Replace APR-XL-CA camera lamp inverter board







APR-BLPCB

APR-BLPCB APPLIES TO:

APR-XL-CA (standard XL camera) APR-SVCA (XLS old version)

REQUIRED TOOLS/EQUIPMENT:

1/16" hex key 7/64" hex key 9/64" hex key Small Phillips screwdriver Kapton tape

CAUTION!!!: This procedure involves handling ESD sensitive components. Proper ESD precautions should followed.

Test Inverter Board / Lamps

- 1. Remove the camera assembly from the head.
- 2. Remove the six screws holding the bottom heat shield. Remove the bottom shield.
- 3. Remove the front cover, held by two screws.
- 4. With the front cover removed, slightly back out the two frontmost small screws on the rails. These screws will act as a stop to prevent the nest from sliding completely off the rails.
- 5. The inverter board connections to the top and bottom lamps are now accessible to the front of the prism. If the one light is out while the other one works, swap the connectors. If the light that was out is still not working, the lamp needs replacement. If the light that was out is now working, the inverter board needs replacement.

Removal of Inverter Board

- 1. Follow camera disassembly steps above.
- 2. Remove the rear panel, held by two screws.
- 3. Disconnect the 6-pin connector just inside the rear panel.
- 4. Carefully slide the camera base forward and remove the four screws on the bottom that hold the camera base plate to the camera box extrusion.
- 5. Carefully slide the base plate and rear panel out of the extrusion. Facing the prism, there are two springs located on the right bottom edge of the base plate. While sliding the base plate out, carefully hold these in place to prevent them from springing out.
- 6. The lamp inverter boards are located to the rear of the base plate, behind the camera. Carefully cut along the edge of the insulation paper to access the inverter boards.







7. Locate the inverter board that needs removal. The board furthest to the rear by the fan is for the top lamp. The board closer towards the front is for the bottom lamp. Disconnect the two connectors to the board. Label the connectors for installation of the new board. Remove the inverter board, held by two screws.

Install New Inverter Board

- 1. Install the new inverter board onto the rear of the camera base using two spacers and screws.
- 2. Install two connectors to the new inverter board. One connector goes to the lamp, and the other is for the wire harness. The board closest to the rear by the fan is for the top lamp. Facing the front of the camera, the top lamp harness will run along the left side. The short control wire harness will connect on the right side. The board closest to the front is for the bottom lamp. Facing the front of the camera, the bottom lamp. Facing the front of the camera, the bottom lamp harness will run along the right side, and the longer control wire harness will connect on the left.
- 3. Tape together the previously cut insulation paper, using kapton tape.
- 4. Slide the camera base and rear panel into the camera box extrusion. Carefully insert each of the two springs on the base so that they are compressed when sliding the base into the extrusion.
- 5. Install the the four screws on the bottom holding the base to the extrusion.
- 6. Connect the 6-pin connector and install the rear panel.
- 7. Ensure top and bottom lamp harnesses are connected.
- 8. Tighten the two front screws on the rails that were loosened to act as the pick-up nest stop.
- 9. Install the front plate and cover.
- 10. Install the bottom heat shield.
- 11. Mount the camera assembly onto the head.