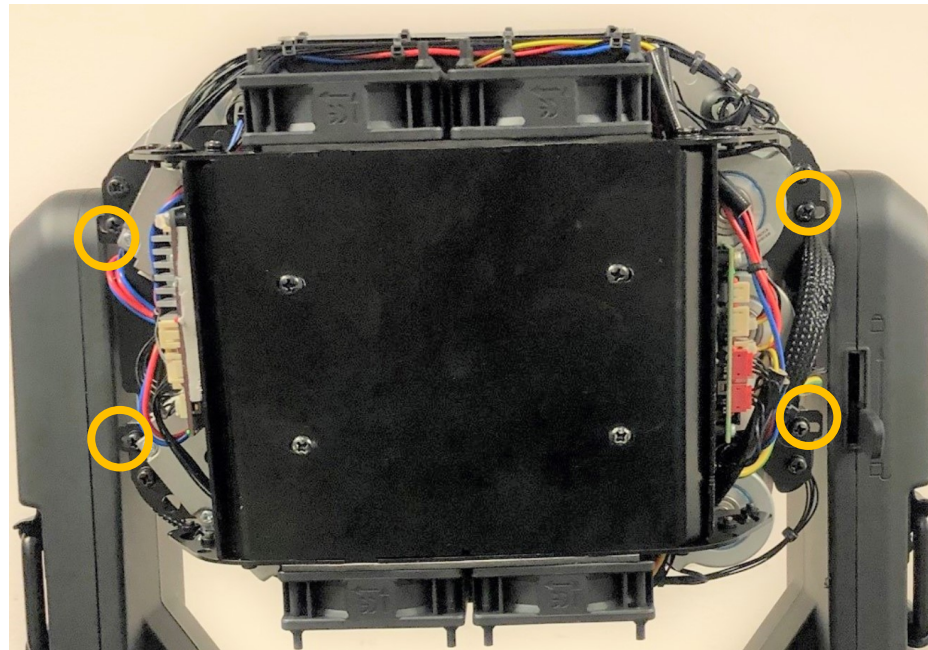
## Calibrating LED Light Engine

If LED appears darker on one side then it will need to be optimized to have the hot spot centered.

Example of off centered light engine with a dark edge on the left side



Loosen the 4X screws with slots. Move the left or right to center the hotspot. Tighten the 4x screws



# Lonestar

## PCB Identifiers

PCB Software ID	Controls
1U	Display
2U	Pan, Tilt
3U	Dimmer
4U	Cyan, Magenta, Yellow
5U	Focus, Frost, Prism, Prism Rot, Zoom
6U	LED Fan
7U	AllBladeRot, Blade1, Blade2, Blade3, Blade4, Iris
8U	Color1, Gobo1, Gobo1 Rot, Animation, Animation Rot
9U	Head Fans