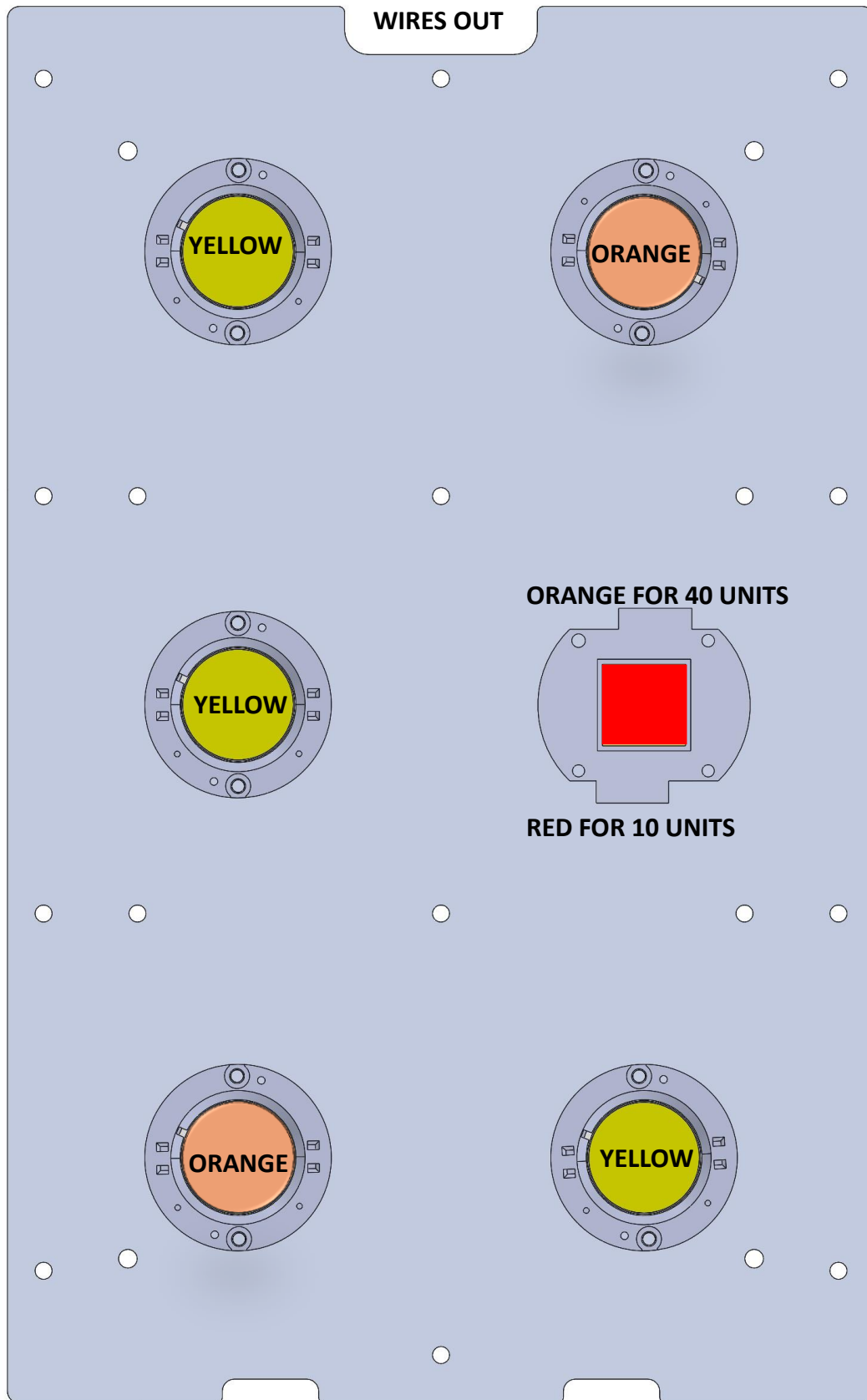


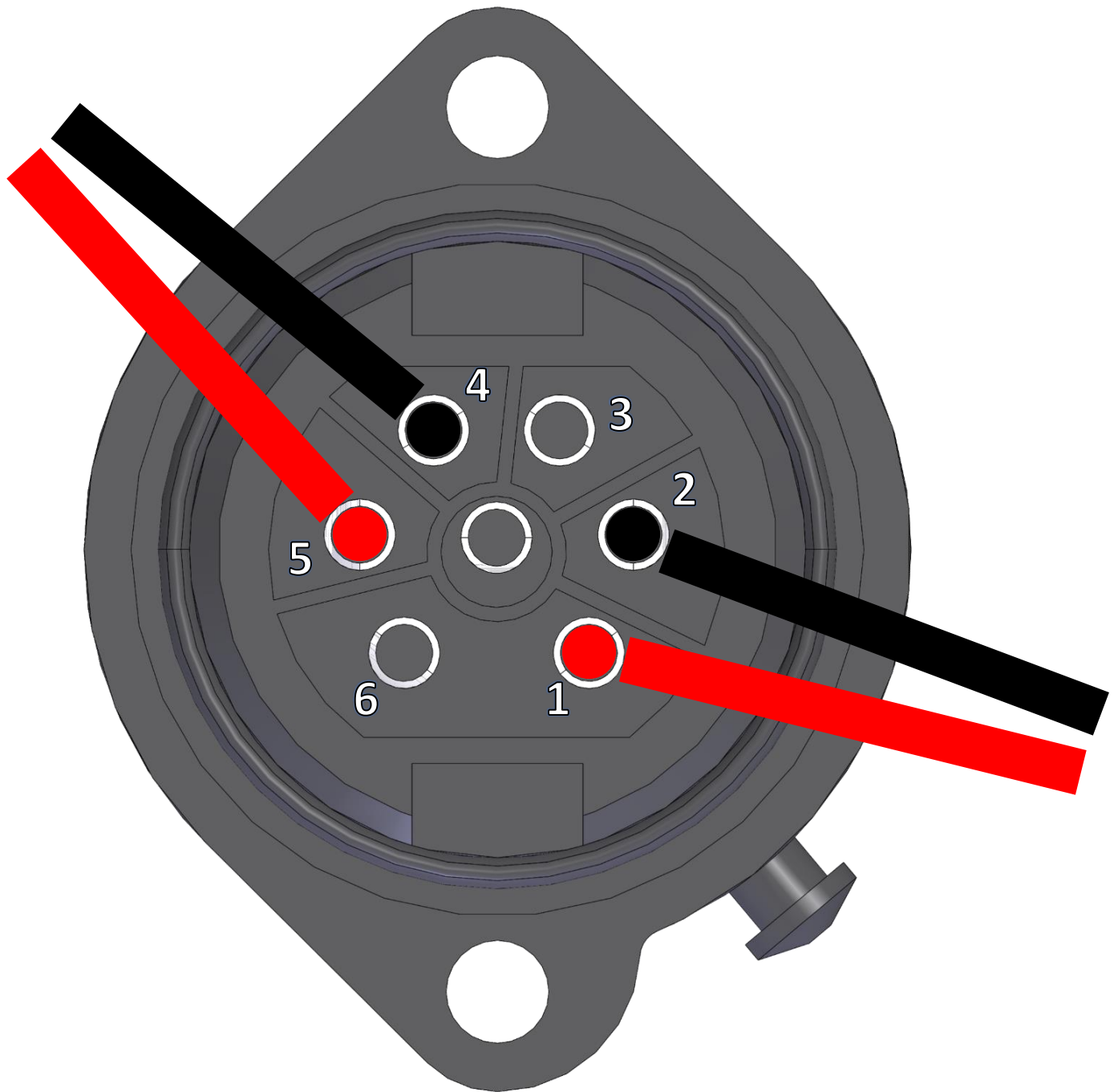
LHC-300 MECHANICAL LIGHT ASSEMBLY INSTRUCTIONS

OpenAg, MIT Media Lab

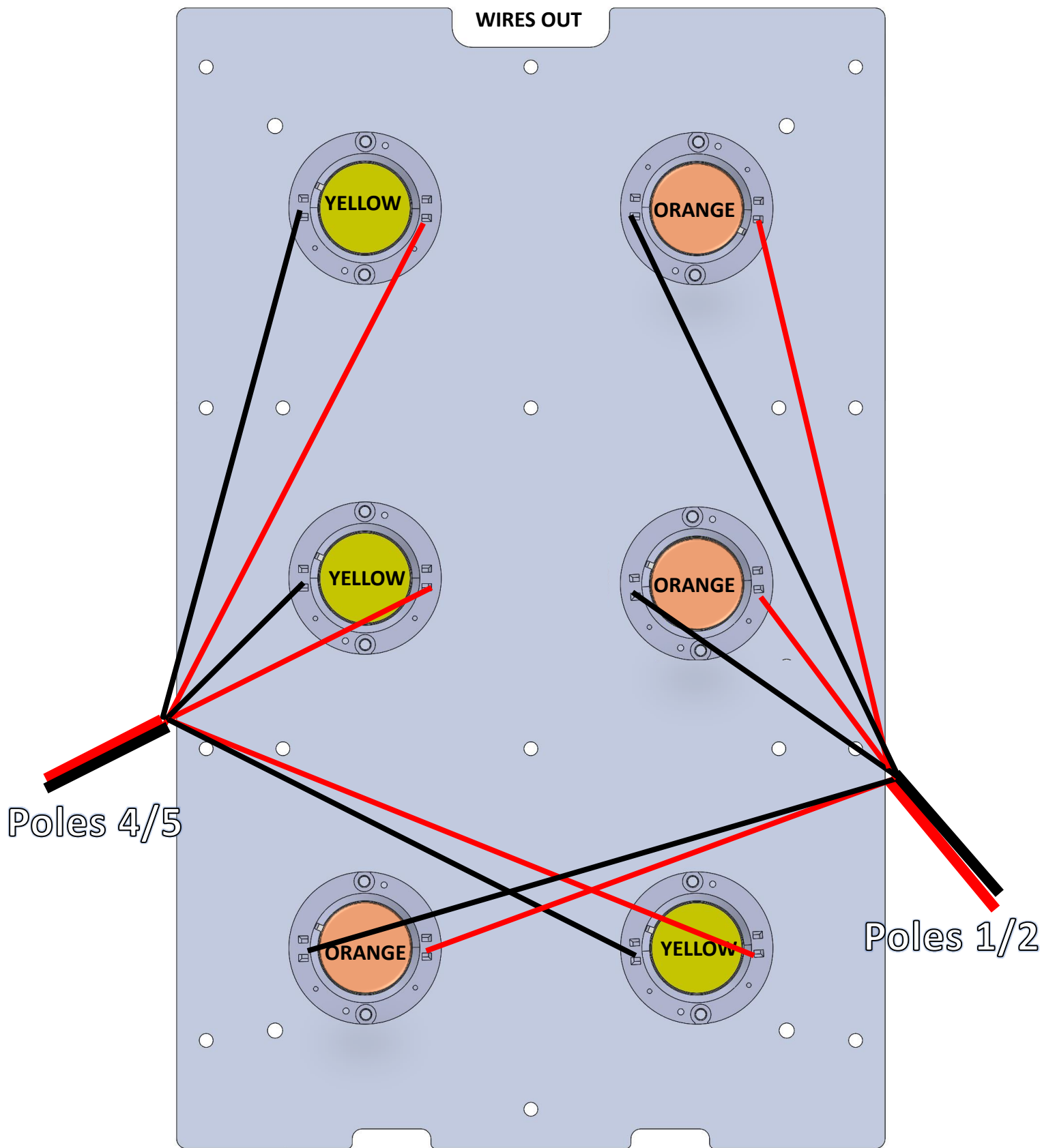
By Eugene Zeleny
May 20th, 2019



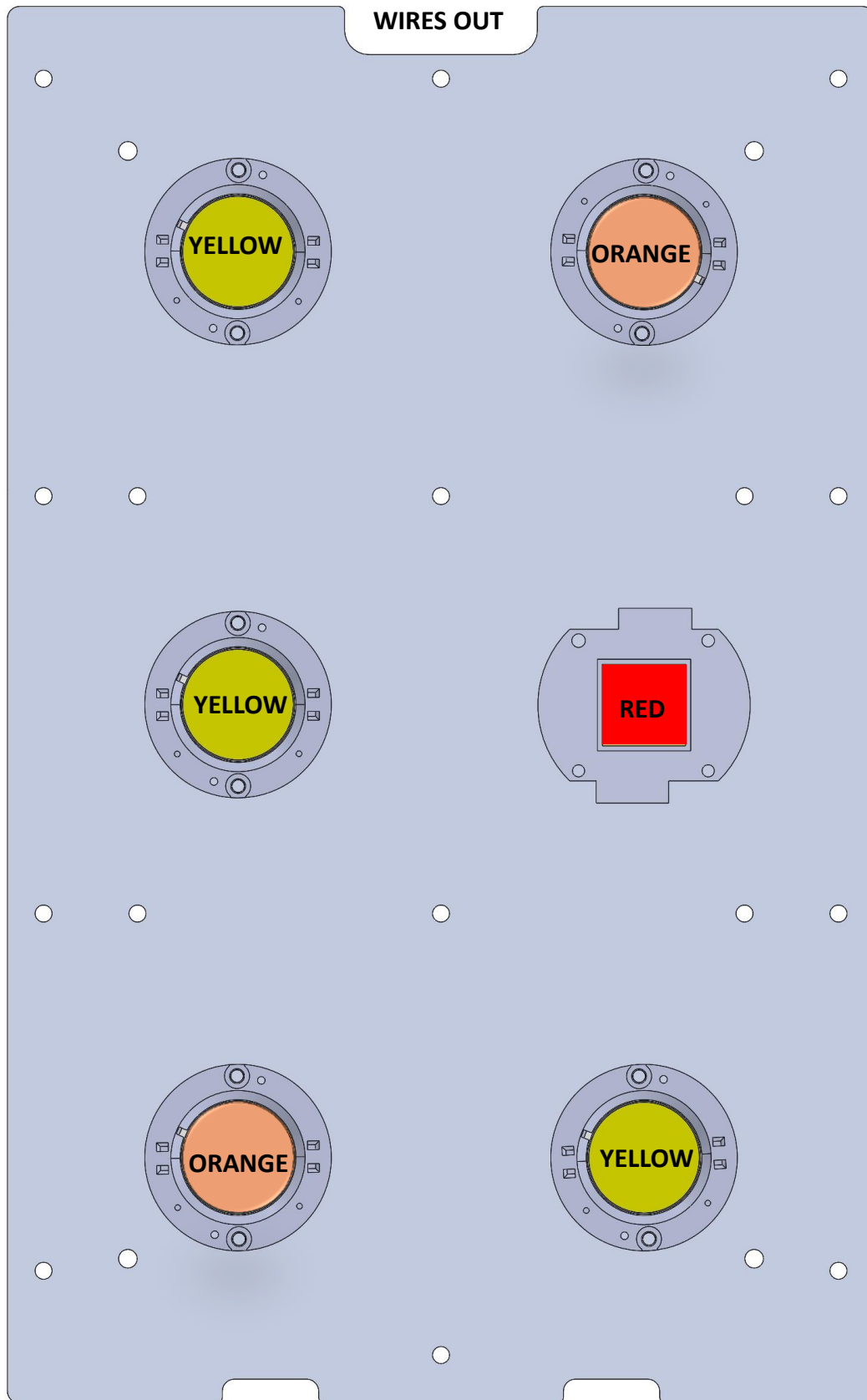
- Attach the LEDs in place on the aluminum plate using the acrylic LED alignment fixture. Ensure the LED orientation matches the instructions
- Attach wires to LEDs, tape them down to aluminum plate so that the wires come out the "WIRES OUT" end of the plate



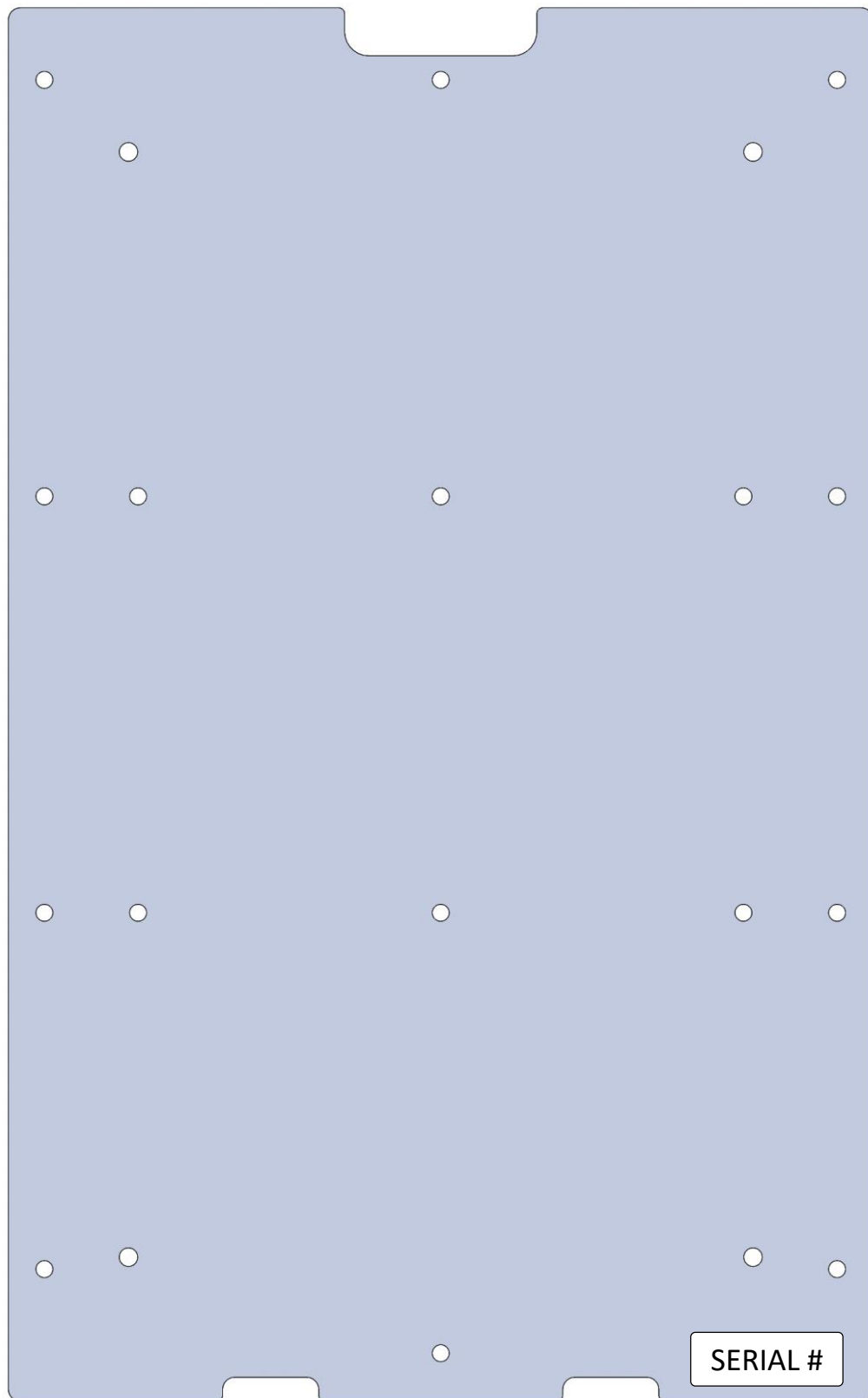
- Wire the Electrical Connectors as shown, with 18 AWG wires soldered directly into the connector
- Poles 4/5 go to COOL/YELLOW light
- Poles 1-2 go to WARM/ORANGE light



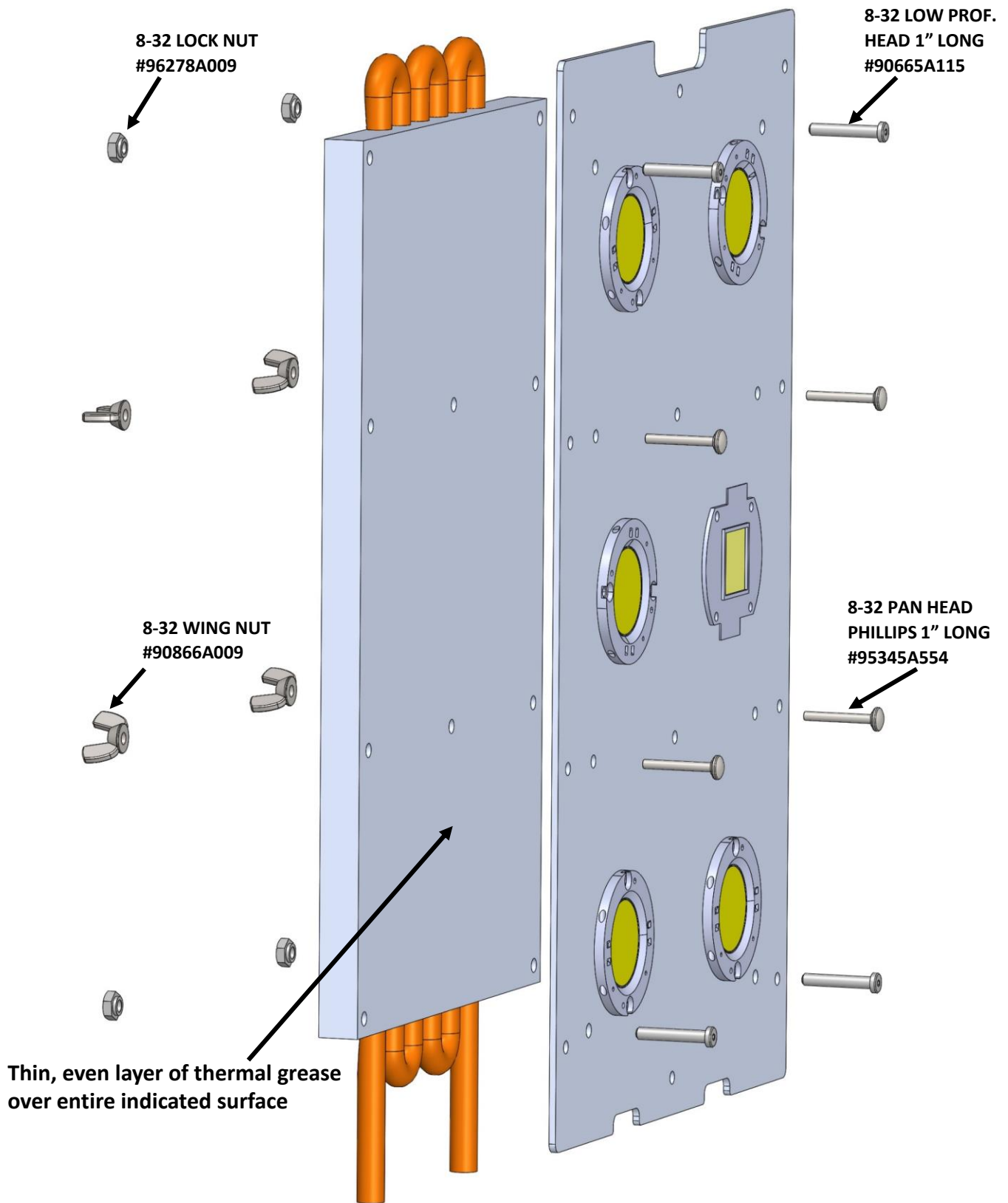
- For the 40 Yellow/Orange Light Units, use the indicated wiring diagram
- Poles 4/5 go to COOL/YELLOW light
- Poles 1-2 go to WARM/ORANGE light



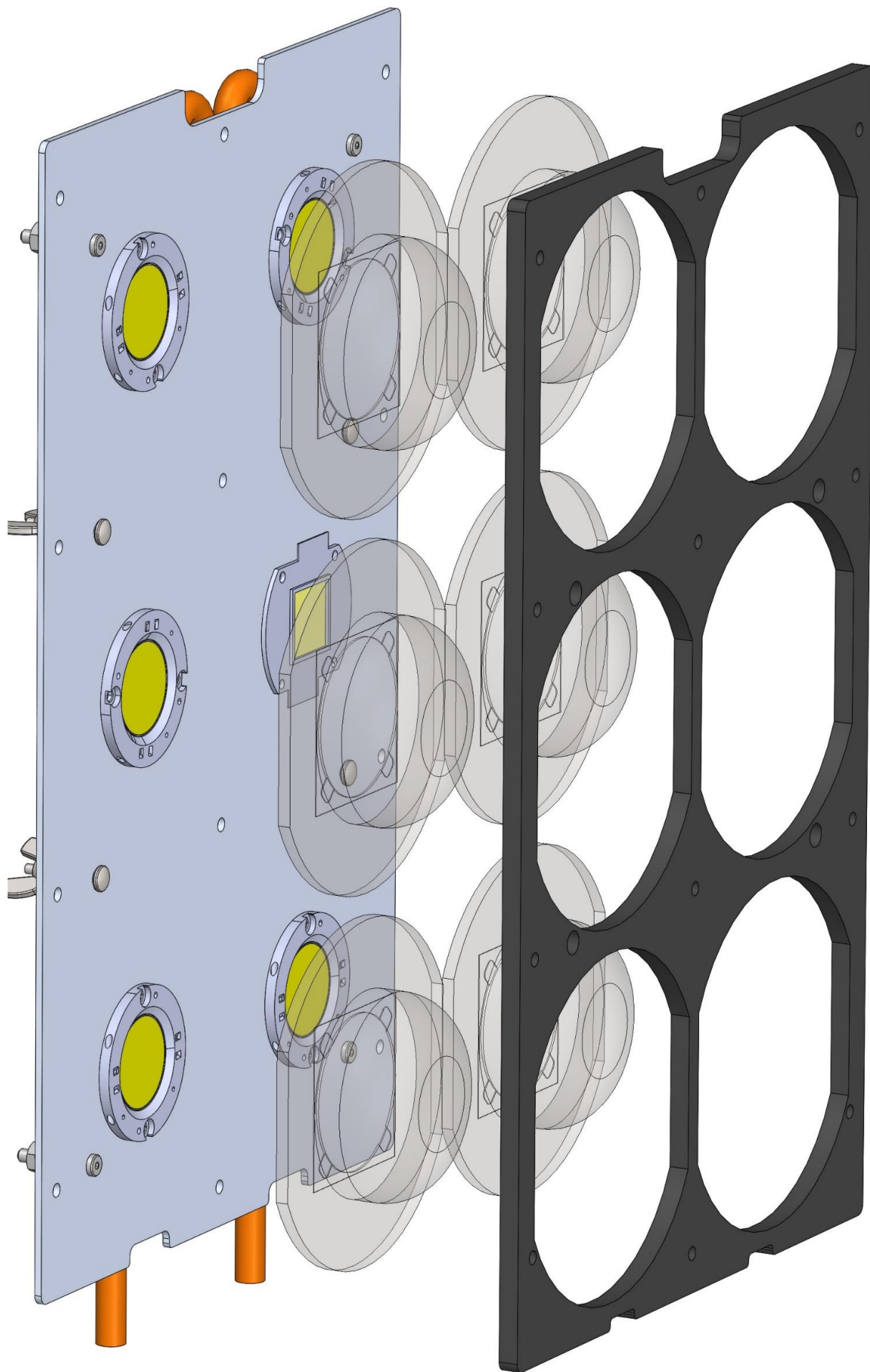
- For the 40 Yellow/Orange/RED Light Units, use the indicated wiring diagram



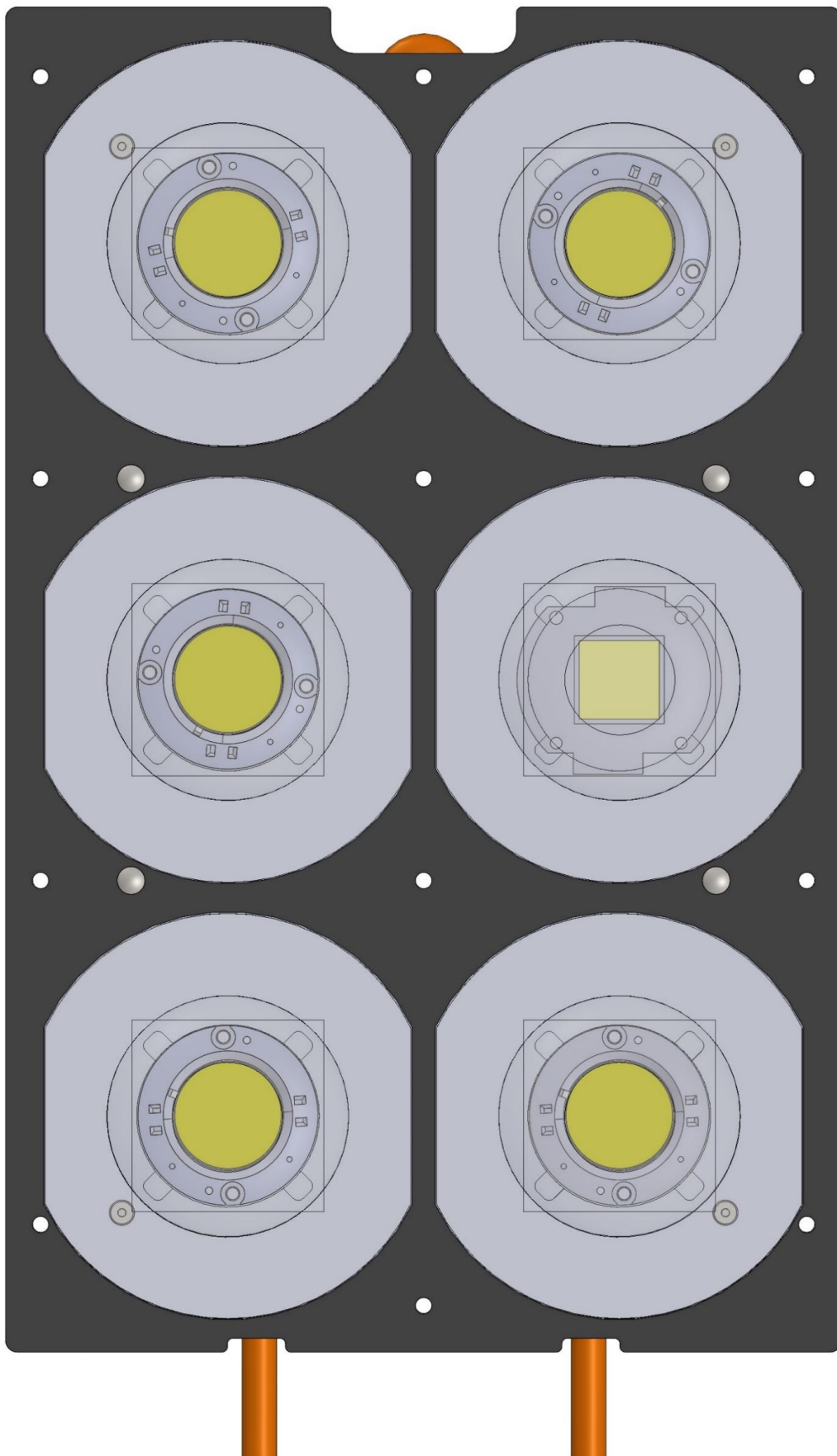
- Flip the aluminum plate over and place a serial number sticker on the bottom right of the plate, for reference.
- **STOP ASSEMBLY HERE:** TEST THE LIGHT PANEL BY GIVING IT POWER TO ENSURE THE LEDS ARE WIRED CORRECTLY



- Apply thermal grease to mating surface of heat sink
- Attach heat sink to aluminum plate with indicated hardware



- Position clear optics over each LED and position foam gasket over the optics, using the notched indicators for alignment



- This is what the assembly should look like at this point

8-32 LOCK NUT
#96278A009

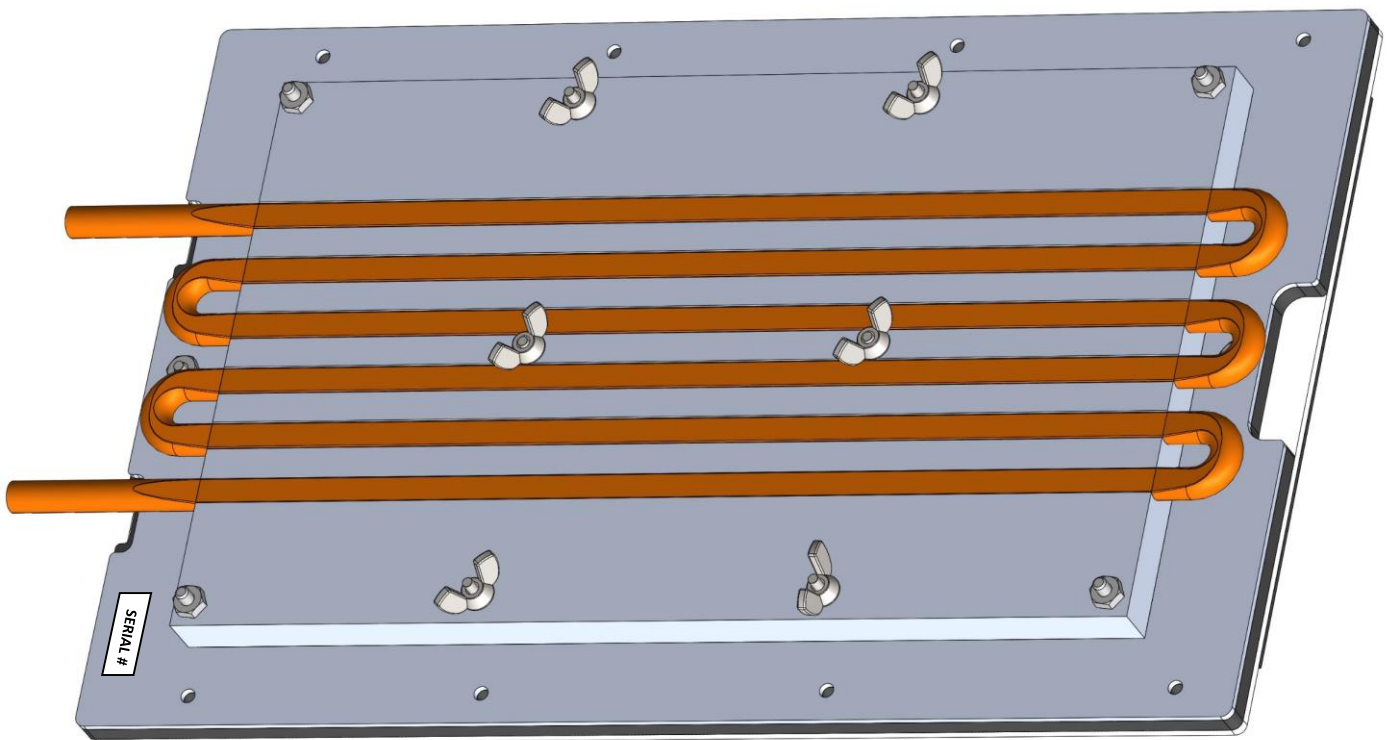
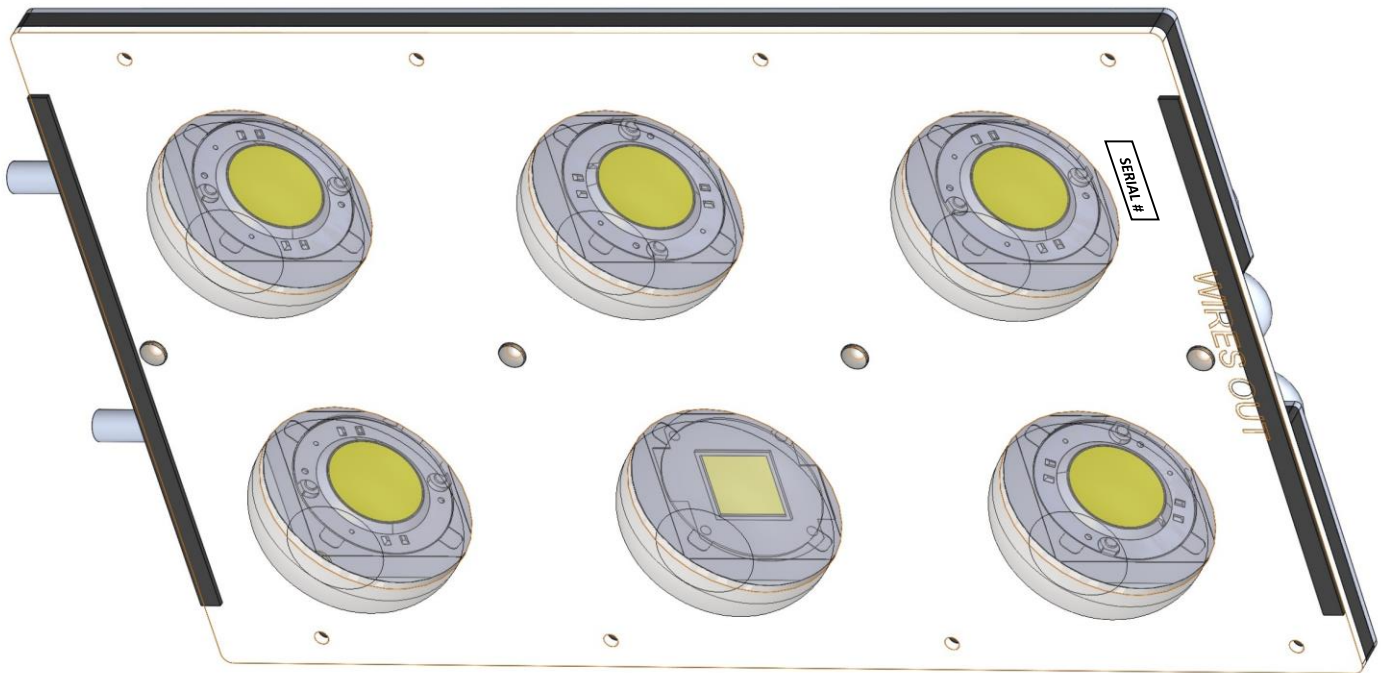
8-32 WING
NUT
#90866A009

8-32 PAN
HEAD PHILLIPS
3/4" LONG
#95345A548

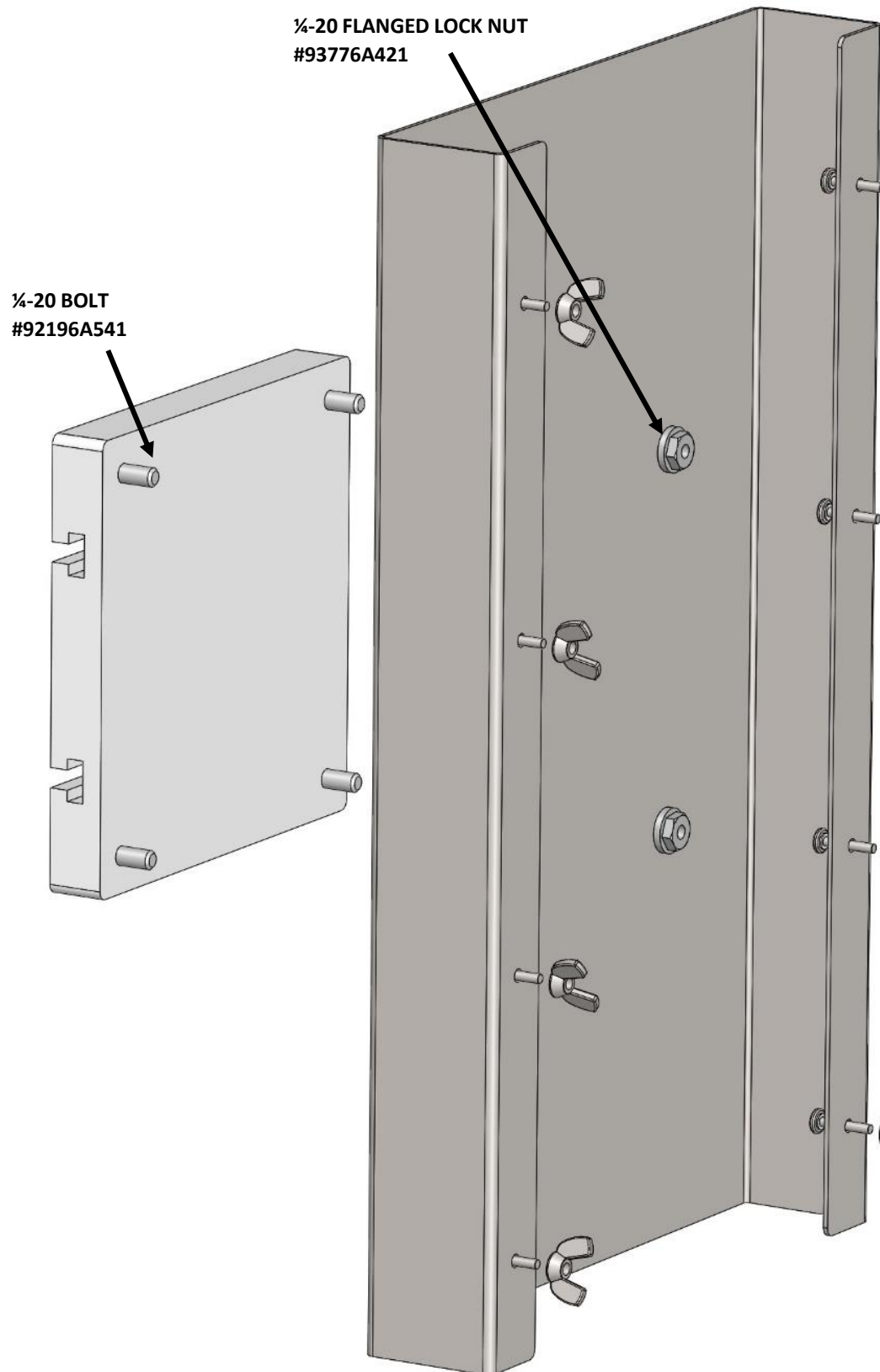
8-32 PAN HEAD
PHILLIPS 1.25" LONG
#95345A555

1/4" WIDE, 1/16" THICK
FOAM,
7.25" LONG
#8694K111

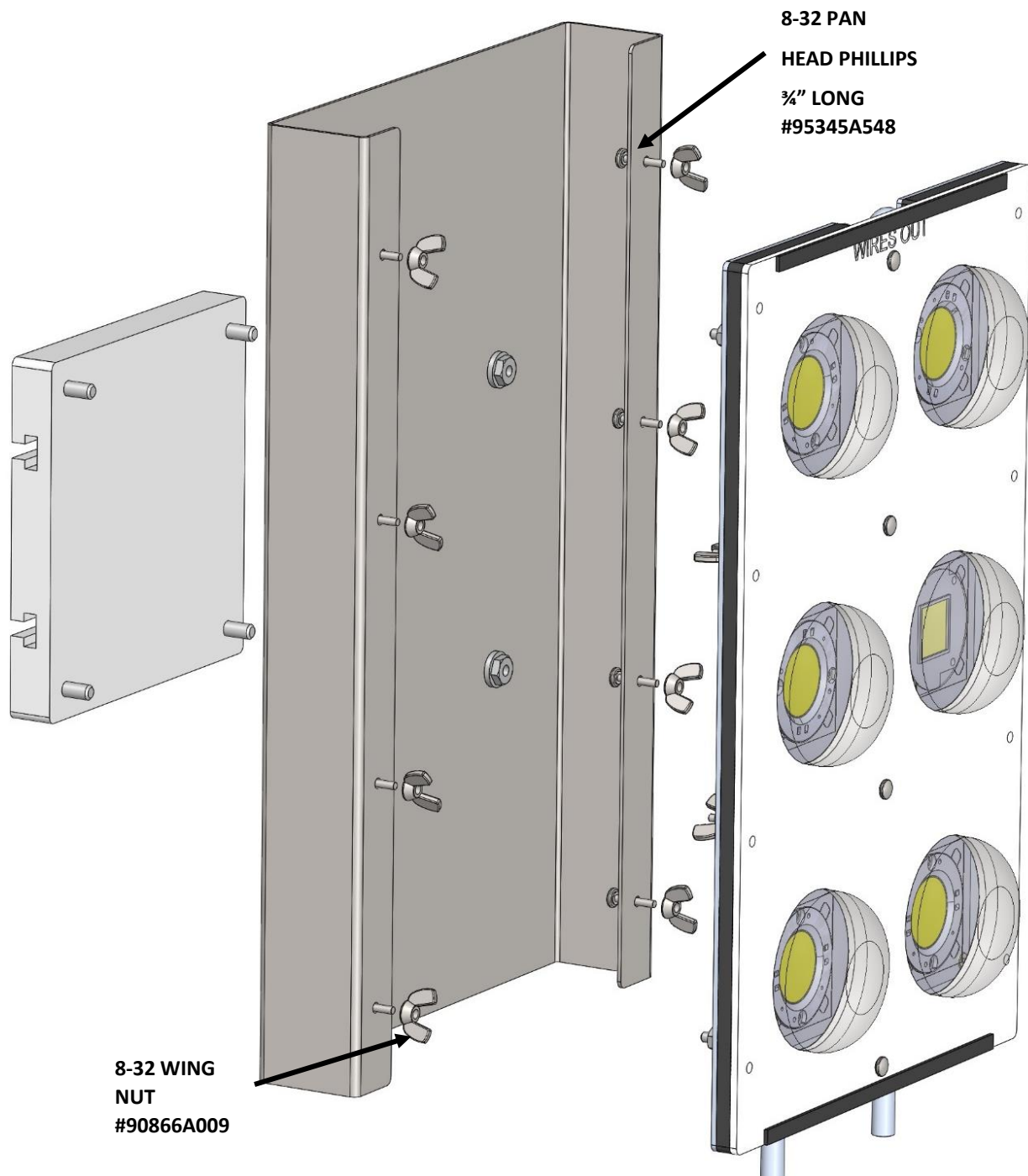
- Attach 1/16th foam strip as shown, centered on plastic cover plate
- Attach plastic cover plate to assembly with indicated hardware



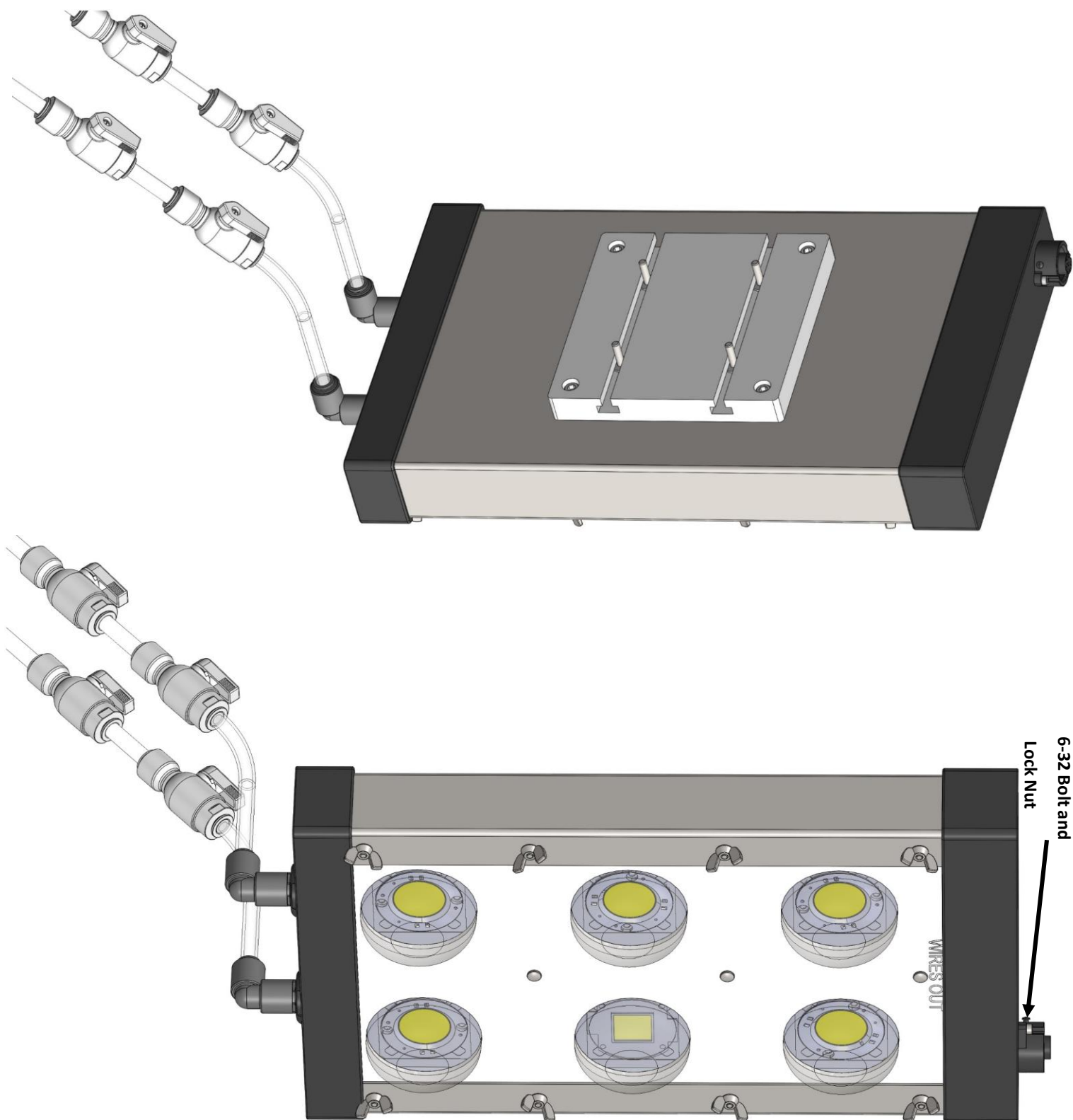
- Place corresponding Serial Number Sticker on front ABS plate in top left corner as shown.



- Attach the Mounting Arm Adapter Plate to the sheet metal enclosure with the indicated hardware (x4).



- Attach the light assembly “sandwich” to the sheet metal enclosure with the indicated hardware



- Slip the top and bottom end-caps onto the assembly.
- Attach the top end-cap to the Electrical Connector with the indicated hardware
- Attach the fluidic connectors to the brass tubing, and fluidic valves to the pre-cut tubing, as shown.