

VI CABINET-CHASSIS ASSEMBLY

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6.1 INTRODUCTION

This section covers assembly of the Sol-10 and Sol-20 chassis and cabinet. The instructions contained herein assume that you have already assembled the power supply and Sol-PC Single Board terminal Computer™... including the personality module and the Sol keyboard (Sol-KBD).

6.2 PARTS AND COMPONENTS

Check all parts and components against the appropriate "Parts List(s)", Table 6-1 and 6-2. If you have any difficulty in identifying any parts by sight, refer to Figures 6-1 and 6-2 on Pages VI-4 and VI-4.

6.3 ASSEMBLY TIPS

6.3.1 General

1. Scan Section VI in its entirety before you start to assemble your Sol cabinet-chassis.
2. IT IS IMPORTANT that you follow the step-by-step instructions in the order given when assembling the Sol cabinet-chassis if your assembly is to be done correctly and with minimum effort.
3. Assembly steps and component installations are preceded by a set of parentheses. Check off each installation and step as you complete them. This will minimize the chances of omitting a step or component.
4. Should you encounter any problem during assembly, call on us for help if needed.

6.3.2 Electrical

1. Use a low-wattage soldering iron, 25 watts maximum, for all soldering.
2. Solder neatly and as quickly as possible.
3. Use only 60-40 rosin-core solder. NEVER use acid-core solder or externally applied fluxes.
4. DO NOT press the tip of the soldering iron on pads or traces when installing components and/or attaching leads to a PC board. To do so can cause the pad or trace to "lift" off the board and permanently damage it.

PROCESSOR TECHNOLOGY CORPORATION

Sol CABINET-CHASSIS

SECTION VI

Table 6-1. Sol-10 Cabinet-Chassis Parts List.

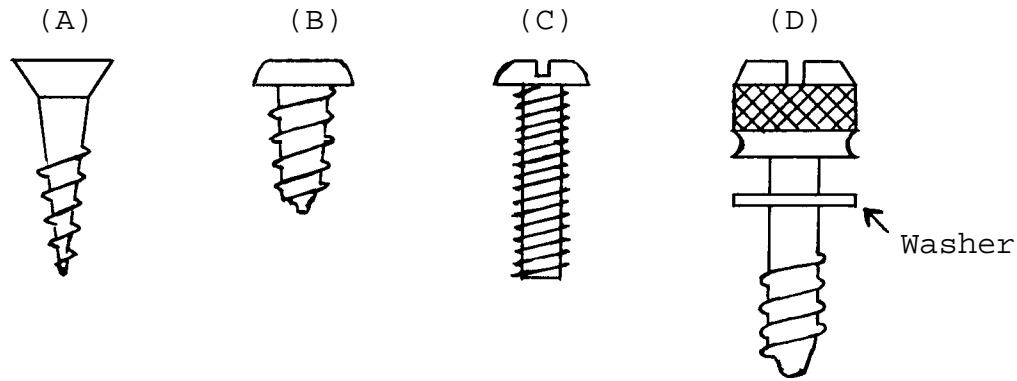
<u>CHASSIS and SUBCHASSIS</u>	<u>HARDWARE</u>
1 Main Chassis	4 4-40 x 3/16 Screw, Machine
1 Expansion Chassis	16 4-40 x 5/16 Screw Machine
1 Power Supply Subchassis	8 4-40 Hex Nut
1 Fan Closure Plate	22 #4 Lockwasher, Internal Tooth
<u>BRACKETS</u>	
1 Power Supply Subchassis Bracket	16 6-32 x 1/2 Screw Machine
2 Keyboard Bracket	8 6-32 Hex Nut
3 8-32 Hex Nut	16 #6 Lockwasher, Internal Tooth
<u>CABINET</u>	
1 Left Side Piece, Walnut	11 8-32 x 1/2 Screw, Machine
1 Left Side Piece, Masonite	2 8-32 x 1 Screw, Machine
1 Right Side Piece, Walnut	3 #8 Lockwasher, Internal Tooth
1 Right Side Piece, Masonite	2 10-24 Thumb Screw
1 Keyboard Cover	21 #6 x 1/4 Screw, Sheet Metal
1 Top Cover	4 #6 x 5/16 Screw, Sheet Metal
<u>MISCELLANEOUS</u>	
2 Finger Well Label, Black *	12 5/8 Screw, Wood
1 Printed Trim Plate, Paper	2 #4 Solder Lug
1 Plexiglass Strip	10 Tinnerman Plastic Inserts, Tapped
1 Serial Number Label	2 1/4" Spacer, 4-40 Tapped
1 Connector Identification Label	4 Self-stick Protective Pads

* May be packaged under the plexiglass strip.

Table 6-2. Sol-20 Cabinet-Chassis Parts List.

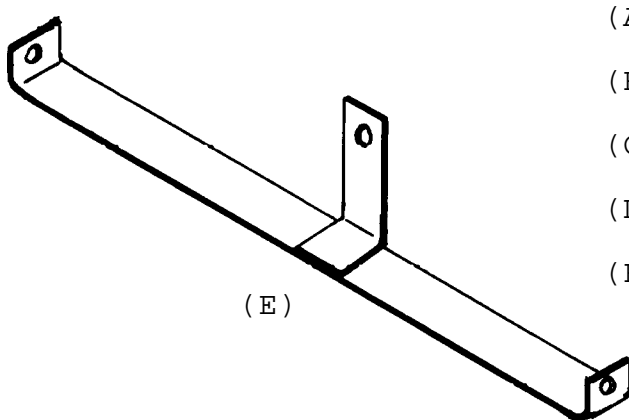
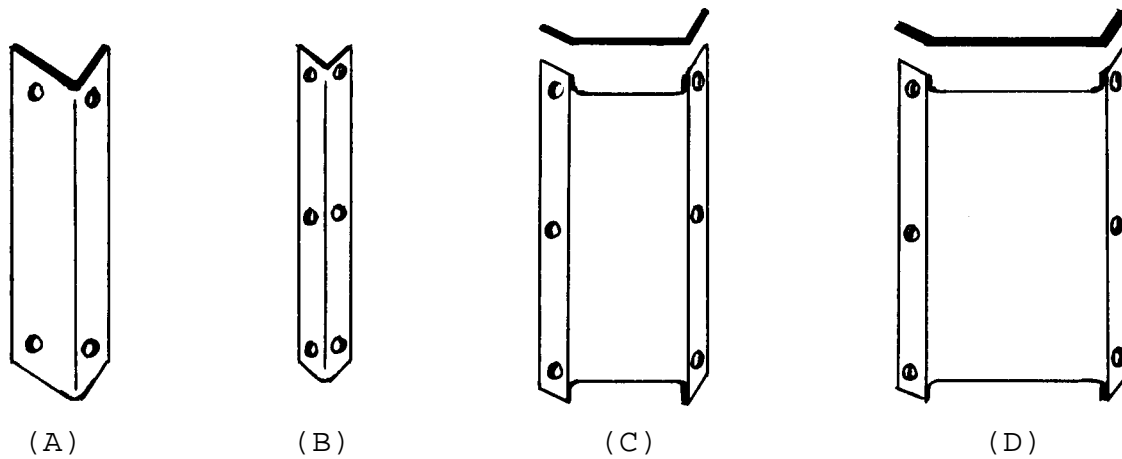
The Sol-20 Cabinet-Chassis Kit includes all Sol-10 parts listed in Table 6-1 plus the following items:

- 1 Sol-BPB Circuit Board (Backplane Board)
- 1 3" 5-wire Cable with Molex Connector
- 1 100-pin Edge Connector, VIKING 3KH50/90V5
- 5 100-pin Edge Connector, other brand
- 2 Right Angle Backplane Bracket
- 1 Gusset Bracket, Left
- 1 Gusset Bracket, Right
- 10 Plastic Card Guide
- 6 4-40 x 5/16 Screw, Machine
- 6 4-40 x 5/8 Screw, Machine
- 12 4-40 Hex Nut
- 12 #4 Lockwasher, Internal Tooth
- 8 6-32 x 1/2 Screw, Machine
- 8 6-32 Hex Nut
- 9 #6 Lockwasher, Internal Tooth
- 12 #6 x 1/4 Screw, Sheet Metal



(A) Flat Head Wood Screw (C) Binder or Pan Head Screw
 (B) Sheet Metal Screw (D) Thumb Screw

Figure 6-1. Types of screws used in Sol cabinet-chassis assembly.



(A) Keyboard Bracket
 (B) Backplane Bracket, Right Angle
 (C) Gusset Bracket, Left
 (D) Gusset Bracket, Right
 (E) Power Supply Subchassis Bracket

Figure 6-2. Brackets used in Sol cabinet-chassis assembly.

6.3.2 Electrical (continued)

5. (Sol-20 only.) The Backplane PC board (Sol-BPB) has plated-through holes. Solder flow through to the component side of the board can produce solder bridges (shorts). Check for such bridges after you install each component or wire.

6. (Sol-20 only.) The Backplane PC board (Sol-BPB) has an integral solder mask (a lacquer coating) that shields selected areas on the board. This mask minimizes the chances of creating solder bridges during assembly.

6.3.3 Mechanical

1. If you do not have the proper screwdrivers (see Paragraph 6.5), we recommend that you buy them rather than using a knife point, a blade screwdriver on a Phillips screw, and other makeshift means. Proper screwdrivers minimize the chances of stripping threads, disfiguring screw heads and marring decorative surfaces.

2. To assure a correct fit and tight assembly, be sure you use the screws specified in the instructions.

3. Lockwashers are widely used in the Sol cabinet-chassis assembly so that screws will not loosen when subjected to stress or vibration. When a lockwasher is specified, do not omit it and make sure you install it correctly.

4. Some instructions call for prethreading holes. This is done to make assembly easier by giving you maximum working space for installing relatively hard-to-drive sheet metal screws. If you bypass prethreading instructions you will only make your cabinet-chassis assembly more difficult.

To prethread a hole, insert specified screw in the hole and position it as straight as possible. While holding the screw in this position, drive it into the metal with the proper screwdriver. If started straight the screw will continue to go straight into the metal so that the head and sheet metal surfaces are in full contact.

5. The diameter of the shank (threaded portion) of a screw increases in relation to its number. For example, a 6-32 screw is larger in diameter than a 4-40 screw. Also, a #8 lockwasher is larger than a #4 lockwasher.

6.4 REQUIRED TOOLS, EQUIPMENT AND MATERIALS

The following tools, equipment and materials are recommended for assembling the Sol cabinet-chassis. (Unless indicated otherwise, none of the following items are supplied with your kit.)

1. Needle nose pliers
2. Diagonal cutters
3. Screwdriver, thin $\frac{1}{4}$ " blade
4. Screwdriver, #2 Phillips
5. Controlled heat soldering iron, 25 watt
6. 60-40 rosin-core solder (supplied)
7. Silicon grit abrasive paper, 220 & 400 grit
8. Boiled linseed oil
9. Turpentine or mineral spirits
10. Masking tape
11. Transparent tape
12. Rubber mallet or small hammer

6.5 ORIENTATION

6.5.1 Sol Backplane Board, Sol-BPB (Sol-20 Only)

The PC board identification (Sol-BPB) and revision level will be located in the upper left-hand corner of the board when the edge connector (gold contacts) is positioned at the bottom of the board. In this position, the component (front) side of the board is facing up. Subsequent position references related to the Sol-BPB assume this orientation.

6.5.2 Sol Cabinet-chassis

Unless specified otherwise, all position references (e.g., left, right, front, back, bottom and top) in the cabinet-chassis assembly instructions assume the Sol cabinet is viewed from the front (keyboard) when it is sitting in its normal position (keyboard up).

6.6 ASSEMBLY-TEST

NOTE

Instructions that apply only to the Sol-20 are preceded by an asterisk. Skip these instructions if you are assembling a Sol-10.

*6.6.1 Backplane Board (Sol-BPB) Assembly

Refer to assembly drawing, page X-11.

- *() Step 1. Visually inspect Sol-BPB PC board for obvious flaws such as solder bridges (shorts) between traces, broken traces and similar defects.

If visual inspection reveals any defects, return the board to Processor Technology for replacement. If the board passes inspection, go on to Step 2.

- *() Step 2. Install VIKING 3KH50/9VC5 100-pin edge connector on top edge of PC board. (This edge has silver (not gold) contacts.)

NOTE

This connector is supplied as a troubleshooting aid. It is not critical to normal operation of the Sol-20.

Position connector on PC board so that its #1 trace is aligned with the #1 trace on the board, and push connector fully onto board. Bend the connector pins slightly so that both rows of pins are in light contact with the traces on the board. DO NOT CLOSE CONNECTOR PINS SO MUCH THAT YOU WILL DAMAGE THE TRACES WHEN PLACING THE CONNECTOR OVER THE EDGE OF THE BOARD. While holding the connector and board together, place board solder side down on a book, or other flat surface that is higher than your work surface, so the connector extends fully over the edge. That is, the connector should not rest on the book. Reposition connector if needed to align the pins and traces. On the component (front) side of board, solder a pair of traces. On the component (front) side of board, solder a pair of pins at each end of the connector to their respective traces on the

(Step 2 continued on Page VI-8.)

board. Then solder the remaining 46 pins on the component side to traces.

The connector must be perpendicular to the edge of the board. If it is not, bend the pins you just soldered to obtain the required alignment. Then solder the other 50 pins to the traces.

- * () Step 3. Install the other five 100-pin edge connectors. Position connector on front side of board and insert pins. On solder (back) side of board, solder pins at opposite corners of the connector to hold it in place. Then solder remaining 98 pins. (Refer to Paragraph 6.6.1 on Page VI-6 for definition of front side of board.)
- * () Step 4. Connect 3" 5-wire cable to circuit board to uppermost pads in top right corner: Insert wires from solder (back) side of board and solder on component (front) side of board. If a wire is too large for the mounting hole, snip off as many individual strands as needed to obtain a fit. Connect cable leads as follows:

<u>CABLE LEAD</u>	<u>PAD</u>
White	Ground (fifth hole from right)
White	Ground (fourth hole from right)
Blue	+8 V dc (third hole from right)
Red-White	+16 V dc (second hole from right)
Yellow-White	-16 V dc (first hole from right)

NOTE

Pad orientations given above are as viewed from component (front) side of circuit board.

- * () Step 5. Fill all exposed (not covered with lacquer) feather-through holes on right-hand side of board with solder.

The backplane board is now assembled. Set it to one side for later installation in the cabinet-chassis.

6.6.2 Wooden-masonite Parts

Refer to assembly drawings, pages X8 and X9.

- () Step 6. Finish walnut side panels.

The sides of the Sol cabinet are solid black walnut which have been sanded to a smooth surface. If there should be any blemishes, remove them with 220 grit abrasive paper. SAND WITH THE GRAIN.. NEVER ACROSS TILE GRAIN.

We recommend an oil finish be applied to the walnut since such a finish lies "in" the wood, not on "top" of it. Also, no wax is necessary with an oil finish.

You may obtain a good finish by using a half-and-half mixture of boiled linseed oil and turpentine. Apply mixture with rag, soaking all surfaces. (End grain may require more oil than face grain.) Let stand for one-half hour, recoating any dry spots, and wipe dry with a clean cloth. Repeat as often as needed to obtain a lustrous finish. (It may take several days.)

You may also use a commercially available penetrating oil such as Watco Danish Oil or Tung Oil. Follow directions on the container if you use such an oil. For a more durable finish when using a penetrating oil:

1. Sand between applications with 220 grit silicon carbide abrasive paper. (Wipe clean after 15 minutes to avoid build-up.)
 2. Repeat the following day using 400 grit paper between applications.
 3. Repeat as often as desired, using a still finer grit paper between applications. DO NOT sand after final application, but wipe the surfaces clean and let dry for one day. Then coat with previously mentioned linseed oil-turpentine mixture and wipe dry.
- () Step 7. Using a black broad tipped felt pen, darken all edges of the two masonite parts.
- () Step 8. Mate the left walnut and masonite side pieces. (Refer to assembly drawing on page X-8.)

NOTE

When the walnut and masonite side pieces are correctly mated, the countersink side of the six countersunk (funnel-shaped enlargement) holes in the masonite will be next to the main chassis.

Insert five Tinnerman plastic inserts in the holes indicated on Drawing X-8. Insert these from the side that mates with the walnut. These inserts may be seated by gently tapping them with a hammer until fully seated.

- () Step 9. Insert remaining five Tinnerman inserts in right masonite side piece as you did the left side piece. (Refer to Drawing on page X-9.)

- () Step 10. Attach left masonite side piece to left walnut side piece with six 5/8" flat head wood screws. Drive these screws through the countersunk holes in the masonite into the walnut. (Refer to Drawing No. X-8.)

NOTE

Lead holes have been predrilled in the walnut to make driving these screws easier.

- () Step 11. Attach right masonite side piece to right walnut side piece as you did the left side pieces. (Refer to Drawing No X-9.)
- () Step 12. Set both side piece assemblies to one side.

6.6.3 Sol Assembly

Refer to Drawing No. X-10 in Section X. Figure 6-3 and 6-4 show complete Sol assemblies without covers.

- () Step 13. Mount keyboard support bracket (heavy gauge right angle brackets) to each side of the main chassis as shown in Drawing No. X-10 . These are mounted with the narrower side of the bracket at the top.

Attach each bracket to main chassis with two 6-32 x ½ binder or pan head screws and #6 lockwashers. Place lockwasher on screw, insert screw from outer surface of main chassis side wall and drive into the threaded bracket mounting holes.

- () Step 14. Attach power supply subchassis bracket (short leg "T" shaped bracket) to top front of power supply subchassis as shown in Drawing No. X-10. (Note that leg of "T" is closer to side wall of subchassis. This leg is for mounting a "power on" indicator light-not supplied.) Insert #6 x ¼ sheet metal screw from right side of side wall and drive into bracket.
- () Step 15. To gain access to the rear area of the power supply subchassis side wall, remove the #6 x ¼ sheet metal screw that attaches the fan closure plate to the subchassis. You should not have to disconnect the transformer (black wires) or AC receptacle ground (green wire) leads since they have sufficient slack to permit moving the closure plate out of the way. (Set screw to one side for use in re-installing the fan closure plate.)

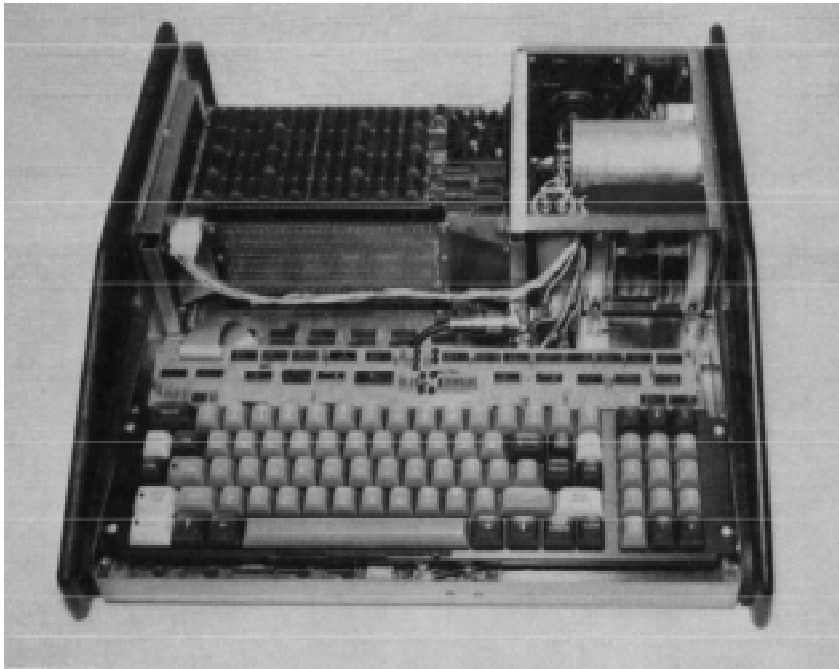


Figure 6-3. Sol-20 with covers removed. Front (or keyboard) is in foreground, power supply is in right rear corner, expansion chassis (with 8KRA Memory installed) is to left of power supply. The vertical board just behind white connector on left is the backplane board.

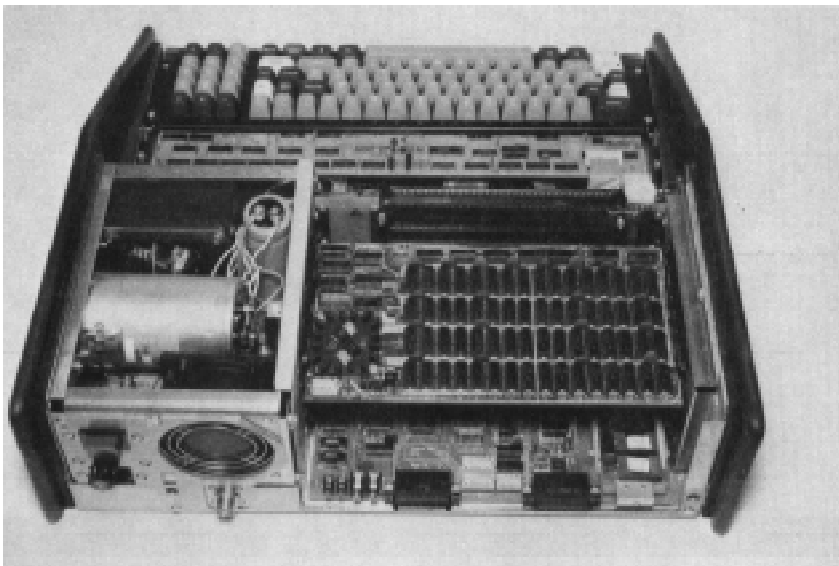


Figure 6-4. Sol-20 with covers removed. Rear side of assembly is in foreground and Sd-PC is just visible at lower right rear of assembly. 8KRA Memory is installed in expansion chassis above Sol-PC.

- () Step 16. Install power supply subchassis in main chassis as shown in Drawing No. X-10.

Place subchassis over the rear right corner of main chassis and lower it almost vertically into position. Attach subchassis to main chassis using eight #6 x $\frac{1}{4}$ sheet metal screws. Five screws are driven through the bottom of the main chassis into the subchassis. The other three are driven through the right side of the main chassis into the subchassis.

- () Step 17. Place right side walnut-masonite assembly in proper position against right side of main chassis and outline the finger well on the chassis. Remove backing from one black finger well label and affix it to the right side of main chassis. Position label to cover the finger well outline you made. Be sure label extends beyond all edges of the outline.

- () Step 18. Using five 8-32 x $\frac{1}{2}$ binder or pan head screws attach right side walnut-masonite assembly to main chassis and power supply subchassis as shown in Drawing No. x-10. Insert screws from inside surface of chassis and drive into the plastic inserts you installed in Step 9. Note that the two front screws are driven through the main chassis, the two lower rear screws are driven through both the power supply subchassis, and the upper rear screw is driven through the power supply subchassis.

- () Step 19. Assemble expansion chassis ("U" shaped chassis).

*() Prethread 12 mounting holes (six on each side) on expansion chassis side walls for backplane brackets with #6 x $\frac{1}{4}$ sheet metal screws. Three of these holes on each side are located near the front edge of the main chassis. The remaining three holes on each side are about $1\frac{1}{2}$ to 2 inches behind the front three. Leave screws installed.

- () Install female coaxial connector on the tab that extends out from the lower right front of the expansion chassis. Insert connector through tab so threaded end faces left as shown in Drawing No. X-10. Insert three 4-40 x $\frac{5}{16}$ binder or pan head screws from left side of tab through the two front and lower rear mounting holes. Place #4 lockwasher on each and secure with 4-40 hex nuts. Insert another 4-40 x $\frac{5}{16}$ binder or pan head screw through upper rear mounting hole and install 4-40 hex nut. (Leave this nut loose.)

*() Install 10 plastic card guides (five on each side) on inside surface of both side walls of the expansion chassis.

These are installed over the ventilation grilles with the gripper fingers pointing towards the backplane board. install, simply insert posts on guide into appropriate mounting holes and push in until they snap into place.

- () Step 20. Install expansion chassis on main chassis as shown in Drawing No. X-10.

Position expansion chassis with coaxial connector at the front (near FWB3 on power supply subchassis) over left rear area of main chassis and lower into place. Attach expansion chassis to main chassis using eight #6 x ¼ sheet metal screws. Four screws are driven through the bottom of the main chassis into the expansion chassis, three are driven through the left side of the main chassis into the expansion chassis, and one is driven through the lower left corner of the back side of the main chassis into the expansion chassis.

- () Step 21. Attach left end of power supply subchassis bracket to expansion chassis as shown in Drawing No. X-10. Drive one 6 x ¼ sheet metal screw through expansion chassis into bracket.
- () Step 22. Route coaxial cable from connector on fan closure plate along left side of power supply subchassis to connector on expansion chassis.
- () Step 23. Using the #6 x ¼ sheet metal screw you removed in Step 15. re-attach fan closure plate to power supply subchassis. (Make sure side lip on plate is on right side of expansion chassis side wall.
- () Step 24. Attach fan closure plate to expansion chassis with two #6 x ¼ sheet metal screws. Drive screws through expansion chassis into fan closure plate.

NOTE

If lip on fan closure plate and expansion chassis are not in contact, insert one or two ½" flat washers as needed between the two surfaces. Place washers so screws pass through them.

- () Step 25. Connect free end of coaxial cable from connector on fan closure plate to connector on expansion chassis. Solder inner conductor to pin of connector. Remove hex nut on upper rear connector mounting screw, place lockwasher lug (coaxial shield) on screw and secure with nut.

Step 26. Install male coaxial connector on free end of coaxial cable that is connected to Sol-PC (the composite video output cable). Install connector as follows (refer to Figure 6-5):

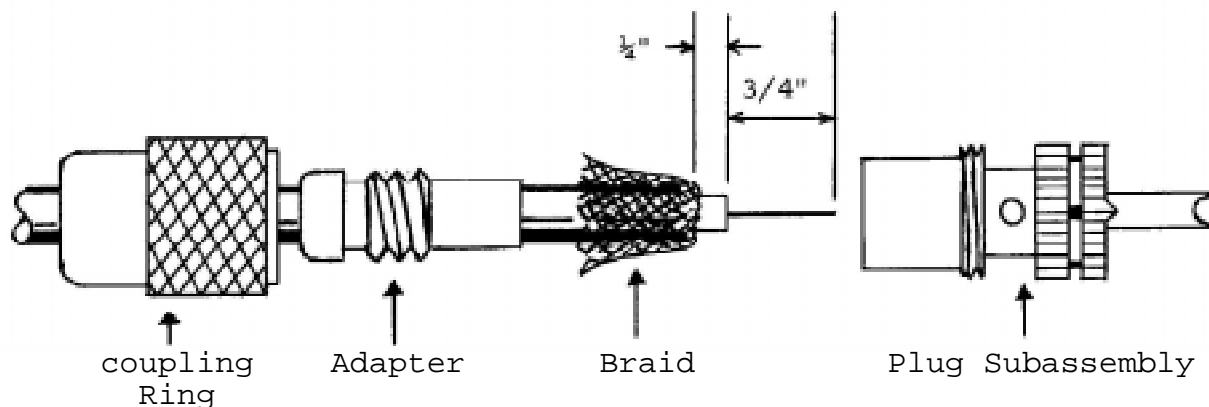


Figure 6-5. Sol-PC coaxial cable connector assembly.

- () Slide coupling ring and adapter on cable in that order and cut end of cable even.
- () Remove one inch of outer insulation.
- () Fan braid slightly and fold back over outer insulation as shown.
- () Slide adapter fully up under braid and press braid down over adapter body.
- () Trim braid so that it does not interfere with adapter threads.
- () Remove 3/4" of inner conductor insulation and tin exposed conductor.
- () Slide cable fully into plug subassembly and screw subassembly on adapter.
- () Solder braid to plug subassembly shell through solder holes. (Use enough heat to create a good bond between braid and shell.)
- () Solder center conductor to plug contact by filling contact with solder. Cut off excess conductor.
- () Slide coupling ring over plug subassembly and screw it onto plug.

- () Step 27. Install Sol-PC in expansion chassis.

Position Sol-PC on bottom of expansion chassis with J1, J2 and J6 through J9 at the rear. Align threaded standoff fs on bottom of Sol-PC with the oblong holes in the bottom of the main chassis.

Attach Sol-PC to chassis with eight 4-40 x 5/16 binder or pan head screws and #4 lockwashers. Place washer on screw and drive screw loosely into standoff from bottom of main chassis. Leave all eight screws loose.

- () Step 28. Connect Sol-PC composite video output cable to expansion chassis coaxial connector.

- () Step 29. Affix black finger well label to left side of main chassis in same manner as you did the right side. (See Step 17.) MAKE SURE LABEL DOES NOT OBSTRUCT ANY OF THE COOLING VENTS.

- () Step 30. Using three 8-32 x 1/2 and two 8-32 x 1 binder or pan head screws, attach left side walnut-masonite assembly to main chassis as shown in Drawing No. 101000. Insert screws from inside surface of chassis and drive into the plastic inserts you installed in Step 8. Note that the two front screws (8-32 x 1/2) are driven through the main chassis, the uppermost screw (8-32 x 1/2) is driven through the expansion chassis, and the two lower rear screws (8-32 x 1) are driven through both the expansion chassis and main chassis.

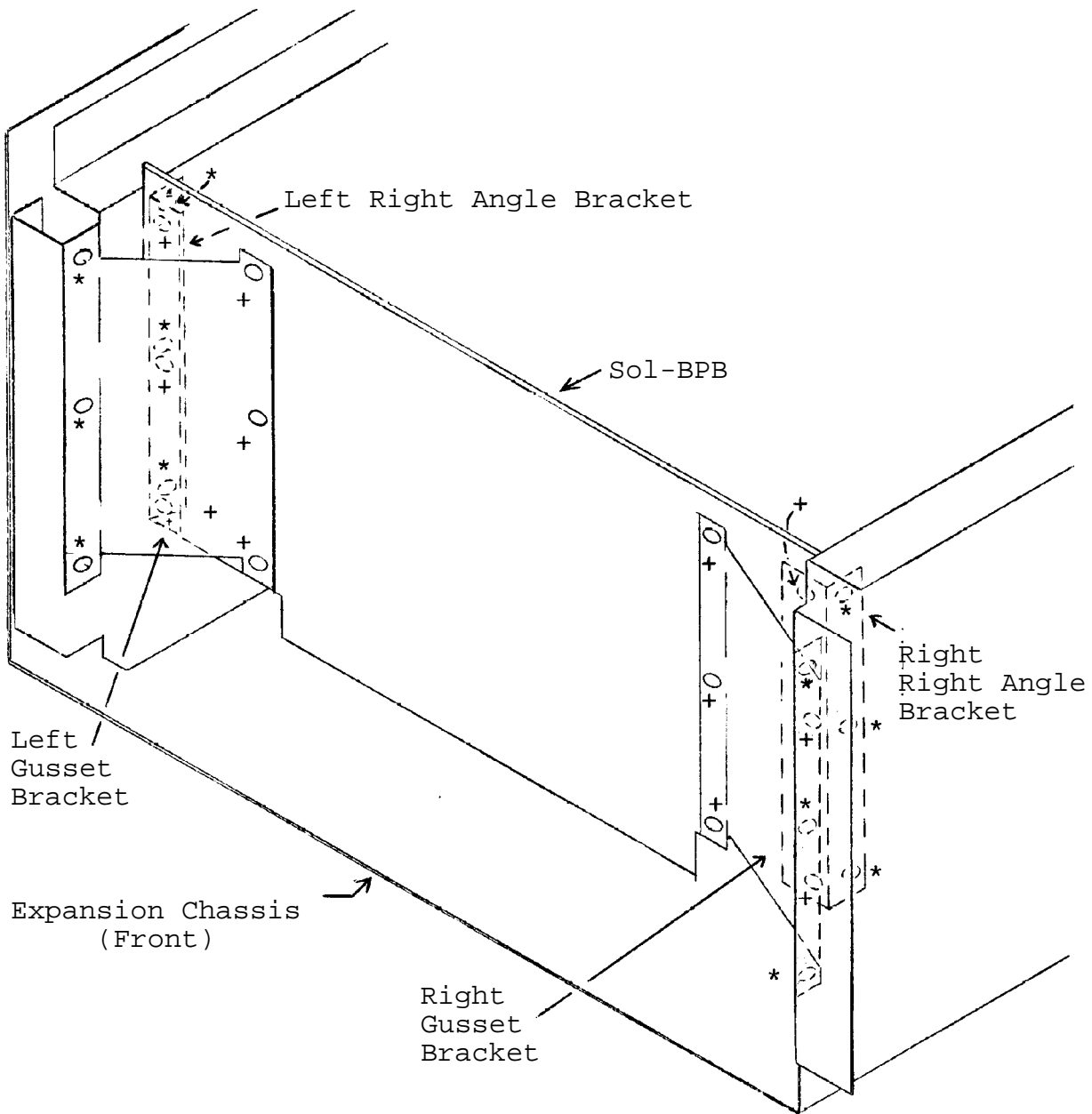
- *() Step 31. Install left and right backplane right angle brackets (light gauge brackets) on expansion chassis side walls. Refer to Figure 6-6 on Page VI-16.) These two brackets are installed just to the front of the card guides and should be positioned as shown in Figure 6-6. Attach each bracket to the chassis with three #6 x 1/4 sheet metal screws. USE THE SCREWS YOU USED IN STEP 19 TO PRETHREAD THE HOLES.

- *() Step 32. Install backplane circuit board (Sol-BPB). The photograph in Figure 6-7 on Page VI-17 shows the backplane board installed.

- *() Position Sol-BPB with 100-pin male edge connector down and the five female edge connectors facing the card guides. The board should rest against the front face of the right angle brackets as shown in Figure 6-6. Adjust position of Sol-PC as needed so that you can plug the Sol-BPB edge connector into J11 on the Sol-PC.

- *() Align holes on left and right ends of Sol-BPB with those in right angle brackets.

(Step 32 continued on Page VI-17)



- * #6 x 1/4 sheet metal screw
- + 4-40 x 5/8 binder or pan head screw,
#4 lockwasher and 4-40 hex nut

Figure 6-6. Backplane board (Sol-BPB) installation.

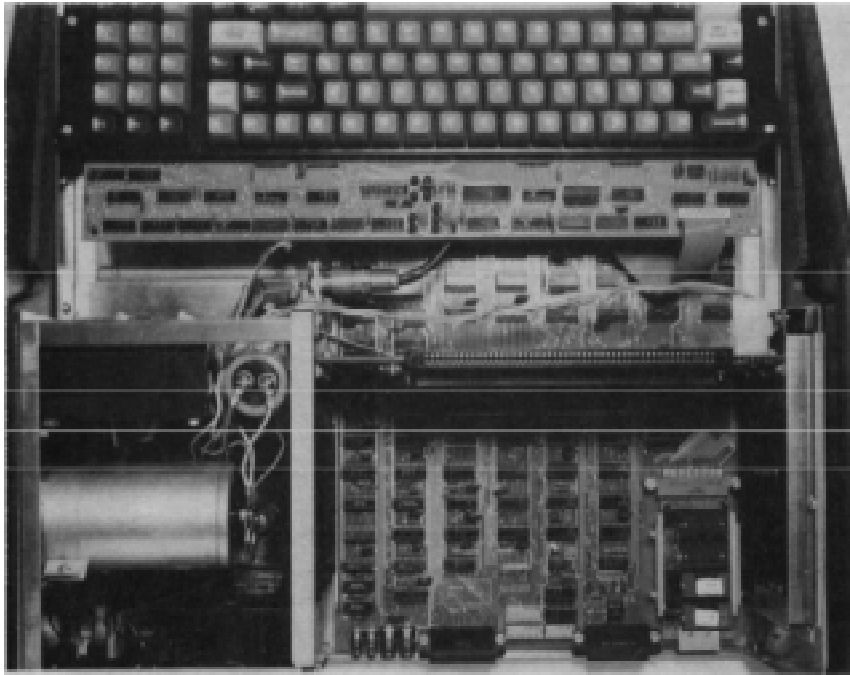


Figure 6-7. Backplane board (Sol-BPB) installation. Rear of Sol is at bottom and Sol-BPB is to right of power supply subchassis in line with C8 and transformer.

(Step 32 continued)

- * () Attach Sol-BPB to brackets with three 4-40 x 5/16 binder or pan head screws, #4 lockwashers and 4-40 hex nuts on each side. Insert screws from the back side of bracket through Sol-BPB, place lockwasher on each screw and secure each with nut.
- * () Step 33. Install left and right gusset brackets as shown in Figure 6-6 on Page VI-16.
- * () Fit narrower gusset bracket on left side so that its flanges are flat against the expansion chassis side wall and the backplane board. (You may have to bend the flange slightly to obtain a proper fit.)
- * () Attach bracket to expansion chassis side wall with the three #6 x 1/4 sheet metal screws you used in Step 19 to prethread the holes.

See WARNING on Page VI-18.

(Step 33 continued on Page VI-18.)

(Step 33 continued.)

WARNING

IT IS QUITE EASY TO SCRATCH OR CUT YOUR HAND ON THE SOLDER SIDE OF THE BACKPLANE BOARD WHEN DRIVING THESE SCREWS. PLACE A SUITABLE PROTECTIVE BARRIER, SUCH AS CARDBOARD, AGAINST SOLDER SIDE OF BACKPLANE BOARD DURING INSTALLATION TO PREVENT SUCH INJURY.

- * () Attach bracket to backplane board with three 4-40 x 5/8 binder or pan head screws, #4 lockwashers and 4-40 hex nuts. Insert screws from front side of bracket through Sol-BPB, place lockwasher on each screw and secure each with nut.
- * () Install wider gusset bracket on right side in the same manner as you did the left bracket. THE PRECEDING WARNING ALSO APPLIES TO INSTALLING THIS BRACKET.
- * () Step 34. Connect Sol-20 DC power cable from power supply subchassis to the Sol-BPB power cable you installed in Step 4.
- () Step 35. Check that Sol-PC is in optimum position and tighten the eight screws holding the Sol-PC to the expansion-main chassis assembly. (See Step 27.)
- () Step 36. Connect Sol-PC power cable (4-wire) to J10 on Sol-PC. CAUTION: Make sure cable connector mates exactly with J10; that is, pin 1 to pin 1, pin 2 to pin 2, etc. Any other mating relationship will damage the IC's on the Sol-PC. (Refer to Step 15 in Section III.)
- () Step 37. Position keyboard (Sol-KBD) near its mounting brackets and connect 20-conductor ribbon cable supplied with Sol keyboard kit between J1 on keyboard and J3 on Sol-PC. With the cable connected properly, the cable will run away from the keys from J1 on the keyboard, and towards the keys from J3 on Sol-PC.
- () Step 38. Attach keyboard to keyboard brackets with two 6-32 x 1/2 binder or pan head screws and #6 lockwashers on each side. Place washer on each screw and drive screws loosely into threaded holes in brackets.

- () Step 39. If your kit does not include the 15-key numeric pad, install the plastic insert supplied with your Sal keyboard kit to the keyboard cover. Attach it on the right end and to the bottom of the cover with masking tape.
- () Step 40. Remove protective cover from one side of Plexiglass strip and attach "Sal Terminal Computer" trim plate to Plexiglass with small pieces of transparent tape. Place trim plate with printed side against Plexiglass.
- () Step 41. Remove protective cover from other side of Plexiglass and slide it into the channel above the keyboard cutout.

NOTE

A hole is provided in the sheet metal behind the trim plate. This may be used for a "power on" indicator light if desired.

- () Step 42. Install keyboard cover. Hook front of cover under front edge of main chassis and lower it over the keyboard. (A slight adjustment of the keyboard position may be needed to obtain a proper fit.)

Position keyboard within cutout in cover if needed and tighten keyboard mounting screws.

- () Step 43. Install top cover.

() Be sure power cord is not plugged into 110 V ac outlet and disconnect cord from fan closure plate receptacle.

() Remove fuse holder cap and fuse.

CAUTION

NEVER REMOVE OR INSTALL FUSE WITH POWER ON.

- () Hook top cover over back edge of keyboard cover and lower it down into place over the rear of the main chassis. Install the two thumb screws (one at the lower left corner and the other to the right of the fan closure plate coaxial connector) to attach cover to rear of main chassis.
- () Step 44. Re-install fuse and plug power cord into receptacle. BE SURE POWER CORD IS NOT PLUGGED INTO 110 V ac OUTLET.

See CAUTION on Page VI-20.

(Step 44 continued.)

CAUTION

NEVER REMOVE OR INSTALL FUSE WITH POWER ON.

- () Step 45. Remove backing from connector identification label and affix it to rear of top cover. Position label just above Sol-PC connector opening in cover so that "J9" is aligned with left mast (as viewed from rear of Sol) subminiature phone jack and "J1" is aligned with right most 25-pin female connector.
- () Step 46. Remove backing from serial number label and affix it to rear of top cover. Position label to right (as viewed from rear of Sol) of fan opening in cover.
- () Step 47. Affix self-stick protective pads to bottom of Sal as shown in Figure 6-8.

You have now completed assembly of your Sol Terminal Computer™ . It is ready for use as a stand-alone computer or CRT terminal. Congratulations on a job well done.

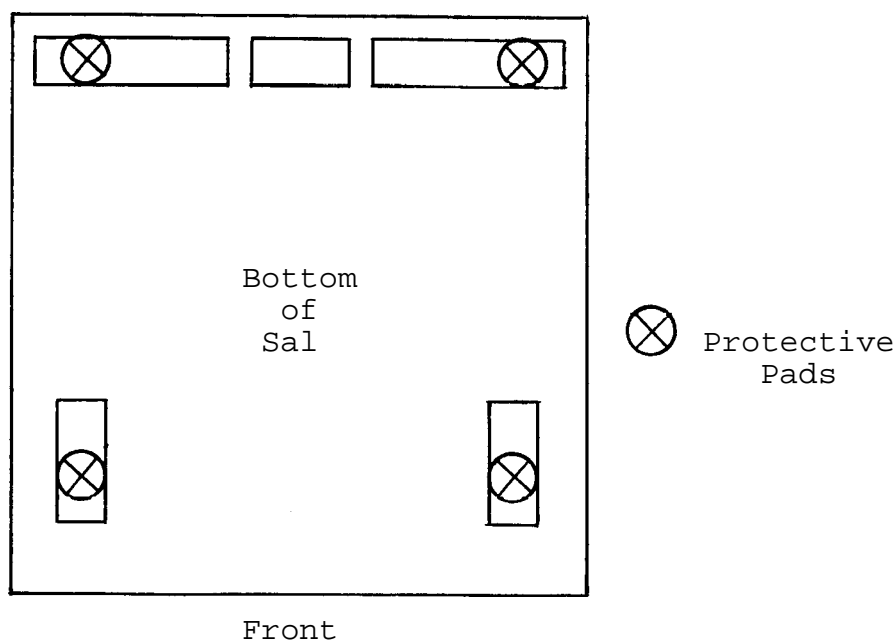


Figure 6-8. Protective foot pad installation.