Lamp Replacement

- **Removal of the Old Lamps**
  - Remove the Lamp Head Assembly from the Scanmaster body.
  - Remove the top plate from the scan head exposing the inverter circuit board.
  - Unplug the connector body from CN2 connector and thread the connector cable through the opening on the side of the scan head.
  - Lamp cable is threaded through a slot in the lamp reflector assembly.
  - Un-thread the lamp cable from the slot.
  - Lamps can then be slid until one end cap is released from the lamp reflector assembly. The other end cap and lamp can then be lifted out from the reflector for each lamp.
• Checking the inverter for damage
  o At this time, check the inverter for damage. Typically, if there is damage it will occur around the output capacitors C3 and C4 and the transformer T1 (See Photo of inverter component location). The corner of the printed circuit board can become burned and C3 or C4 can be destroyed. If this is the case, consider replacement of the inverter with the CXA-M10M-L inverter from TDK available through Digikey before replacing the lamp assembly.

• Inserting the new lamp assembly BF20325-24B/ASSY/01
  o Each lamp of the lamp assembly will fit into the lamp rail. Center the lamp in each reflector and push the end caps down into the reflector. The wires can be bent so that the wires come out the ends of the rail.
  o Start by finding the small cutout on the side of the rail where the lamp wires from the old lamp assembly transitioned down to the inverter.
Place the new lamp assembly so that the longer wires are away from the cutout and place the lamp with the red/pink wires furthest from the cutout.

Insert the lamp with the white wires into the reflector closest to the cutout. Run the wires out the ends of the reflector and press the wires into the groove underneath the reflector until the wires reach the cutout.

Insert the lamp with the red/pink wires into the reflector furthest from the cutout. Run the wires out the ends of the reflector and across and under the other reflector. Place the wires in the same slot as the white wires and press in place.

The lamp connector can then be threaded back through to the inverter and connected.

Replace the cover and the assembly is completed. Replace the assembly in the scanner.
Inverter Replacement

CXA-M10M-L

- **Disconnecting the power input**
  - At this point, the lamp assembly has been disconnected, the inverter has been checked, and damage has been found. Disconnect the connector from CN1 and thread the cable through to the outside of the lamp head assembly.

- **Removing the inverter**
  - There are two screws on opposite corners of the inverter that will be removed. Remove the inverter from the cavity of the lamp head assembly. The inverter and the screws can be discarded.

- **Inserting the new inverter (CXA-M10M-L)**
  - The inverter will need to be modified as follows:
    - The input connector from the old inverter will need to be removed and wired to the new inverter as shown in the picture below.
    - The output connector from the old inverter will need to be removed and wired to the new inverter as shown in the picture below.
  - The inverter can be placed in the cavity where the old inverter was located and should be glued down, as the screw holes will not match the old inverter.

- **Reconnecting the inverter (CXA-M10M-L)**
  - Attach the input wire harness to CN1 and the output wire harness to CN2 and the inverter is connected. The connectors are keyed to mate in one orientation only do not try to force the connectors.

CXA-M10M-L INVERTER MODIFIED

Innovative Solutions to High Volume Lamp Applications