TAITO AMERICA CORPORATION

CONVERSION KIT

JUNGLE HUNT™

TO

TAITO SER. NO.
505383

ELEVATOR Action T.M.

72-10007-001 REV - 1

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WARNING

The parts contained in this game conversion kit must be installed in accordance with the instructions contained in this Service Manual. Failure to follow these instructions in every detail could result in the creation of illegal interference to radio and TV reception.

Taito America Corporation has verified that, when this conversion kit is installed without deviation from these instructions, the equipment will then comply with the requirements of Part 15 of FCC Rules for a Class A computing device. The manufacturer will not be responsible for incomplete or improper conversions.

After such installation in accordance with the instructions, the enclosed NOTICE AFTER CONVERSION should be applied to the back of the game cabinet so as to cover up any previous notice regarding FCC Rules.

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This manual will guide you in the conversion of your JUNGLE KING/JUNGLE HUNT™ upright game to ELEVATOR ACTION™. We urge you to read through the instructions and study the drawings before beginning the conversion.

Perform the instruction steps in the order presented.

1. Check the parts supplied in this kit against the parts list
   included in this manual.
2. Remove JUNGLE KING/JUNGLE HUNT Control Panel.
   a. Release the latch at each end of the control panel (access through coin door opening).
   b. Tilt the panel outward from the top and disconnect the cable connector to the right.
3. Remove JUNGLE KING/JUNGLE HUNT Marquee.
   a. Remove the three (3) allen screws and retaining bracket. The marquee will slide out of the guides.
   b. Remove and save the two (2) plastic "U" channel guides from the marquee. These will be used later.
4. Remove JUNGLE KING/JUNGLE HUNT Coverglass.
   a. Loosen (but do not remove) three (3) screws holding the coverglass front bracket.
   b. Remove and save the rear coverglass retaining bracket and three (3) screws. Slide the coverglass out.
5. Remove PC Board Assembly.
   a. Disconnect the PC Board Harness connectors "G" and "H" at the right side and "T" at the left side of the board set.
   b. Rotate the "L" bracket board retainer 90 degrees counter- clockwise and slide the boardset out from the left.
6. Remove Filter Board.
   a. Disconnect all cables from the filter board. See FIGURE 1.
   b. Remove and discard the old filter board.
7. Remove Board Mounts.
   a. Remove two (2) PC Board Stops (small "L" brackets). See FIGURE 1.
   b. Remove and save the PC Board Harness.
   c. Remove and discard the two (2) PC Board Mounting Brackets.
8. Remove JUNGLE KING/JUNGLE HUNT ROMS.
   a. Separate the PC Boards as shown in FIGURE 2.
   b. Remove the ROM Board from the PC board set.
   c. Remove any EPROMS located in the following sockets:

ROM Board sockets	IC01 to IC08
CPU Board sockets	IC52 to IC55
	IC64 to IC69
GAME Board sockets	IC70 to IC73

9. Install new ELEVATOR ACTION ROMS.
   CAUTION: EACH IC MUST BE INSTALLED WITH ITS NOTCHED END ORIENTED AS SHOWN IN THE APPROPRIATE FIGURE. Install the new EPROMS marked "EA09" through "EA27". REFER TO FIGURE 2 FOR LOCATING ROMS ON THE BOARDS.

ROM Board ICs	– EA20 through EA27
CPU Board ICs	– EA12 through EA19
GAME Board ICs	– EA09 through EA10

10. Install the Security Board.
    a. Remount the ROM Board onto the GAME Board.
    b. Remove the Z80 IC from socket IC39 of the CPU Board and install it in location 12 of the Security Board. See FIGURE 3.
    c. Connect the flat ribbon cable of the Security Board to socket IC39 of the CPU Board. See FIGURE 3.
    d. Remove the two (2) plastic board standoffs indicated in FIGURE 4.
    e. Reassemble the VIDEO and CPU Boards on the remaining beard standoffs. See FIGURE 4.
    f. Snap the adhesive-backed board mounts to the Security Board as shown in FIGURE 4.
    g. Assemble the plastic board spacers and snap mounts as shown in FIGURES 4 and 5.
    h. Peel the paper from the bottom of the adhesive board mounts.
    i. Snap the Security Board down onto the CPU Board as shown in FIGURE 4. Press the adhesive mounts down on the board.
    j. Reassemble the GAME and VIDEO boards on their plastic standoffs.
11. Install New Ground Plate Assembly and PC Boards.
    a. Relocate the lower latch bracket on the back door. In most cases the bracket may be relocated by removing the right-hand screw, rotating the bracket 180 degrees, and installing the screw on the left.

    The Ground Plate Assembly consists of a ground plate, plastic RF shield, filter board and PC board mounting brackets.

    b. Positon Ground Plate on back door as shown in FIGURE 6. Center plate between Lower Latch bracket and door hinge, leave ½" between bottom of door and plate.
    c. Screw brackets to door as shown in FIGURE 6 with wood screws.
    d. Screw filter board to door as shown in FIGURE 6 using screws from old filter board.
    e. Screw "L" brackets and spacer to door See FIGURE 6.

f. Slide the board set into the mounting brackets with the "G" and "H" connectors to the right and the SJC3 Board next to the ground plate. Set the board stops against the boards and tighten the screws.
g. Reconnect the PC Board Harness to the "G", "H", and "T" connectors on the board set. Reconnect the five (5) connectors to the lower portion of the Filter Board. Dress the harness as shown in FIGURE 7 and install three (3) cable clamps.
h. Reconnect the six (6) Main Harness connectors to the upper portion of the Filter Board. See FIGURE 7. Note: Use holes in ground plate as a template.

12. Install Ground Braids.
    a. Connect the 16 inch ground braid to the Ground Plate with a screw in the hole near the lower right corner. Connect the other end of the ground braid to the power supply circuit board mounting screw. Scrape any green solder mask from the hole pad on the power supply circuit board before assembly. Tie wrap the ground braid to the Main Harness to prevent short circuits to the fuses. See FIGURE 8.
    b. Connect the 28 inch ground braid from the power supply PC board mounting screw to a convenient chassis screw on the monitor. Scrape any green solder mask from the mounting hole pad before assembly. See FIGURE 9.
    c. Connect the 9 inch ground braid from the power cord filter box to the power supply PC board mounting screw. Scrape any green solder mask from the mounting hole pad before assembly. See FIGURE 9.
    d. Connect the 5 inch ground braid from the lower rear door lock mounting screw to the upper left corner of the ground plate. See FIGURE 6.
13. Install ELEVATOR ACTION Coverglass.
    a. Clean the coverglass with a non-abrasive cleaner.
    b. Install the coverglass from the rear of the cabinet.
    c. Tighten the three (3) screws on the front coverglass bracket.
    d. Install the coverglass retaining bracket at the rear with three (3) screws.
14. Install ELEVATOR ACTION Control Panel.
    a. Remove cable assembly from control panel being careful not to break tabs off of any leaf switches.
    b. Remove the joystick, buttons and wood braces from the control panel.
    c. Remove the (4) leaf switches and the switch plate from the joystick. Install the switches on the new 4-way switch plate and replace the switch plate back on the joystick.
    d. Install the joystick, (with new actuator), buttons, (including the two new ones) and the wood braces on the ELEVATOR ACTION control panel metal. See FIGURE 11.
    e. Take the violet wire in pin 9 out and insert it into pin 7 of the control panel cable connector. Insert the pin end of the green fire cable into the pin 9 hole on the control panel cable connector.
    f. Reconnect the control panel cable to its original state except connect the green wires to the inside fire buttons. See FIGURE 11.
    g. Connect the black ground wire to the inside fire buttons and splice the stripped end into one of the existing black wires.
    h. Reconnect the control panel to the main harness and mount the panel on the cabinet. Be sure no wires are pinched by the latches.
15. Install ELEVATOR ACTION Marquee.
    a. Attach the two (2) plastic "U" channel pieces to the sides of the new marquee and slide it up into the cabinet.
    b. Attach the marquee bracket with three (3) allen screws.
16. Adjust Game Settings.
    a. Consult the ELEVATOR ACTION Manual and adjust the DIP switches as desired.
    b. Turn the game ON and play a "2-PLAYER" game. Adjust the volume controls as desired.
17. Install Plastic RFI Shield.
    a. Carefully fit the shield over the board set. Check that the PC Board Harness does not push against the shield and that the wires on the lower portion of the filter board do not protrude under or push against the shield. Insure that the ground braid at the lower right lies flat between the shield and ground plate. See FIGURE 10.
    b. Secure the shield with eleven (11) screws & washers. The RFI Shield must be held FIRMLY against the Ground Plate to prevent radio frequency noise emission. NOTE: The volume controls are accessible from a hole in the underside of the shield.
    c. Close and lock the rear service door and the coin door.
18. Attach FCC Compliance Label. Affix the new self-adhesive FCC Compliance label OVER the original label on the rear of the cabinet.
19. Attach the FBI Warning label. Affix the self-adhesive FBI label on the outside of the rear door near the top in the center. The conversion is complete.

JUNGLE KING/JUNGLE HUNT TO ELEVATOR ACTION CONVERSION PARTS LIST

********** ACCESSORY & HARDWARE PACK **********

PART NUMBER	DESCRIPTION	QUANTITY
63-00144-001	SCREW INSULATOR	2
63-00145-001	PCB SUPPORT	2
63-00146-001	PCB SUPPORT, ADHESIVE	2
63-00147-001	PLASTIC SPACER	2
09-00260-001	BRAIDED GND CABLE 9"	1
09-00260-002	BRAIDED GND CABLE 16"	1
09-00260-003	BRAIDED GND CABLE 28"	1
09-00260-004	BRAIDED GND CABLE 5"	1
51-01012-001	#6 X 1" SCREW	2
51-00005-001	#8 X 11/16 SCREW	11
51-01012-006	#6 X 1/2" SCREW	4
51-01022-015	6 X 1 1/2 HH SCREW	2
55-01004-001	#10 x 1/2" WASHER	11
59-00016-002	SPACER	2

********** MANUAL PACK **********

79-00075-001	SWITCH SETTING CARD	1
72-00042-001	GAME MANUAL EA	1
72-10007-001	CONVERSION MANUAL JK/JH - EA	1
79-00070-001	GENERIC FCC COMP. LABEL	1
79-00074-001	FBI WARNING LABEL	1

********** CONVERSION KIT **********

16-00032-100	EPROM SET EA SJC3	1
*07-00261-001	BRACKET ASSY	1
*07-00262-001	BRACKET ASSY	1
*61-00300-001	GROUND PLATE	1
*63-00140-001	PLASTIC RFI SHIELD	1
*08-00120-001	FILTER BOARD	1
47-00016-008	E.A. COVERGLASS	1
47-00012-017	MARQUEE, E.A.	1
08-00116-003	SJC3 SECURITY BOARD E.A.	1

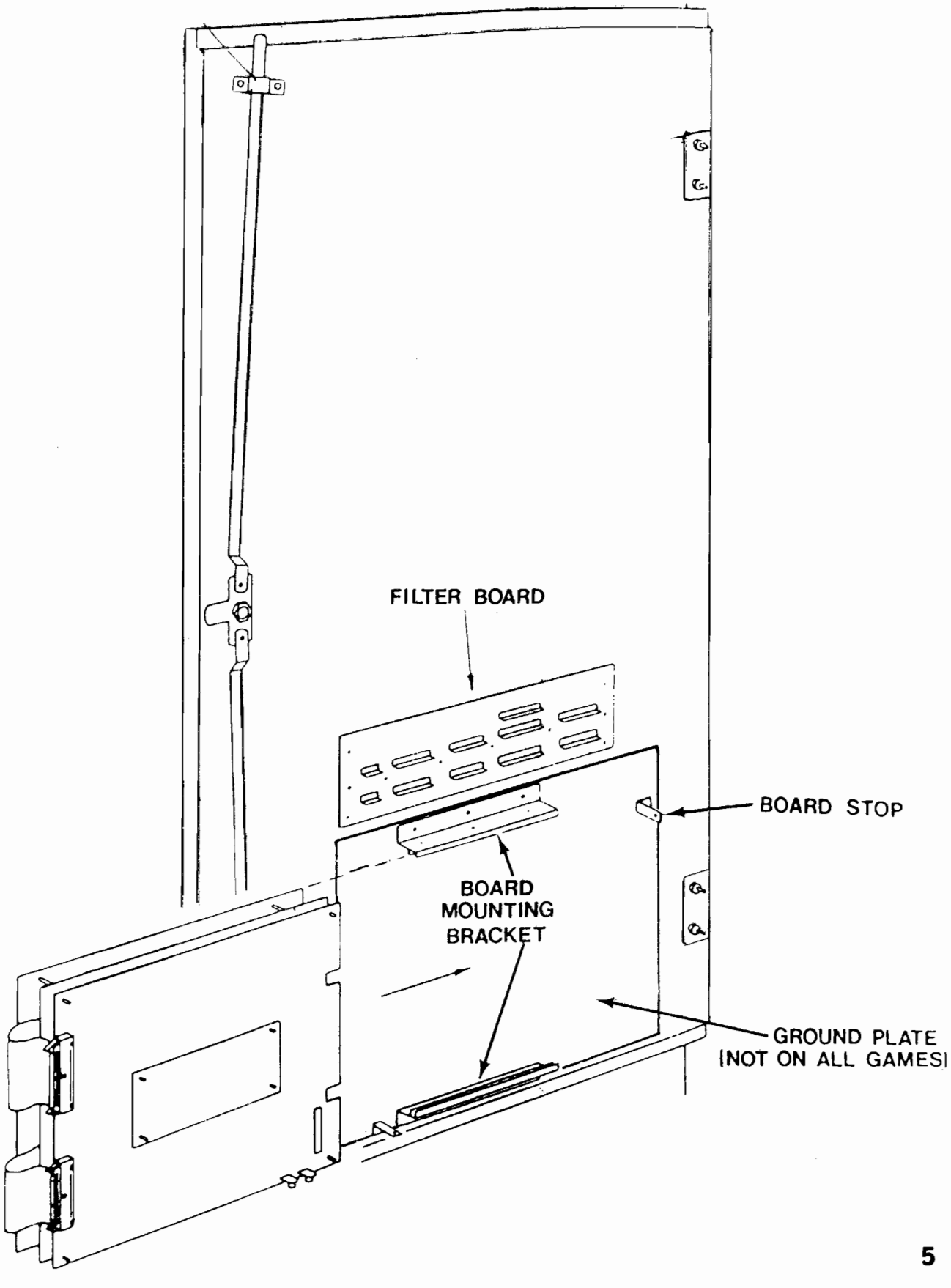
********** CONTROL PANEL PACK **********

07-00281-002	CONTROL PANEL ELEVATOR ACTION	1
09-00287-003	BLACK WIRE	1
09-00278-002	GREEN WIRE	1
63-00024-001	PUSH BUTTON	2
29-00020-001	PUSH BUTTON SUPPORT	2
54-07001-008	NUT	2
63-00028-002	PLATE	1
63-00030-001	ACTUATOR	1

FIGURE 1

JUNGLE KING / JUNGLE HUNT

DOOR ASSEMBLY



ELEVATOR ACTION ROMS

FIGURE 2

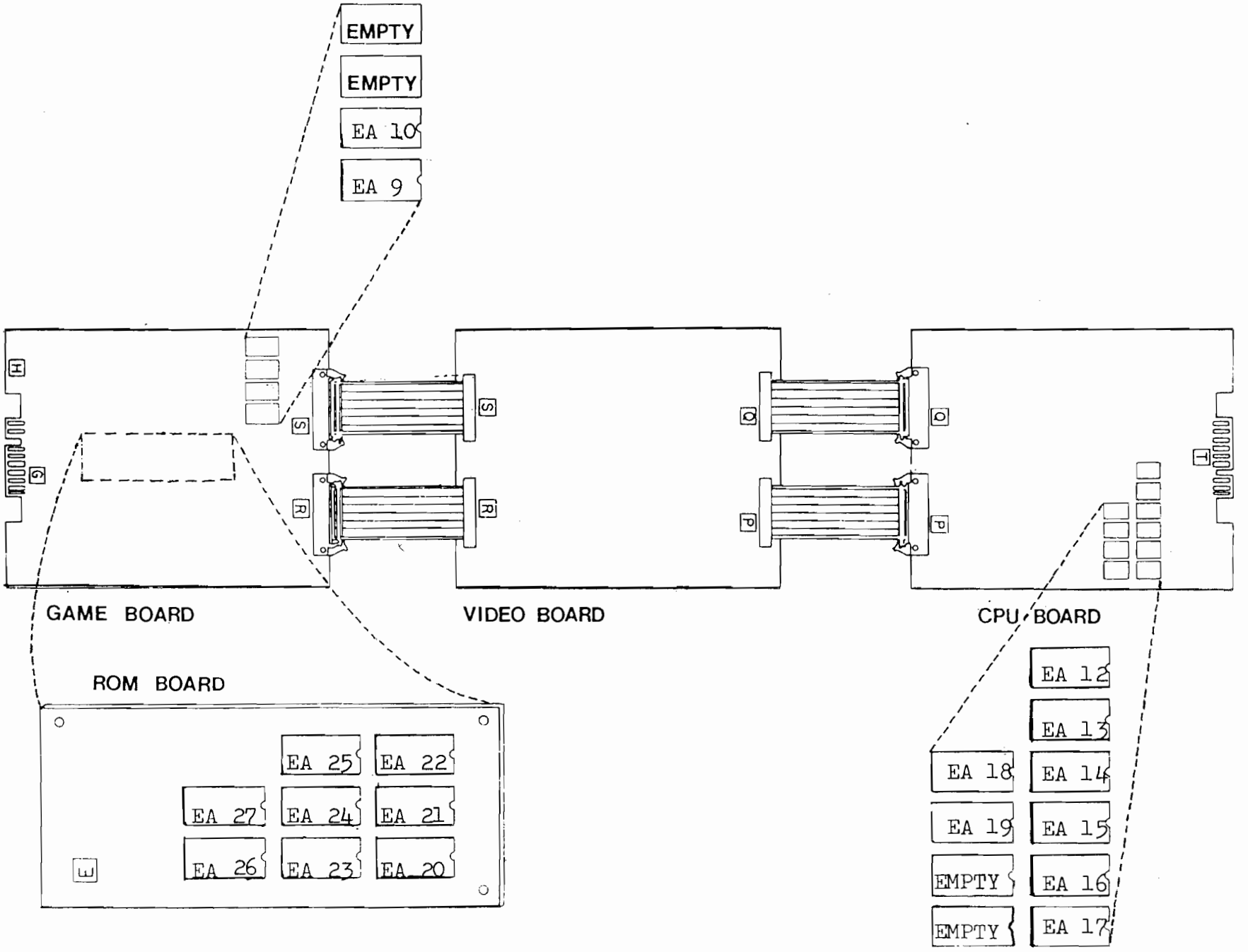


FIGURE 3 SECURITY BOARD CONNECTION

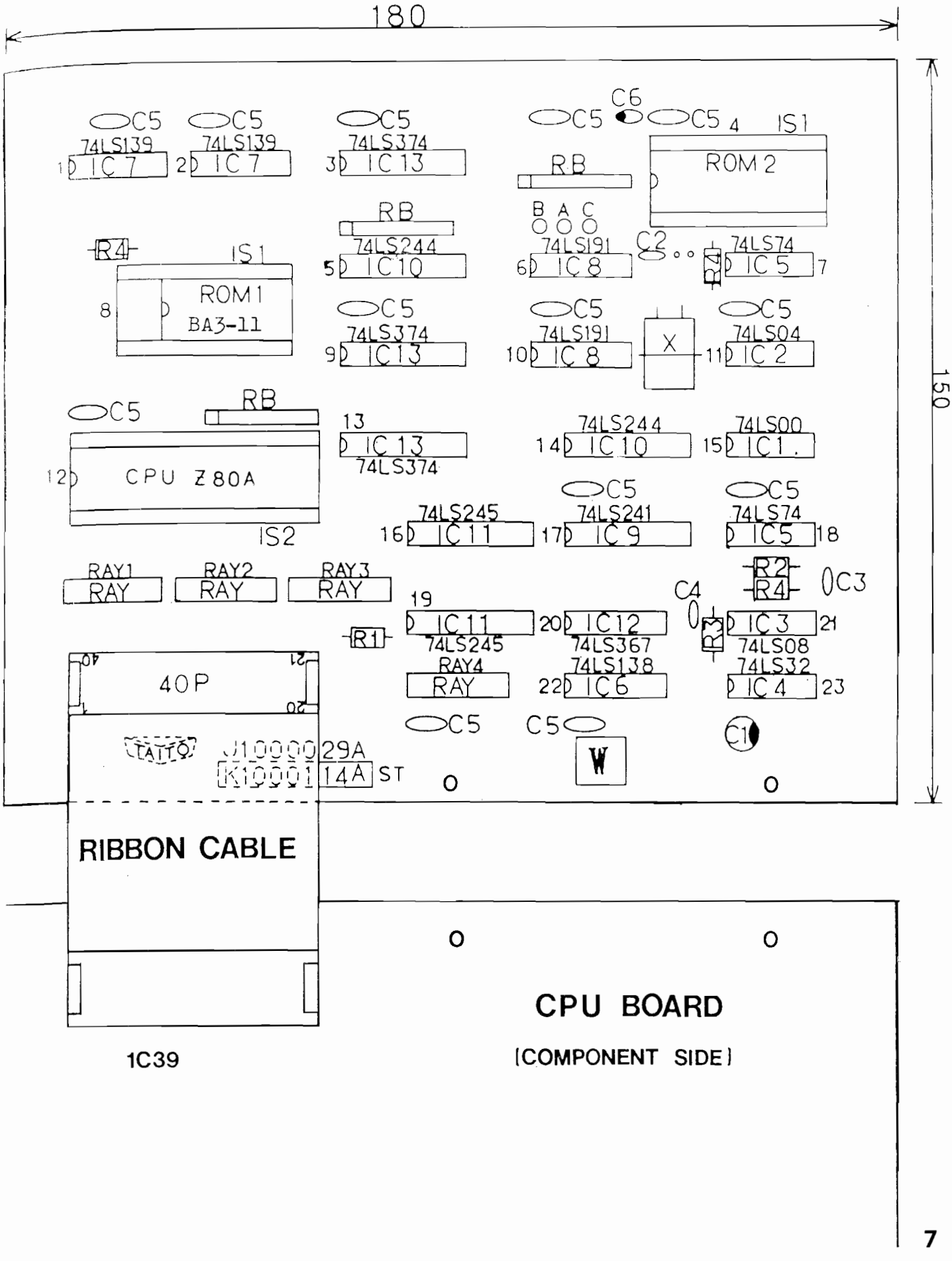


FIGURE 4
SECURITY BOARD ASSEMBLY

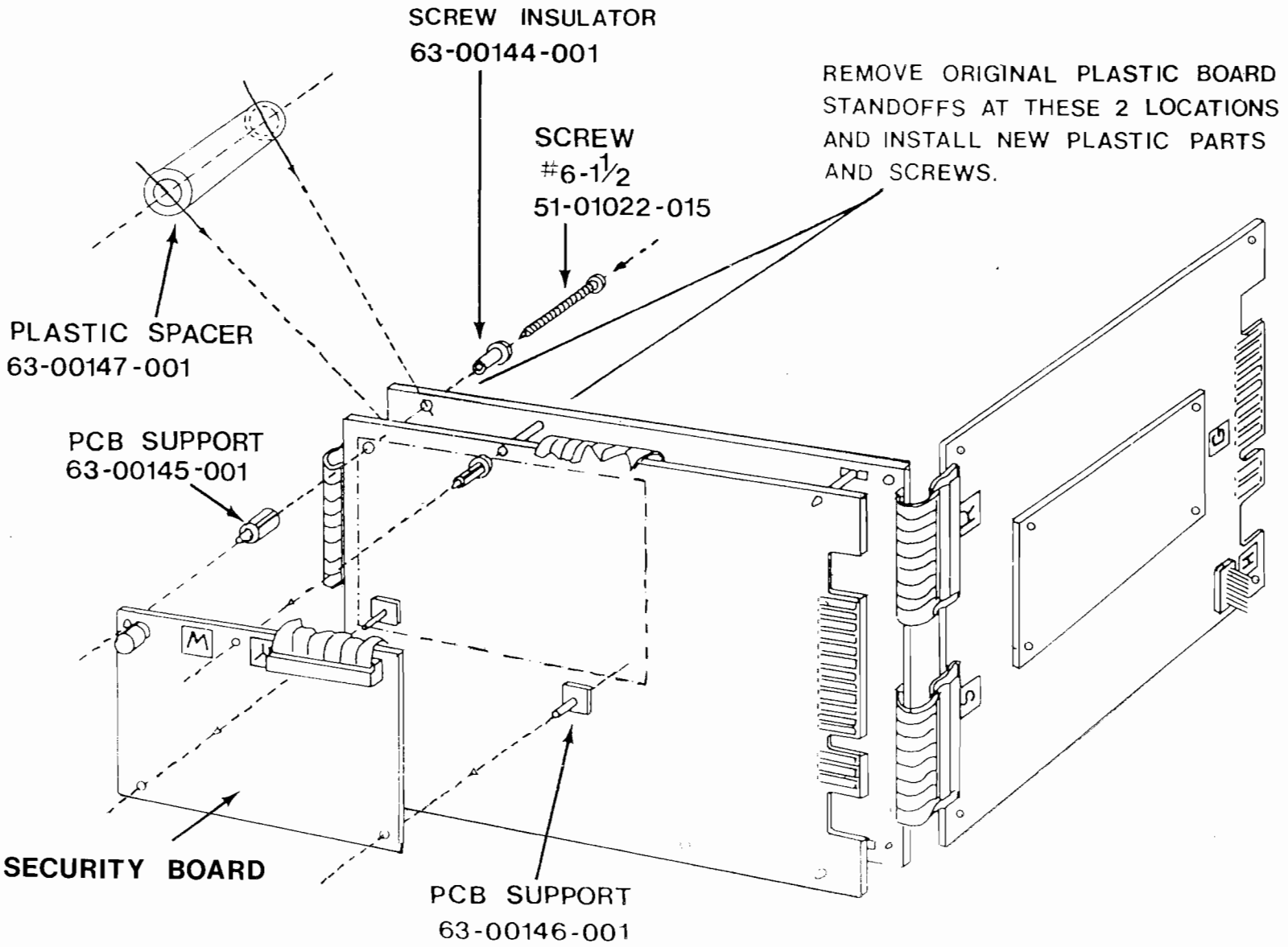


FIGURE 5

SJC3 PC SYSTEM BOARD SET

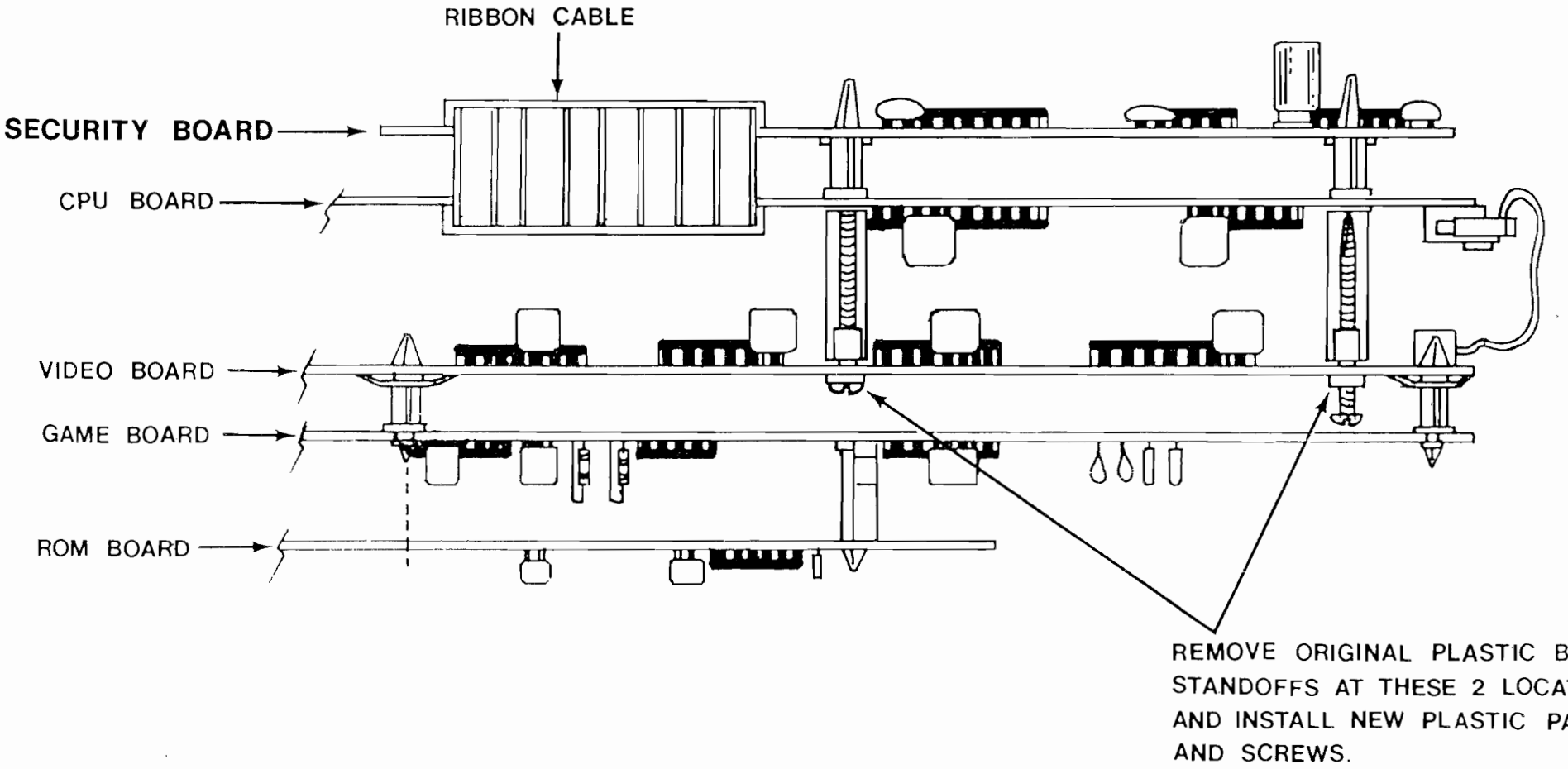
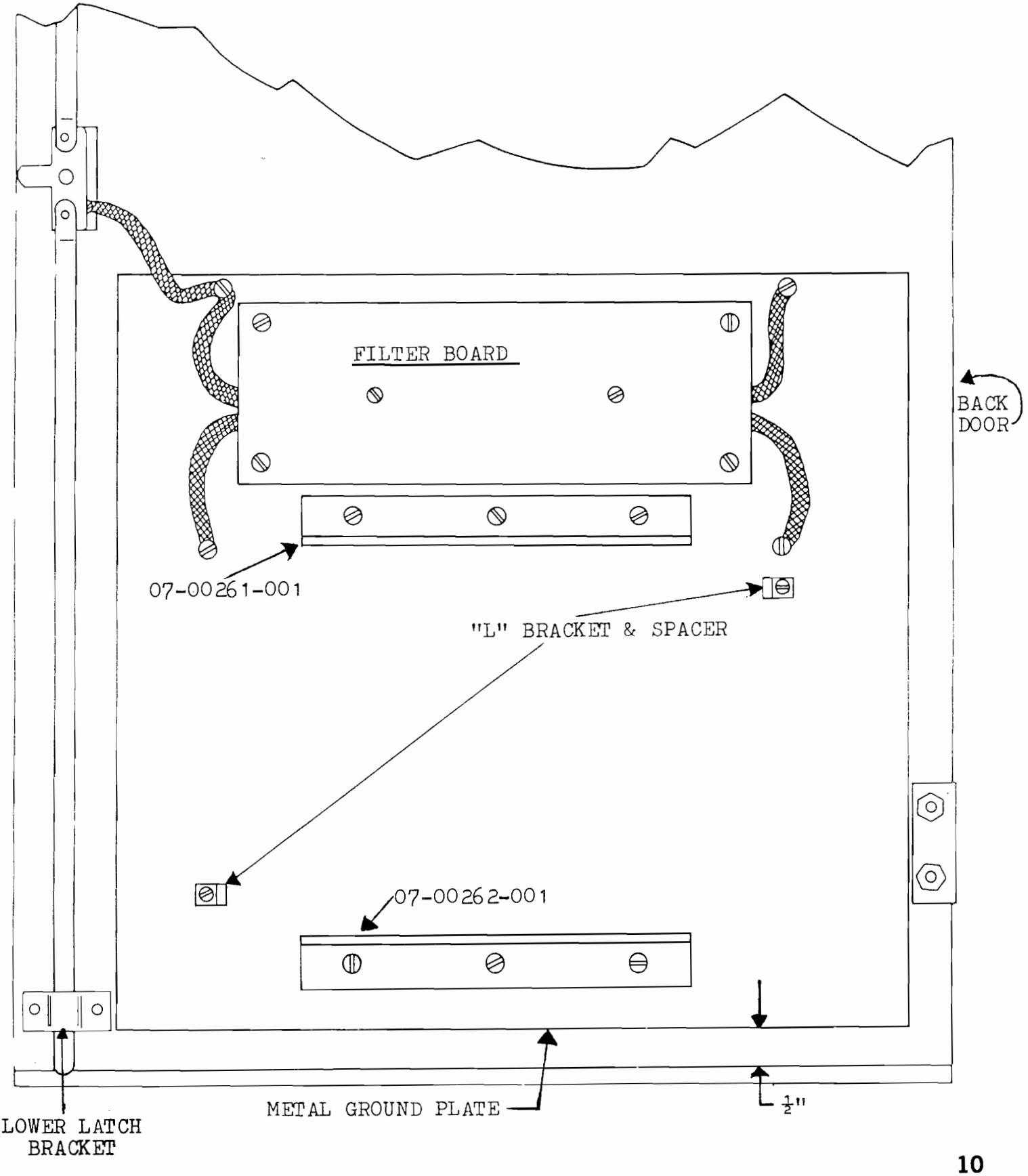


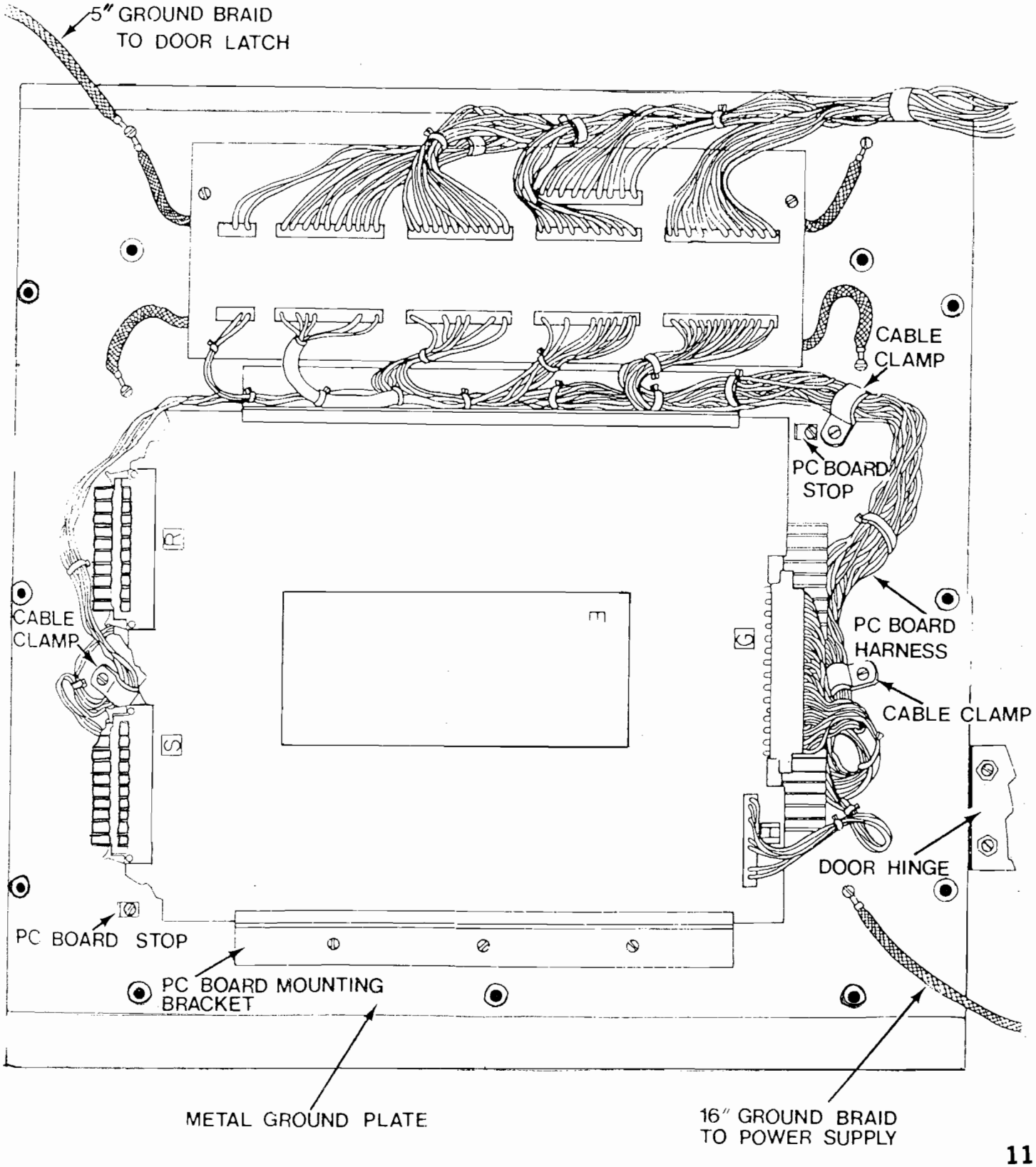
FIGURE 6

GROUND PLATE ASSEMBLY MOUNTING



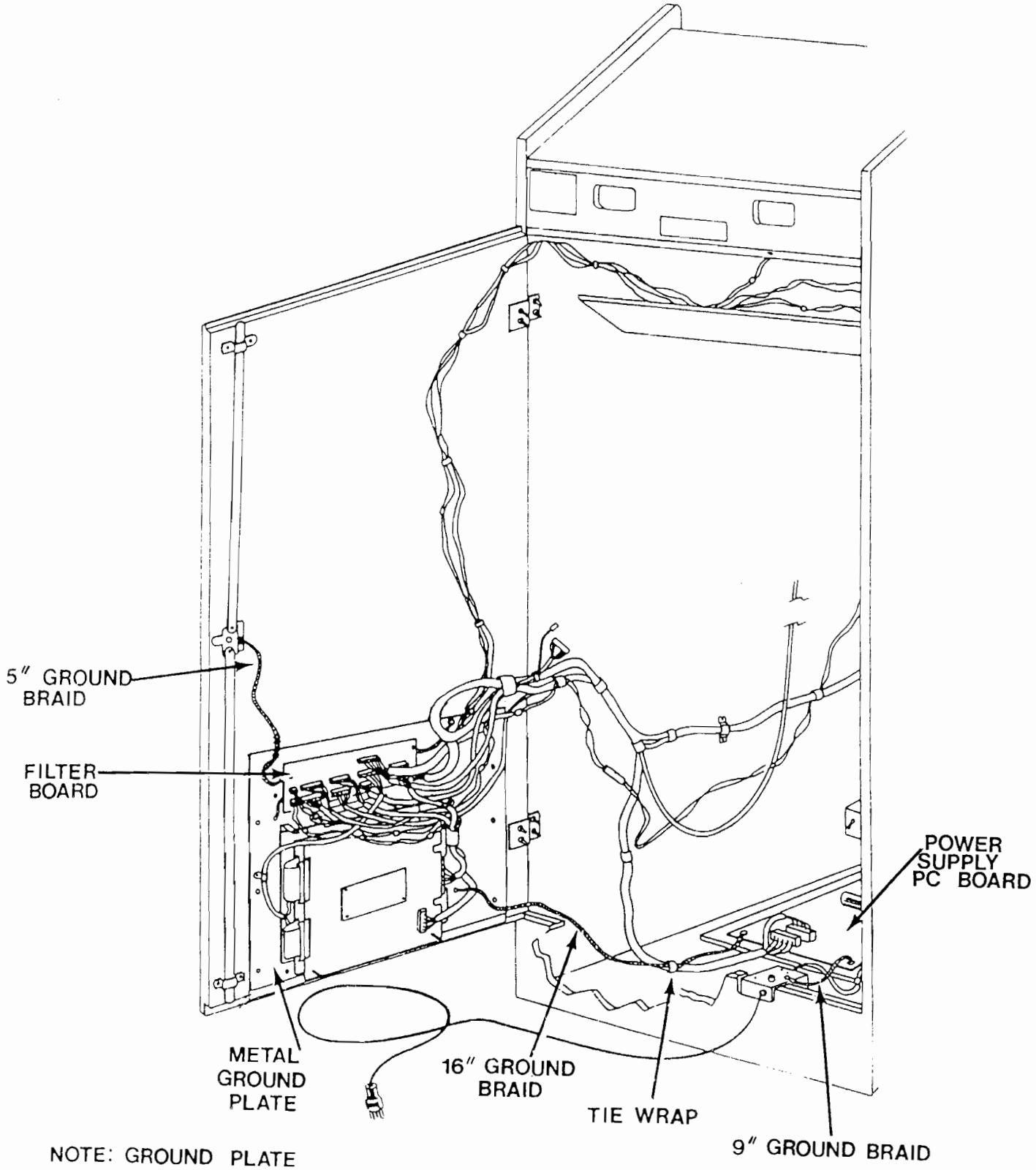
GROUND PLATE ASSEMBLY DETAIL

FIGURE 7



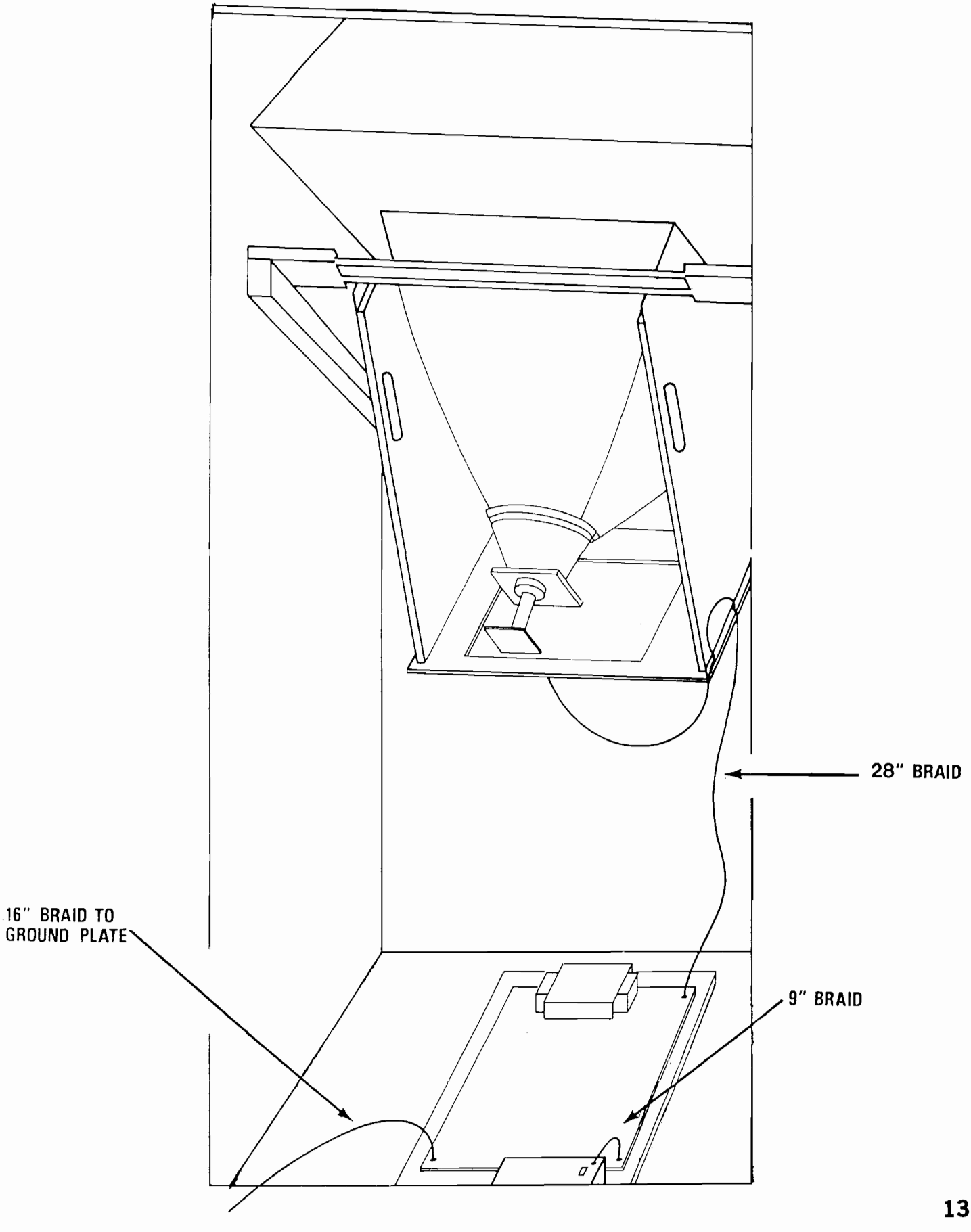
CABINET INTERIOR

FIGURE 8



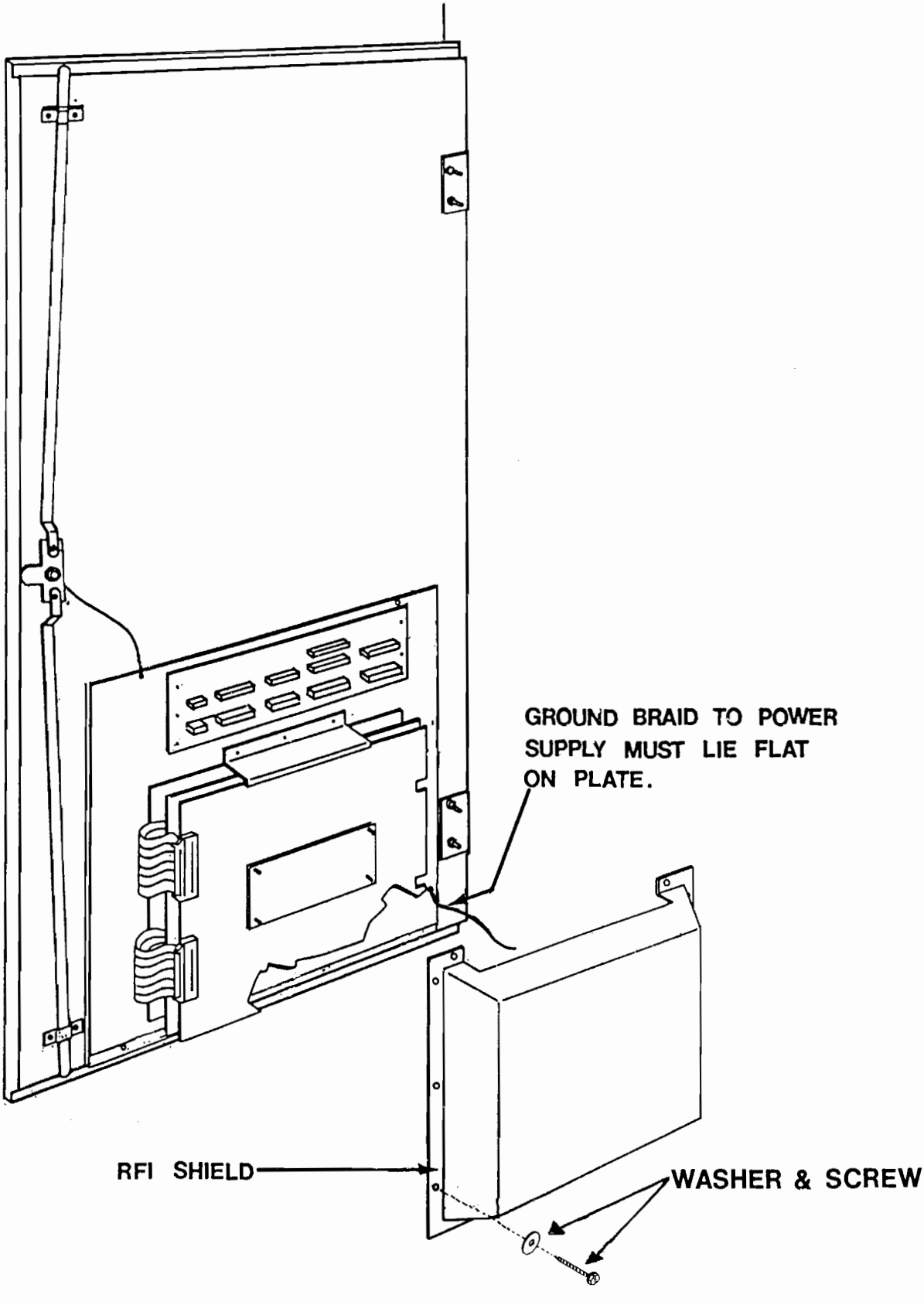
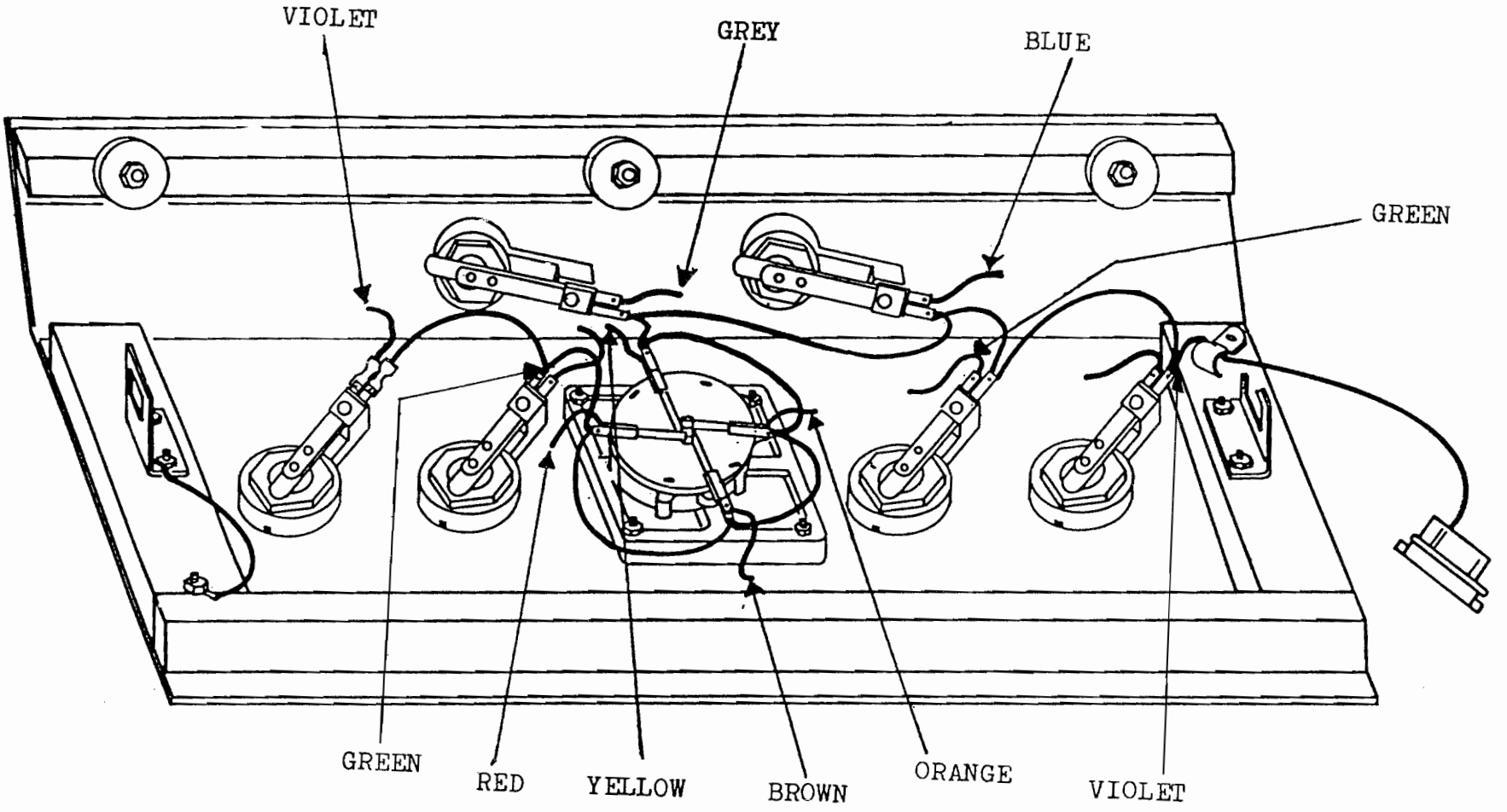
NOTE: GROUND PLATE ASSEMBLY SHOWN WITHOUT RFI SHIELD

FIGURE 9
MONITOR GROUNDING



RFI SHIELD INSTALLATION

FIGURE 10



CONTROL PANEL
FIGURE 11