

Section 8: Electrical Replacements

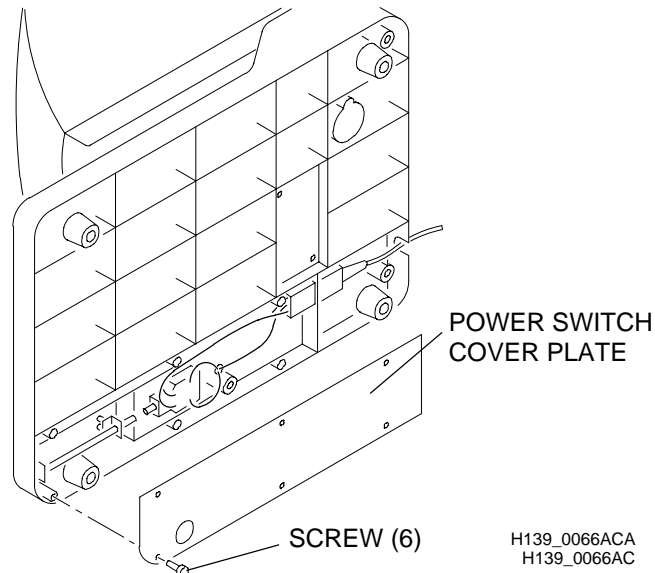
Replacement of the POWER SWITCH

Do the following steps to de-energize the CAMERA and to replace the POWER SWITCH. If it is necessary to disconnect any wires during a service procedure, record the colors and locations of the wires **before** you disconnect them.



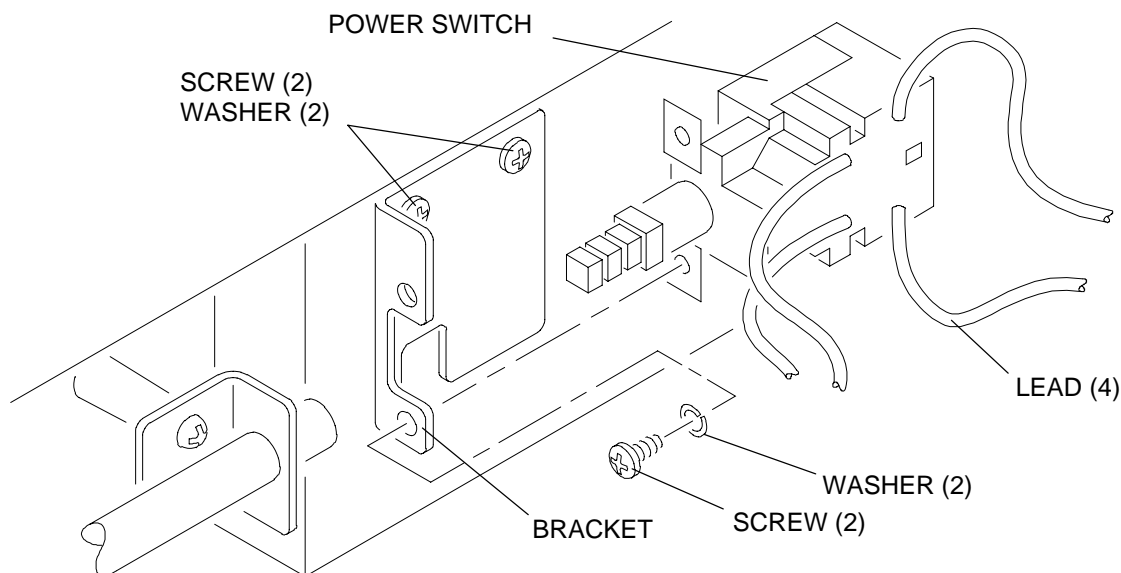
Warning
Dangerous Voltage

Figure 8-1 Removing the COVER for the POWER SWITCH



- [1] Disconnect the main power.
- [2] Turn the ID CAMERA on its side.
- [3] Remove the 6 SCREWS and the POWER SWITCH COVER PLATE.

Figure 8-2 Replacement of the POWER SWITCH



H139_0055BCA
H139_0055BC

- [4] Unsolder the 4 LEADS.
- [5] Remove the 2 SCREWS and 2 WASHERS that hold the BRACKET.
- [6] Remove the 2 SCREWS, 2 WASHERS, and the POWER SWITCH from the BRACKET.
- [7] Install the new POWER SWITCH on the BRACKET.
- [8] Install the BRACKET.
- [9] Solder the 4 LEADS.
- [10] Install the POWER SWITCH COVER PLATE and the 6 SCREWS.

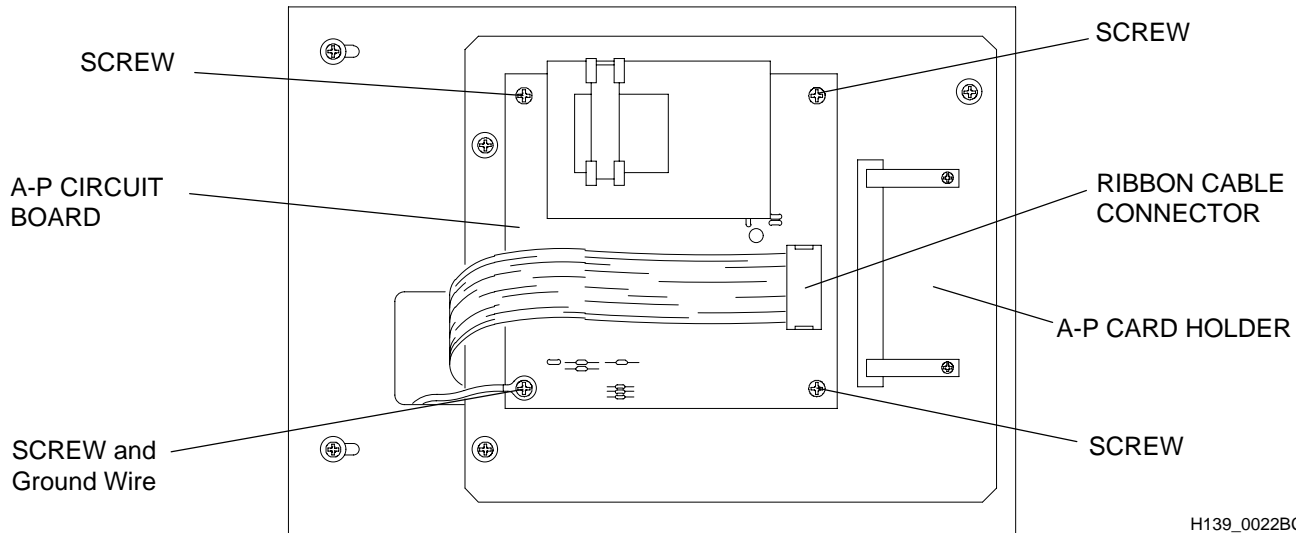
Replacement of the A-P CIRCUIT BOARD



Caution

Possible damage from electrostatic discharge.

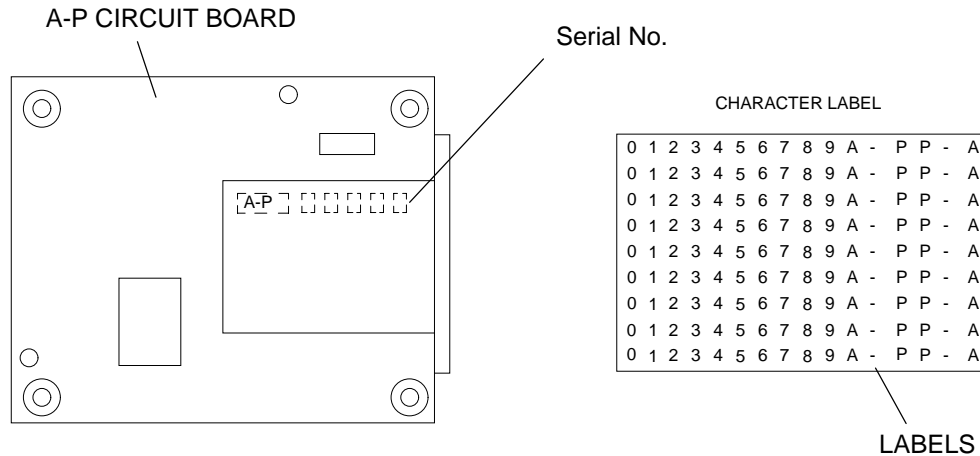
Figure 8-3 Replacement of the A-P CIRCUIT BOARD



H139_0022BCC
H139_0022BC

- [1] Do the "COVER Removal Procedure" on Page [6-1](#).
- [2] Disconnect the RIBBON CABLE CONNECTOR.
- [3] Remove the 3 SCREWS.
- [4] Remove the SCREW holding the ground wire.
- [5] Remove the A-P CIRCUIT BOARD.

Figure 8-4 Identifying the Serial No. on the A-P CIRCUIT BOARD



H139_0070BCA
H139_0070BC

- [6] On the back of the A-P CIRCUIT BOARD, identify the Serial No. of the CAMERA.
- [7] Remove any adhesive that might remain on the A-P CARD HOLDER after the A-P CIRCUIT BOARD is removed.
- [8] On the new A-P CIRCUIT BOARD, apply the correct combination of LABELS, to indicate the Serial No. of the CAMERA. All the LABEL combinations are provided on the CHARACTER LABEL.
- [9] Install the new A-P CIRCUIT BOARD.
- [10] Install the ground wire and the SCREW.
- [11] Install the 3 SCREWS.
- [12] Connect the RIBBON CABLE CONNECTOR.
- [13] To complete the assembly of the CAMERA, reverse the "COVER Removal Procedure" on Page [6-1](#).

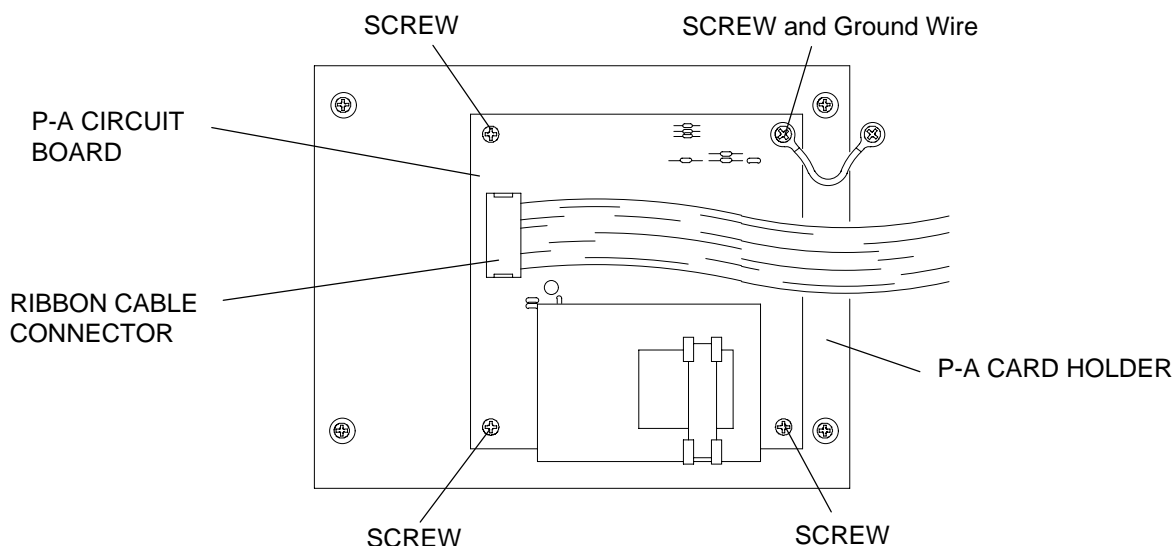
Replacement of the P-A CIRCUIT BOARD



Caution

Possible damage from electrostatic discharge.

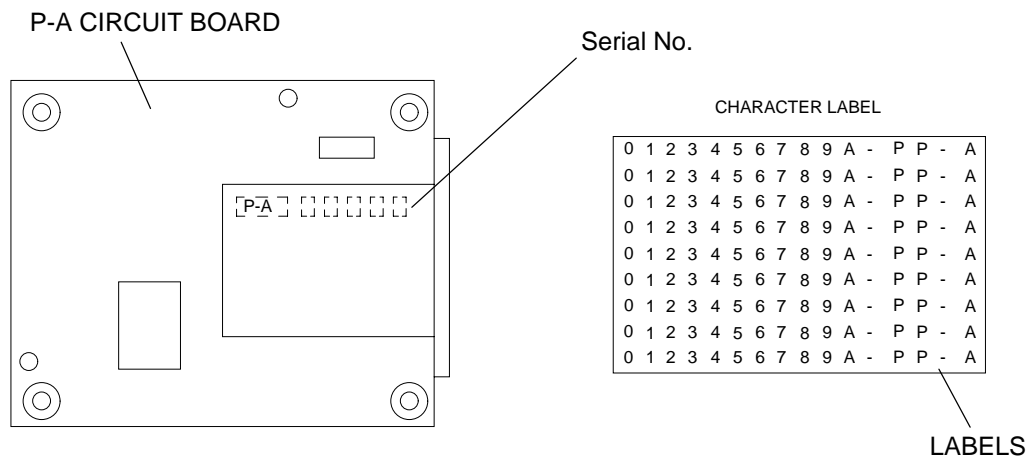
Figure 8-5 Replacement of the P-A CIRCUIT BOARD



H139_0024BCB
H139_0024BC

- [1] Do the "COVER Removal Procedure" on Page [6-1](#).
- [2] Disconnect the RIBBON CABLE CONNECTOR.
- [3] Remove the 3 SCREWS.
- [4] Remove the SCREW and the ground wire.
- [5] Remove the P-A CIRCUIT BOARD.

Figure 8-6 Identifying the Serial No. on the P-A CIRCUIT BOARD



H139_0069BCA
H139_0069BC

- [6] On the back of the P-A CIRCUIT BOARD, identify the Serial No. of the CAMERA.
- [7] Remove any adhesive that might remain on the P-A CARD HOLDER after the P-A CIRCUIT BOARD is removed.
- [8] On the new P-A CIRCUIT BOARD, apply the correct combination of LABELS, to indicate the Serial No. of the CAMERA. All the LABEL combinations are provided on the CHARACTER LABEL.
- [9] Install the new P-A CIRCUIT BOARD.
- [10] Install the ground wire and the SCREW.
- [11] Install the 3 SCREWS.
- [12] Connect the RIBBON CABLE CONNECTOR.
- [13] To complete the assembly of the CAMERA, reverse the "COVER Removal Procedure" on Page [6-1](#).

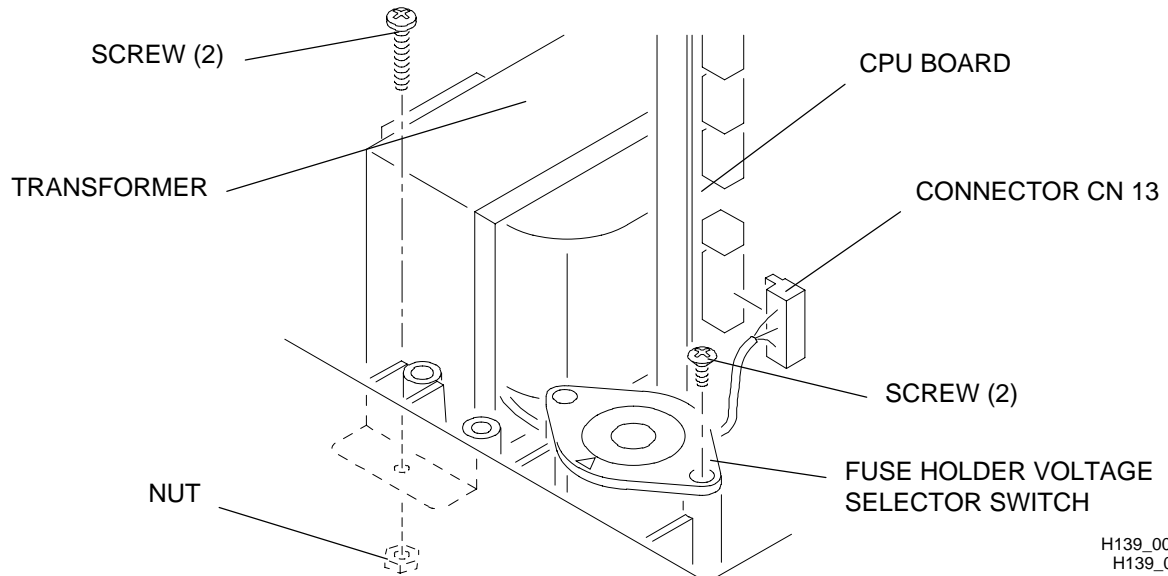
Replacement of the TRANSFORMER



Caution

Possible damage from electrostatic discharge.

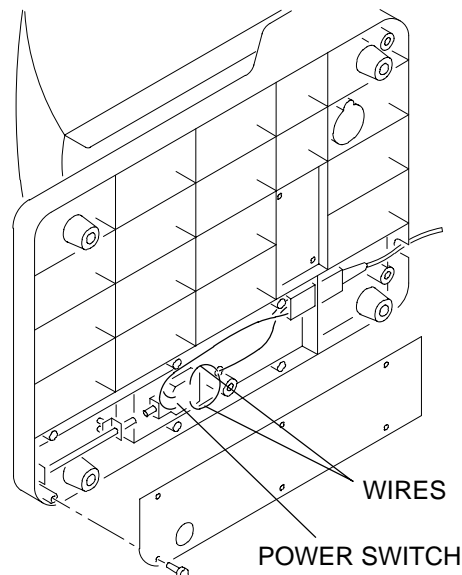
Figure 8-7 Removing the TRANSFORMER and the FUSE HOLDER VOLTAGE SELECTOR SWITCH



H139_0060BCA
H139_0060BC

- [1] Do the "COVER Removal Procedure" on Page [6-1](#).
- [2] Do the "UPPER HOUSING ASSEMBLY Removal Procedure" on Page [7-2](#).
- [3] Disconnect CONNECTOR CN 13 from the CPU BOARD.
- [4] Remove the 2 SCREWS and the 2 NUTS holding the TRANSFORMER.
- [5] Remove the 2 SCREWS for the FUSE HOLDER VOLTAGE SELECTOR SWITCH.

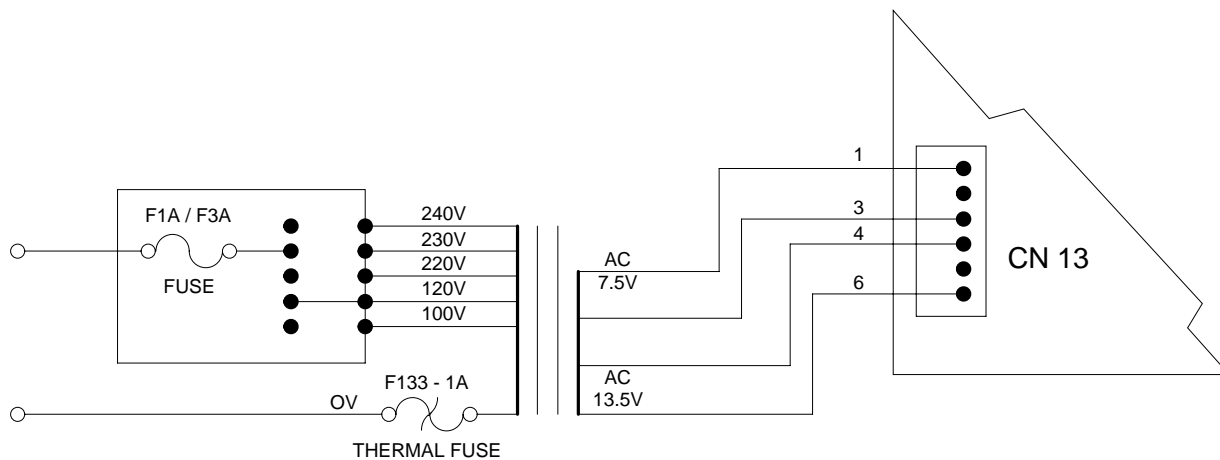
Figure 8-8 Removing the WIRES from the POWER SWITCH



H139_0066ACB
H139_0066AC

- [6] Cut or de-solder the 2 WIRES for the POWER SWITCH.
- [7] Cut the wire tie.

Figure 8-9 Removing the WIRES from the VOLTAGE SELECTOR SWITCH



POWER TRANSFORMER

H139_0001BC_

- [8]** Remove the TRANSFORMER and the VOLTAGE SELECTOR SWITCH together.
- [9]** Cut or de-solder all the WIRES from the VOLTAGE SELECTOR SWITCH **except for the main FUSE wire in the center.**
- [10]** To complete the assembly of the CAMERA, reverse the procedure above, solder the wires, and reverse the "UPPER HOUSING ASSEMBLY Removal Procedure" on Page [7-2](#) and the "COVER Removal Procedure" on Page [6-1](#).

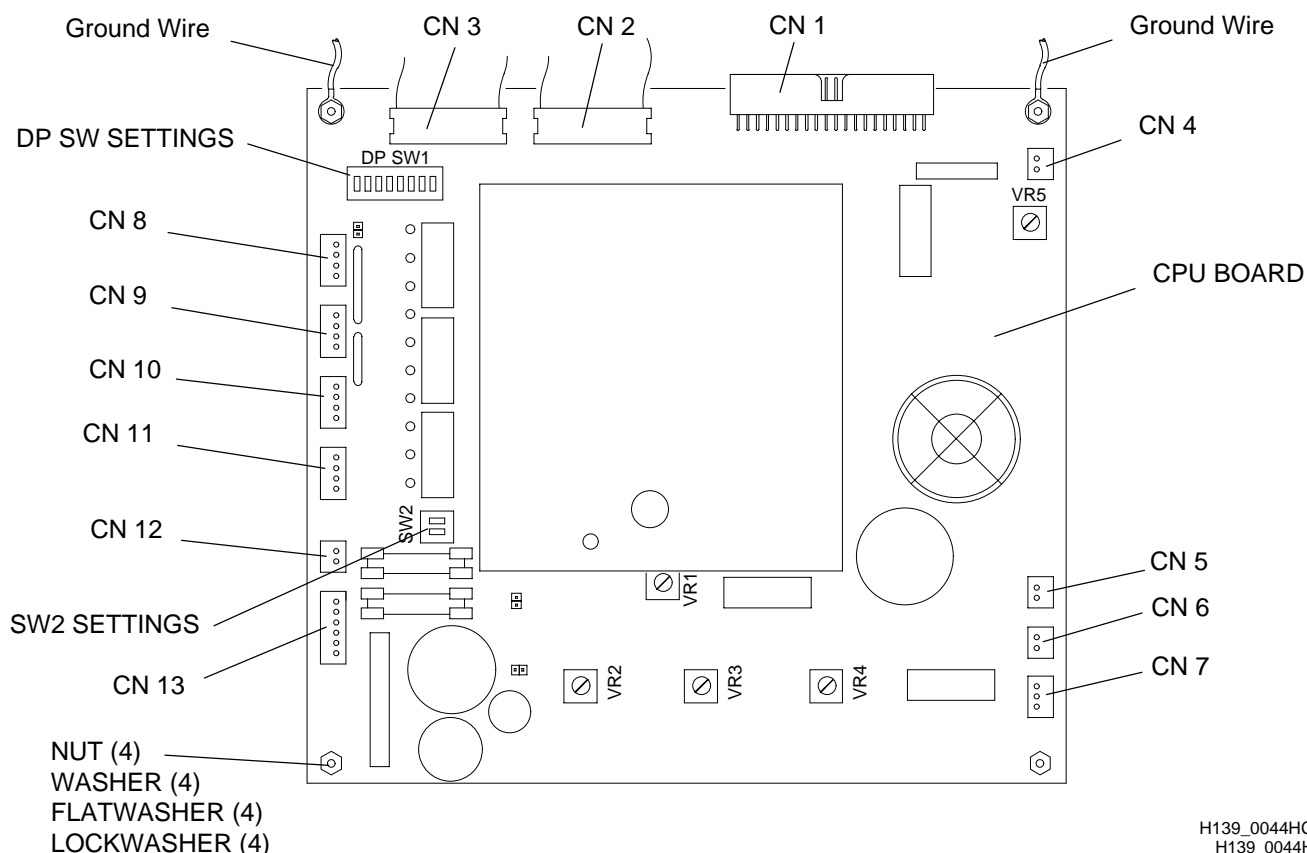
Replacement of the CPU BOARD



Caution

Possible damage from electrostatic discharge.

Figure 8–10 Replacement of the CPU BOARD



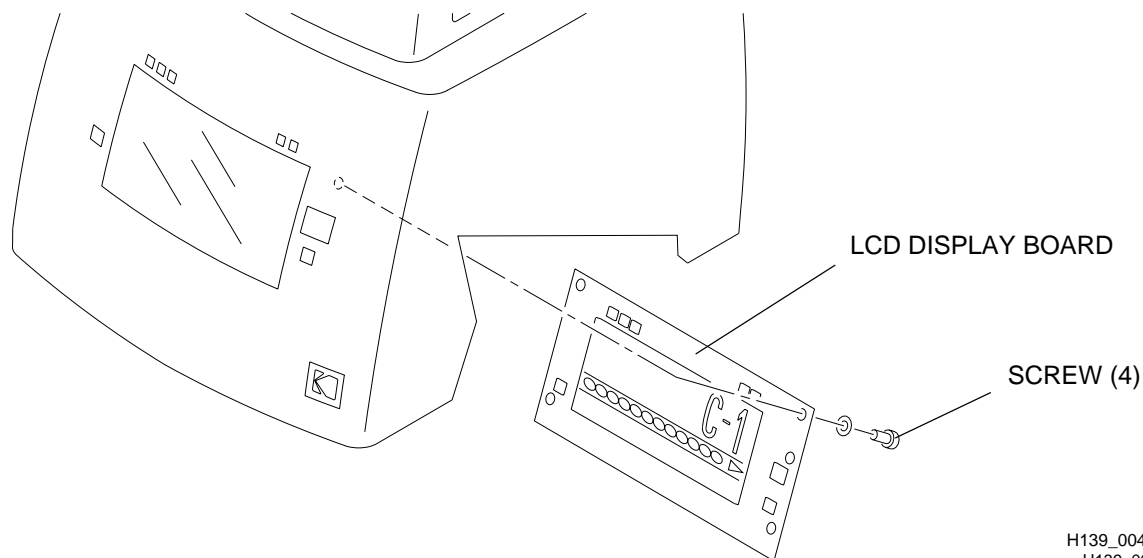
- [1] Do the “COVER Removal Procedure” on Page [6–1](#).
- [2] Disconnect the 13 CN CONNECTORS from the CPU BOARD.
- [3] Remove the 2 ground wires from the CPU BOARD.
- [4] Remove the 4 NUTS, 4 WASHERS, 4 FLAT WASHERS, and 4 LOCK WASHERS from the 4 corners of the CPU BOARD.
- [5] Install the new CPU BOARD.
- [6] Check that the DIP SW settings on the new CPU BOARD are the same as the existing CPU BOARD being replaced.
- [7] Do the adjustments for POTENTIOMETERS VR1, VR2, VR3, VR4, and VR5. See “Adjusting POTENTIOMETERS” on Page [6–8](#).
- [8] Install the COVER. Reverse the “COVER Removal Procedure” on Page [6–1](#).
- [9] Reset the date and time. See “Setting the Date and Time” procedure on Page [6–6](#).

Replacement of the LCD DISPLAY BOARD

**Caution**

Possible damage from electrostatic discharge.

Figure 8-11 Replacement of the LCD DISPLAY BOARD



- [1] Do the "COVER Removal Procedure" on Page [6-1](#).
- [2] Disconnect the CN 1 RIBBON CABLE from the LCD DISPLAY BOARD.
- [3] Remove the 4 SOCKET HEAD SCREWS holding the LCD DISPLAY BOARD.
- [4] Remove the LCD DISPLAY BOARD.
- [5] Install the new LCD DISPLAY BOARD.
- [6] To complete the assembly of the CAMERA, reverse the procedure above and the "COVER Removal Procedure" on Page [6-1](#).