07

CONTENTS

07-010   INTRODUCTION

The 5211 Printer attachment is used to attach either the Model 1 or Model 2 5211 Printer to System/34. With the 48-character set, the Model 1 has an operating speed of 160 lines per minute and the Model 2 has an operating speed of 300 lines per minute.

07-100   LOCATIONS

All parts for the printer attachment are located on the A-gate, A2 board. These parts include two cards, four top card connectors, and three flat cables. For a description of the top card connectors, see paragraph 07-300. The two cards, their locations, and the hardware on each card are:

- Printer controller card (A-A2S2)
  - 4-bit ALU
  - 4-bit A and B registers
  - 16 4-bit data address registers
  - 16 4-bit primary work registers
  - 16 4-bit auxiliary work registers
  - 16-bit storage address register (The SAR bits are numbered XSAR 0 through 3 and SAR 0 through 11.)
  - 16-bit instruction address register
  - 2K bytes of random access storage
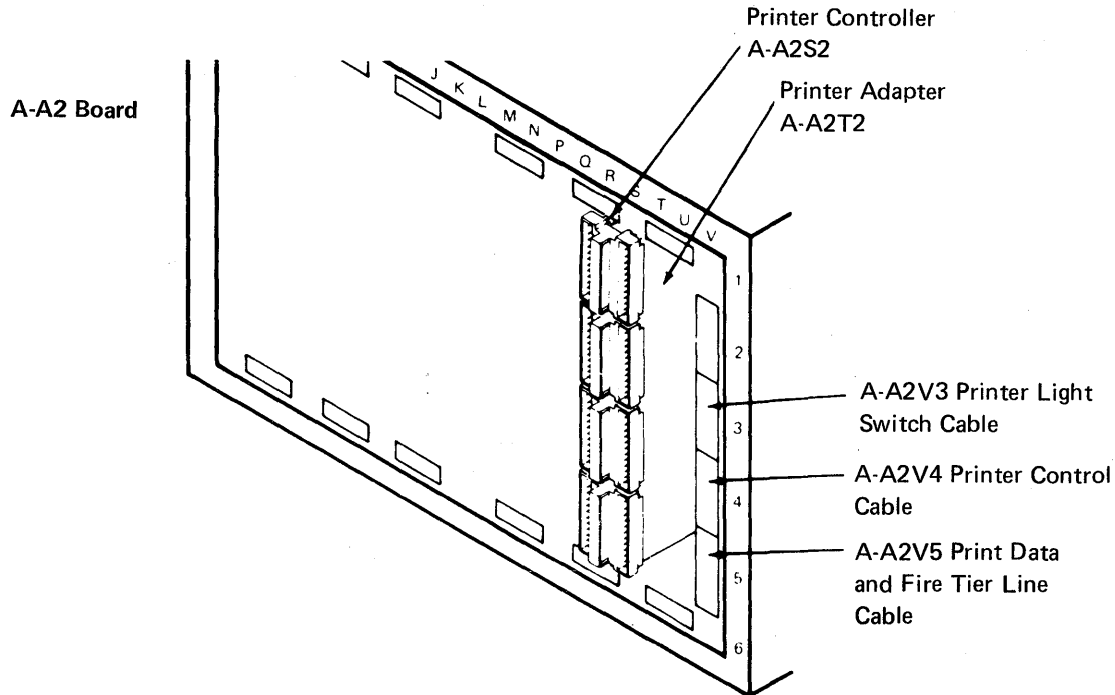 - Control logic: Includes control lines between the controller card and the adapter card.

- Printer adapter card (A-A2T2)
  - System command decode
  - System/controller data registers
  - Printer/controller data registers
  - Printer controls:
    Fire tier generation
    Belt and carriage controls
    Hammer echo checking
    Control lines for printer indicators and switches
  - Controller data bus in assembler
  - System data bus in assembler

The three flat cables used for the printer attachment are plugged into sockets V3, V4, and V5 on the A-A2 board. The other ends of the cables are plugged into the cable tower. See paragraph 07-400 for a description of these cables.

Figure 07-1. Printer Attachment Card Locations

07-200   MAINTENANCE

Because of the parts (cards, top card connectors, and cables) that make up the printer attachment, there are no adjustment, removal, or replacement procedures. Any maintenance performed on the attachment needs a failing part exchanged. For locations of all the parts, see Figures 07-1 through 07-3.

For maintenance information on the 5211 Printer, see the *5211 Printer Maintenance Information Manual.*

07-300   TOP CARD CONNECTORS

The four top card connectors on the printer attachment cards are marked (from top to bottom) W, X, Y, and Z. The pins that can be probed on each connector are numbered 02 through 13 (right side of connector) and 22 through 33 (left side of connector).

Using connector W as an example in Figure 07-2, notice that pins W02 through W13 of the T2 card, and pins W22 through W33 of the S2 card can be probed. Also notice that pin A-A2T2W22 cannot be probed with the top card connector installed; but this pin is connected to A-A2S2W22, which can be probed. All of the 02 through 13 pins of the S2 card and the 22 through 33 pins of the T2 card cannot be probed when the top card connector is installed.

As an aid to identifying pin locations on each card connector, at least one pin location is shown on each connector in Figure 07-2.
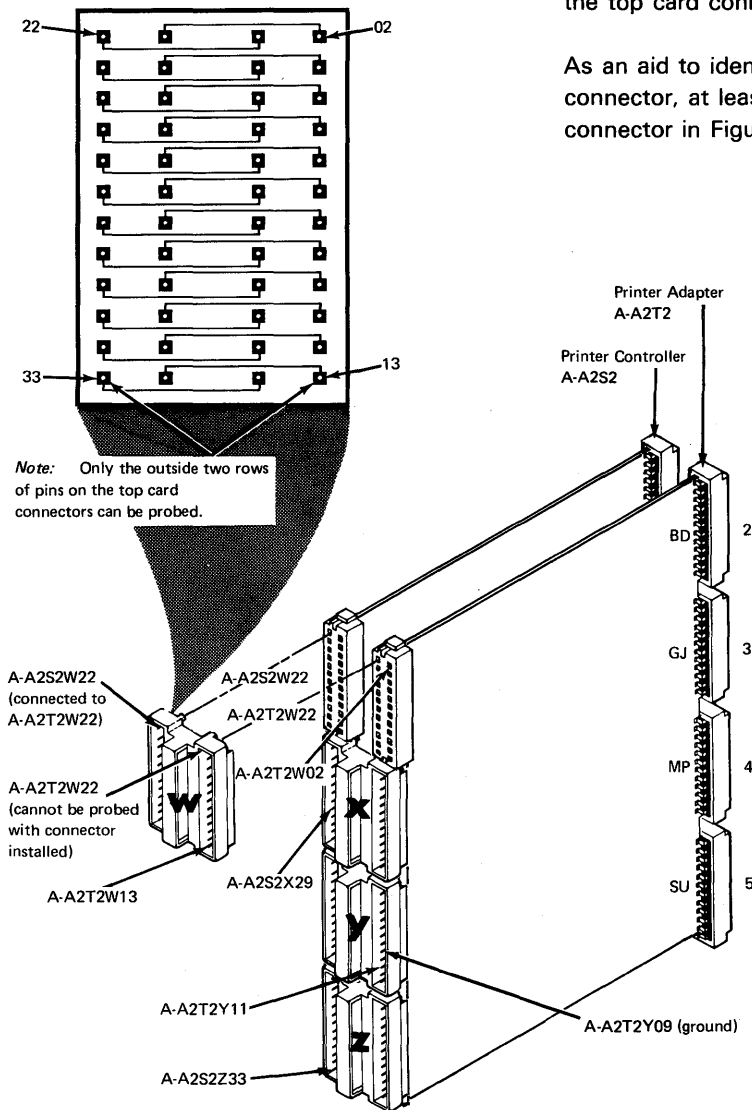

Figure 07-2. Printer Attachment Top Card Connectors

07-400   INTERNAL CABLES

Three internal cables are used to attach the 5211 Printer
to System/34. These cables are connected from the
A-gate, A2 board to the cable tower. See Figure 07-3
for a description of each cable and for the cable
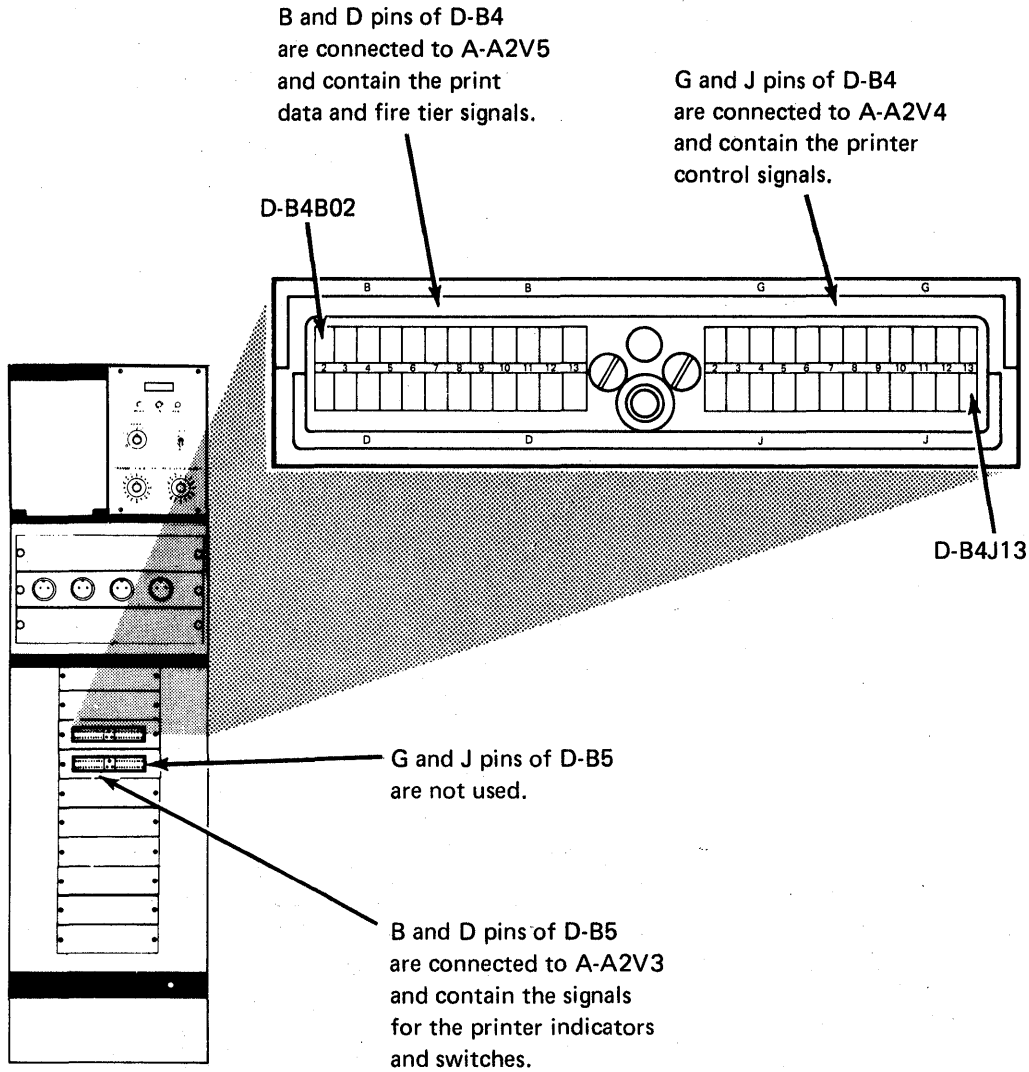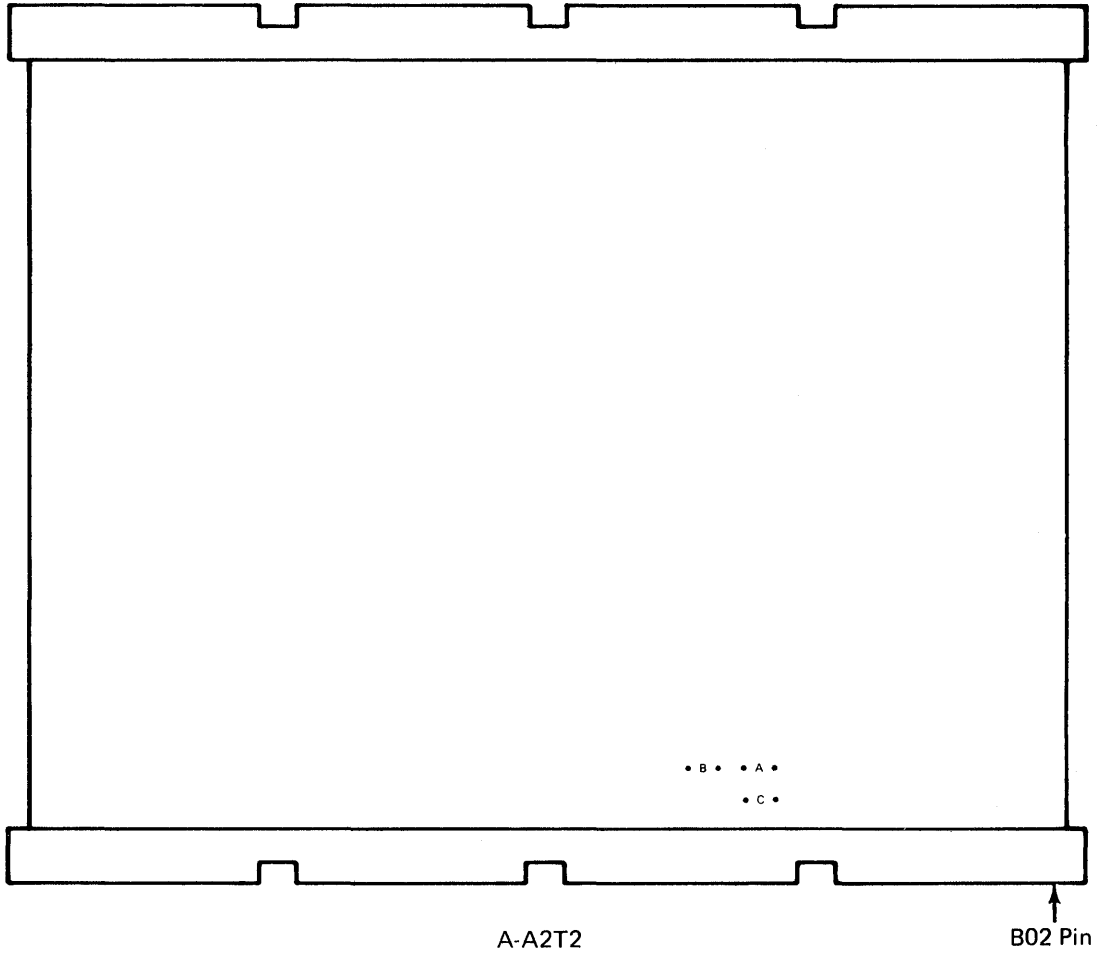locations on the cable entry tower.

B and D pins of D-B4
are connected to A-A2V5
and contain the print
data and fire tier signals.

G and J pins of D-B4
are connected to A-A2V4
and contain the printer
control signals.

D-B4B02

D-B4J13

G and J pins of D-B5
are not used.

B and D pins of D-B5
are connected to A-A2V3
and contain the signals
for the printer indicators
and switches.

Figure 07-3. Cable Entry Tower

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07-500   CARD JUMPERS

There are three jumper locations on the printer adapter
card located in A-A2T2. Attach the jumpers (IBM part
1675209) as shown in Figure 07-4.

A-A2T2   B02 Pin

A — Must be removed for both the 5211 Model 1 (160 lines
per minute) and the 5211 Model 2 (300 lines per minute)
printers.

B — Needed for both printer models.

C — Needed for the 5211 Model 2 (300 lines per minute)
printer; not needed for the 5211 Model 1 (160 lines
per minute) printer.

Figure 07-4. Printer Adapter Card Jumpers