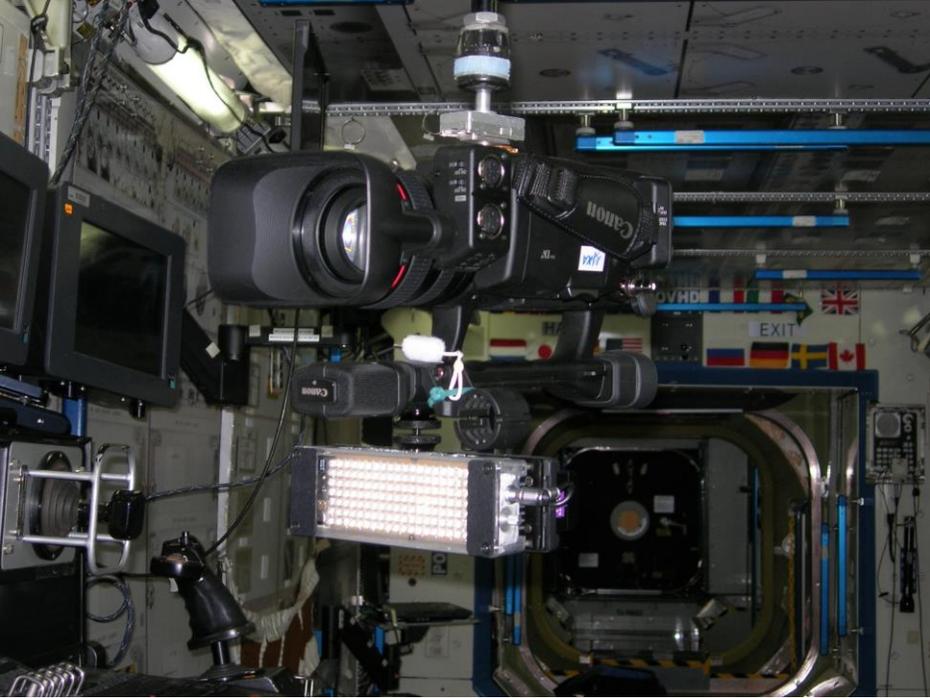


Work Light Battery Holder

The Work Light is a commercial off the shelf product from Lite Panels who makes different sized LED lights for the film and TV industry. They are intended to be used with still and video cameras but are used on the ISS as a broad beam light for seeing into bags, inside and behind racks, and behind panels as well as for filming videos and still photography.

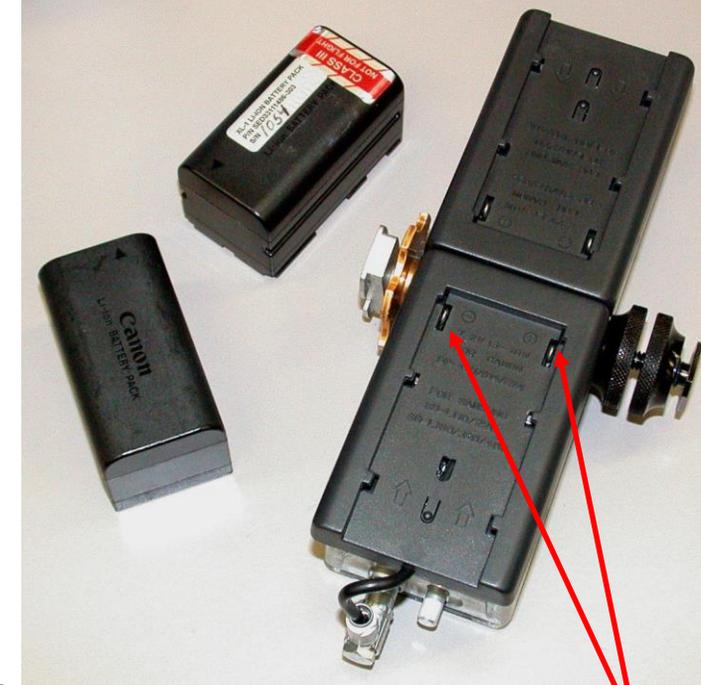


Problem:

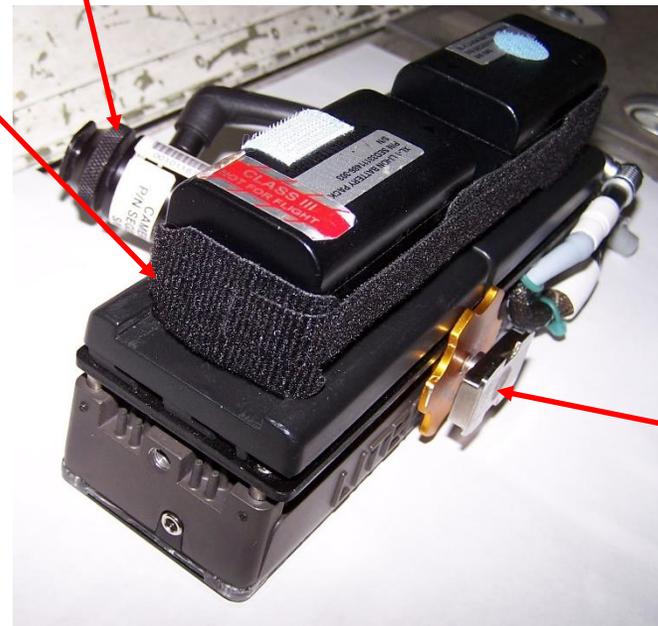
- The Work Lights have served on the ISS for 7 or more years and have been good equipment. Unfortunately the tabs that hold the Canon batteries onto the Work Light have been breaking off making it difficult to keep the batteries connected.
- The astronauts have been using Velcro straps to hold the batteries on by pulling them together. This works well as long as the tabs closest to the battery contacts are there but when those break off, the batteries won't stay on.
- Because these Canon batteries are no longer used by the current video cameras, the only thing that uses these are the Work Lights. Rather than shipping up more Work Lights and more batteries, the ISS program is wanting to find another light that uses the DeWalt batteries. Until that new light is certified and flown, the crew would like another method for holding the batteries on.



Foot that fits into a camera flash connector— screws onto Work Light with ¼-20—removable if needed



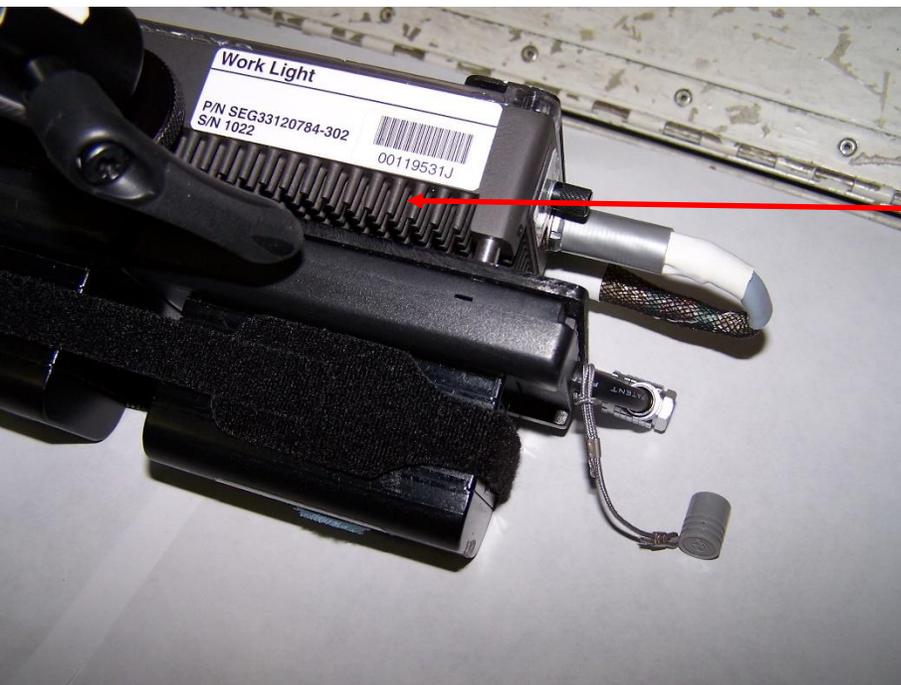
Battery contacts



Foot that fits onto NASA camera shoe— screws onto Work Light with ¼-20— removable if needed

Options?

- Tape would work but it would also leave glue on the batteries and work light—not a good idea.
- What kind of 3D printed object could work as a clip to hold them on?
- Is there another type of strapping that might be easy to assemble.



Cooling fins for the light—
make sure you leave room
for air flow so the light
will not get too hot

