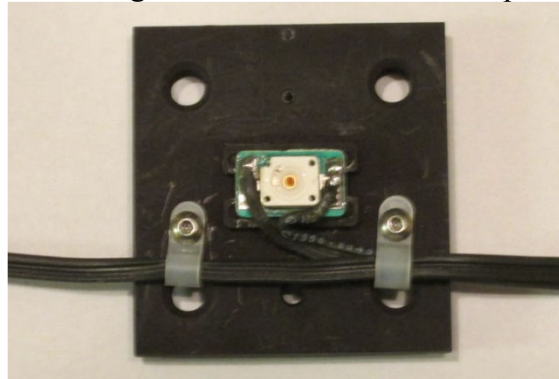


Moving the 1st Gen WorldSID T1 and A1 LED Assemblies on the Inner Rib Clamps.
July 2024
Boxboro Systems LLC

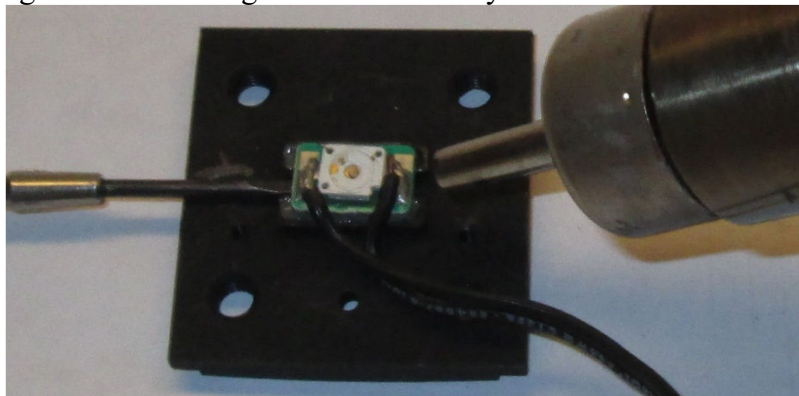
First generation WorldSID RibEyes had the thoracic 1 and abdominal 1 rib center LEDs mounted to the center of the inner rib clamp assembly as shown in Figure 1. The current WorldSID PADI has the thoracic 1 and abdominal 1 LEDs mounted at the bottom edge of the ribs. Use the following procedure to relocate these LEDs to the bottom of the inner rib clamp assembly.

Figure 1. Original T1 and A1 center LED positions



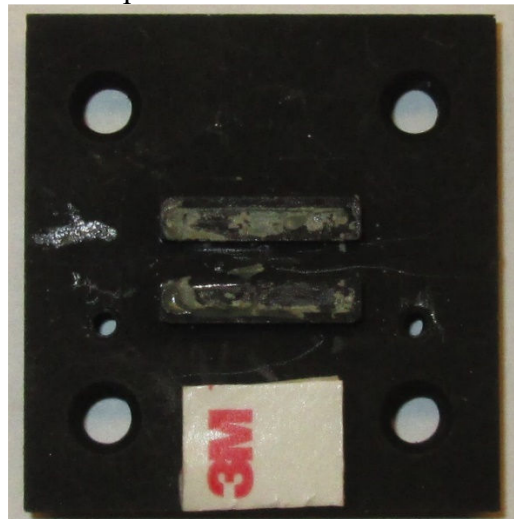
1. Remove the T1 and A1 rib clamps from the ribs and remove the wire clamps from the inner rib clamp by removing the 2-56 BHCS screws.
2. The LED assemblies are epoxied to the inner rib clamp assembly. The epoxy can be loosened by applying heat. Set your heat gun to ~ 250 F. DO NOT EXCEED 500 degree F or the solder can melt. Using a small flat bladed screwdriver the LED assembly can be gently pried off of the rib clamp while applying heat as shown in Figure 2.

Figure 2. Removing the LED assembly from the inner rib clamp



3. Scrape off any remaining epoxy from the back of the LED assembly's metal clad circuit board and clean the back of the board and the bottom of the inner rib clamp (where the 2-56 thru-hole is) with alcohol
4. Install a piece of VHB double sided tape the size of the LED assembly board to the bottom of the rib clamp assembly as shown in Figure 3. Press the tape on the rib clamp with 15 psi of force.

Figure 3. VHB tape installed at bottom of inner rib clamp



5. Install the LED assembly onto the tape, pressing hard. **DO NOT TOUCH THE SOFT SILICONE SURFACE OF THE LED** – you might damage the LED!
6. Reinstall the wire clamps as shown in Figure 4

Figure 4. Wire clamps re-installed

