"DATASPEED*" 4540 STATION ARRANGEMENTS

ROUTINE MAINTENANCE

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1. GENERAL

1.01 This section provides the routine maintenance procedures and methods for a DATASPEED 4540 Station, hereafter referred to as 4540 type.

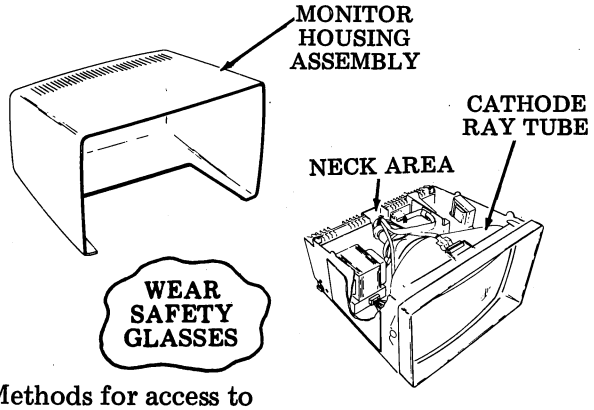
1.02 This section is reissued to add methods for 4540 Single Display Stations (4540 SDS) and the AP200 printer.

Note: When ordering replaceable parts or components, unless otherwise specified, prefix each part number with the letters "TP" (ie, TP410055).

1.03 The following dangers and warning are to be used as safety measures for the apparatus and the craftsperson.

Danger 1: Turn off all power and signal sources before removing or replacing any component.

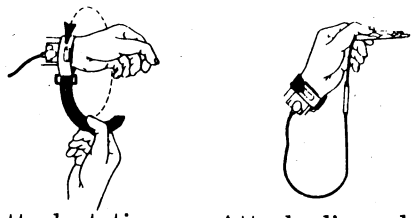
Danger 2: Wear approved safety glasses when the housing of the monitor is removed, as the display tube is fragile in the neck area and is subject to implosion if broken. Be careful not to strike the glass of the tube with tools or components when working in its vicinity. (Fig. 1).



Methods for access to clean the monitor are given in Part 3.

Fig. 1—Monitor

Warning: To avoid possible internal damage to circuitry, wear a 346392 static discharge strap connected to a ground to allow static discharge before handling circuit cards for removal or replacement. Avoid touching circuit lands or components as much as possible (Fig. 2).



Attach static ground strap tightly to wrist.

Attach clip end of static discharge strap to frame ground.

Fig. 2—Ground Strap

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1.04 Perform the routine maintenance at the customer's convenience. Consider any special maintenance or corrective action requested by the customer or operator.

1.05 This routine is for field use only. Do not attempt repairs without notifying the customer and your supervisor.

2. TOOLS AND SUPPLIES

2.01 Tools required for routine maintenance:

- Static discharge strap (346392).
- Safety glasses or goggles (approved).
- Soft, bristled brush (1/2 inch collar).
- Vacuum, hand-held (battery or ac type).

2.02 Supplies required for routine maintenance:

- Soft wiping cloths (lint-free).
- Mild detergent (household).
- Container for detergent solution.

3. ROUTINE MAINTENANCE

3.01 The routine required is primarily for the mechanical facilities of each device. This routine is to be performed on each device of a station arrangement, after one year or 2000 hours (50 weeks times 5 days/week times 8 hours/day) of service by the station arrangement (whichever occurs first). Routine intervals should be shorter in dirty or corrosive environments.

3.02 Obtain a station release from attendant, test board, or customer's communication center (give the approximate length of time the station will be out of service). Turn off all power.

3.03 Cleaning routine:

Note: On customer location, avoid cleaning methods that spread dust and debris to surrounding areas.

Warning: Do not use sharp objects, harsh abrasive cleaning agents or solvents which could scratch or damage plastic surfaces.

Cabinets, Pedestals and Keyboards

(a) Clean all ventilating screens; use a soft bristled brush to remove debris while vacuuming. See Fig. 3. There is no screen on keyboards. Brush and vacuum fan assembly in printer cabinet. (There is no fan in the 40CAB201 friction feed cabinet).

(b) Clean exterior surfaces; wash with mild detergent solution, rinse with damp cloth, buff dry with soft cloth.

Monitors and Display Bases

(a) Clean all ventilating slots. Top, bottom and rear of monitor, lower edge and top of display base. (See Fig. 3).

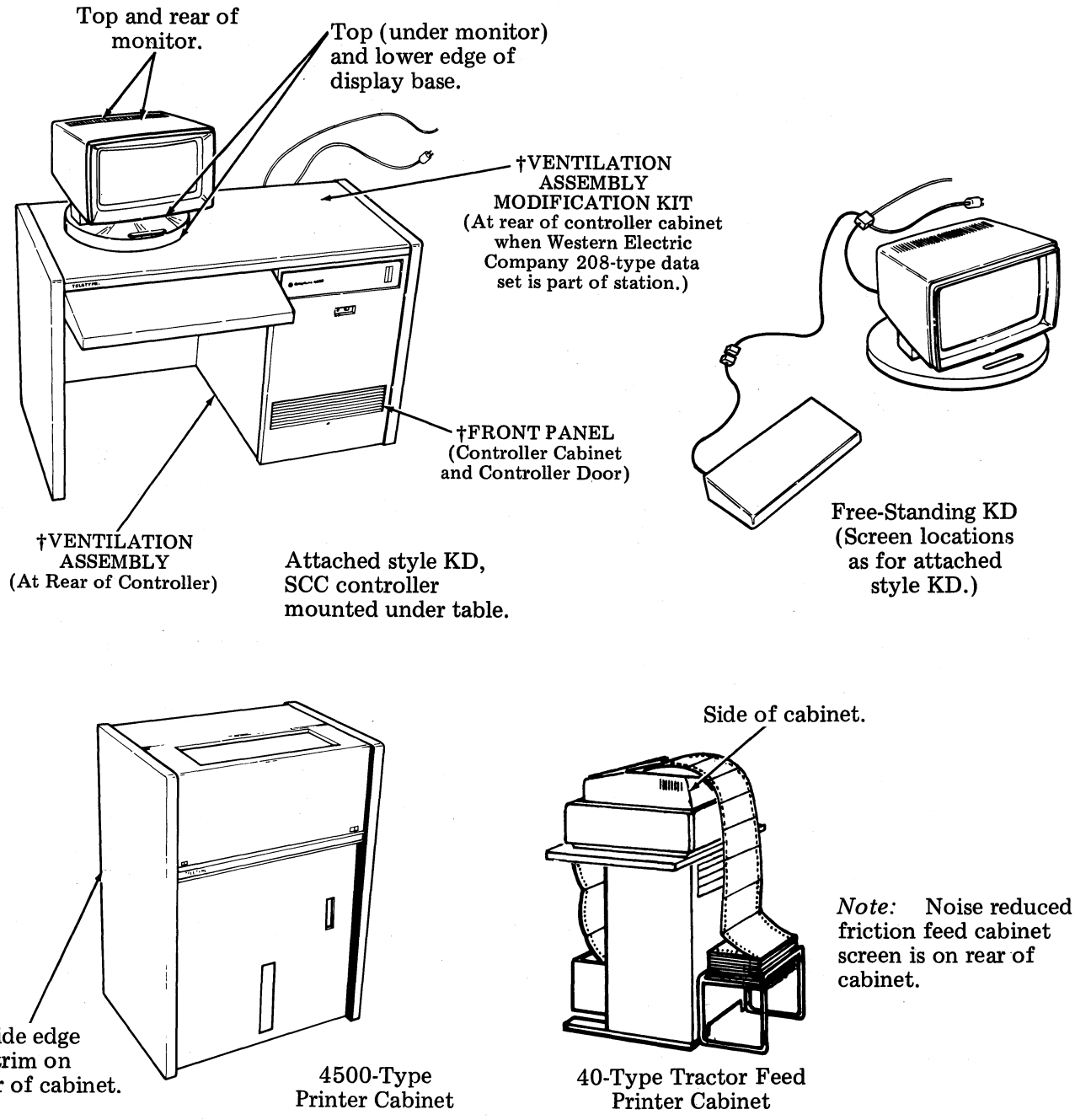
(b) Clean exterior surfaces — wash, rinse and buff.

(c) Interior of monitor — brush and vacuum. (See 3.06 for fuse check.)

Note: Dismantling for cleaning shall be kept to a minimum. To remove monitor cover, tilt monitor back, push latch to right, slide cover to rear. (The display base is not designed for field disassembly.)

SCC Controller

Clean ventilation screens of controller door and ventilation assembly. Brush and vacuum fan assembly, see Fig. 3.



†These items apply to clustered 4540 (equipped with SCC controller), not to 4540 SDS.

Fig. 3—Ventilating Screen Locations

3.04 Cabinets, pedestals, monitors, display bases and keyboards do not require routine lubrication.

3.05 Refer to Figs. 4 through 10 and check for and correct any defects in the general appearance of the station:

- All connectors are seated properly and securely.
- No pinched or crimped wires or cables.
- Doors and panels open and close properly.
- Covers are secure.
- Grounding straps connected and in good condition.

3.06 In the clustered 4540, grounding between the SCC power supply and ventilation assembly is done through connectors.

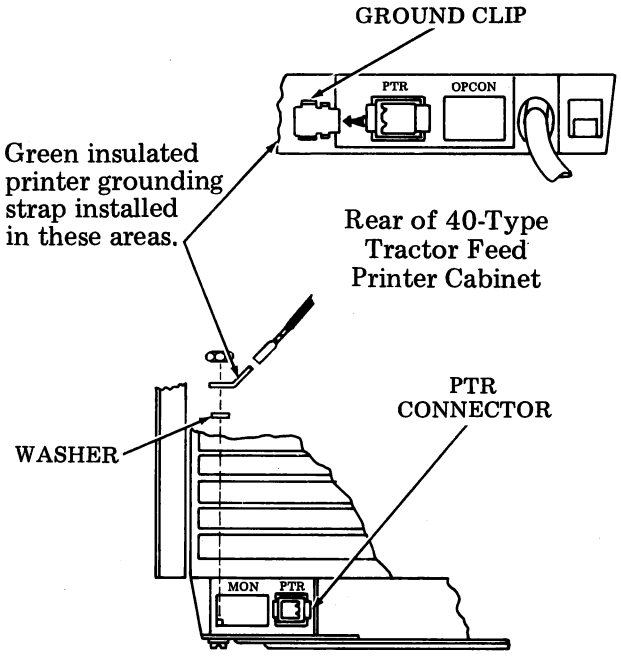


Fig. 4—Rear of 40-Type Friction Feed Printer Cabinet

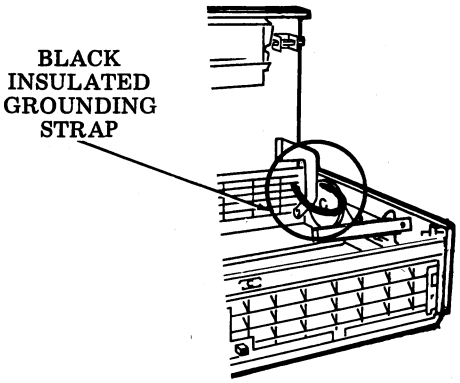
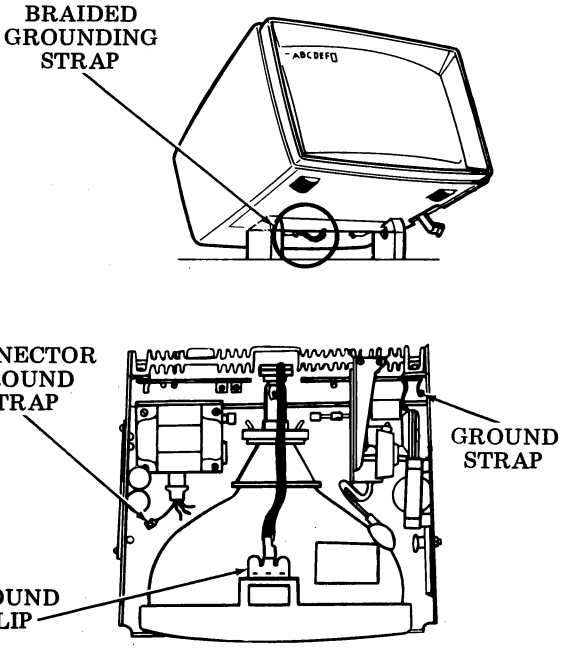


Fig. 5—40-Type Friction Feed Printer Cabinet (40P201 and 40P251)



(Top View Housing Removed)

Fig. 6—Monitor

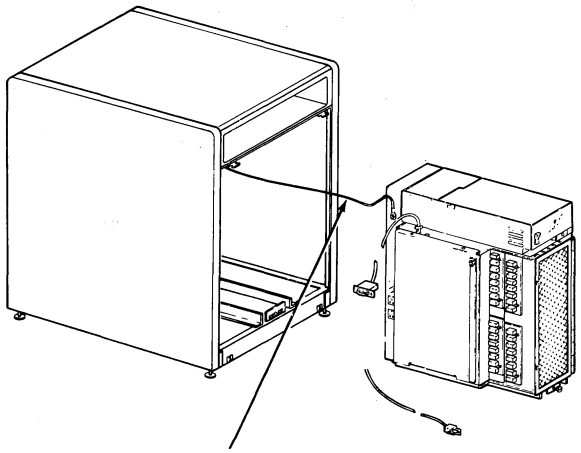


Fig. 7—Controller and Cabinet

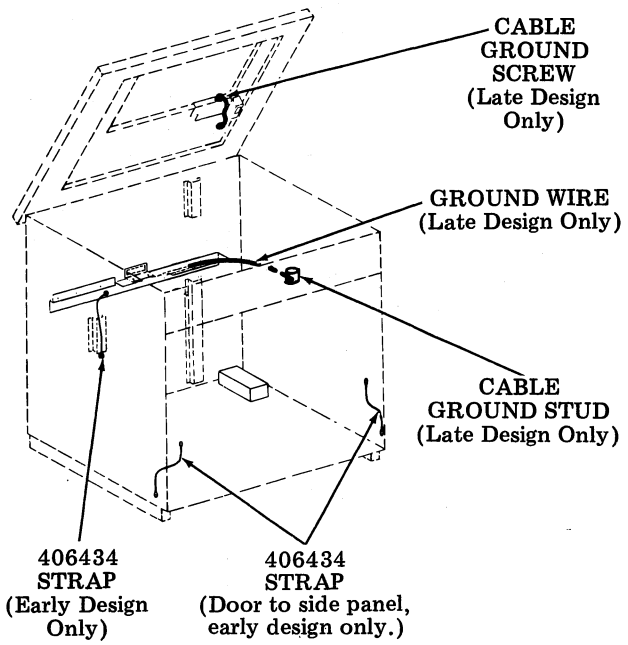


Fig. 9—Forms Access Printer Cabinet

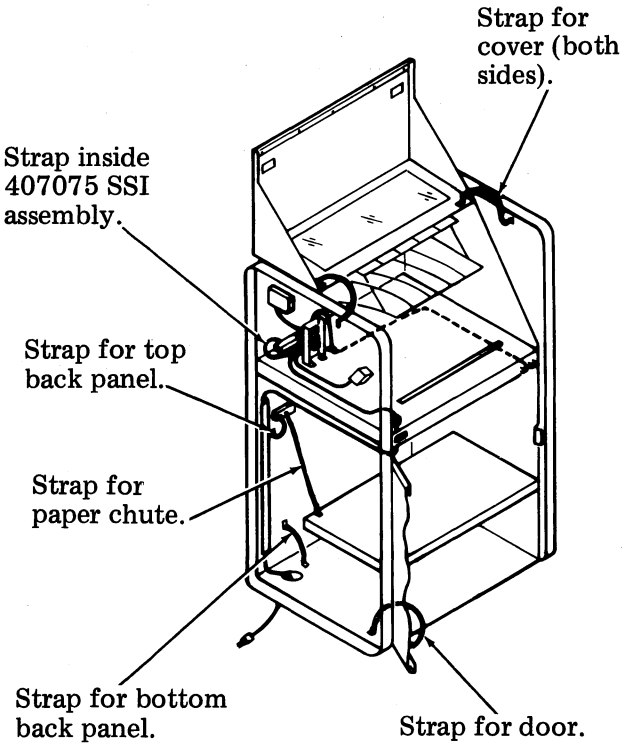
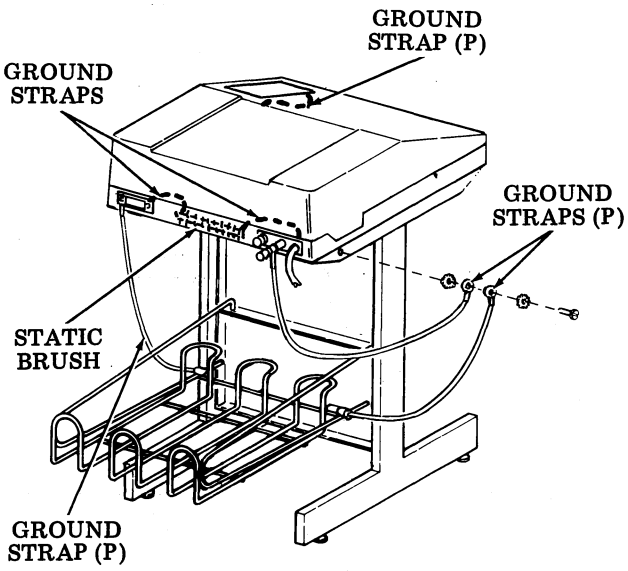


Fig. 8—Front of 4500-Type
Printer Cabinet



Items marked with (P) are
only present when pedestal
is used.

Fig. 10—AP200 Printer With 45CAB403/AAA
Pedestal Assembly

3.07 Check fuse condition and ratings (fuse ratings are critical, no higher ratings than specified shall be used). Refer to Fig. 2 for locations.

Printer	= 1 Amp SL-BL MDL-1 (143306)
SCC Controller	= 5 Amp SL-BL (129920)
Monitor (Early Design)	= 1.4 Amp (Special plug-in type, must be marked, number 341578).
(Late Design)	= 1.5 Amp SL-BL glass type (341686)
Display Base Cable (4540 SDS or Late Design for Clustered 4540)	= 3.2 Amp SL-BL (120167)

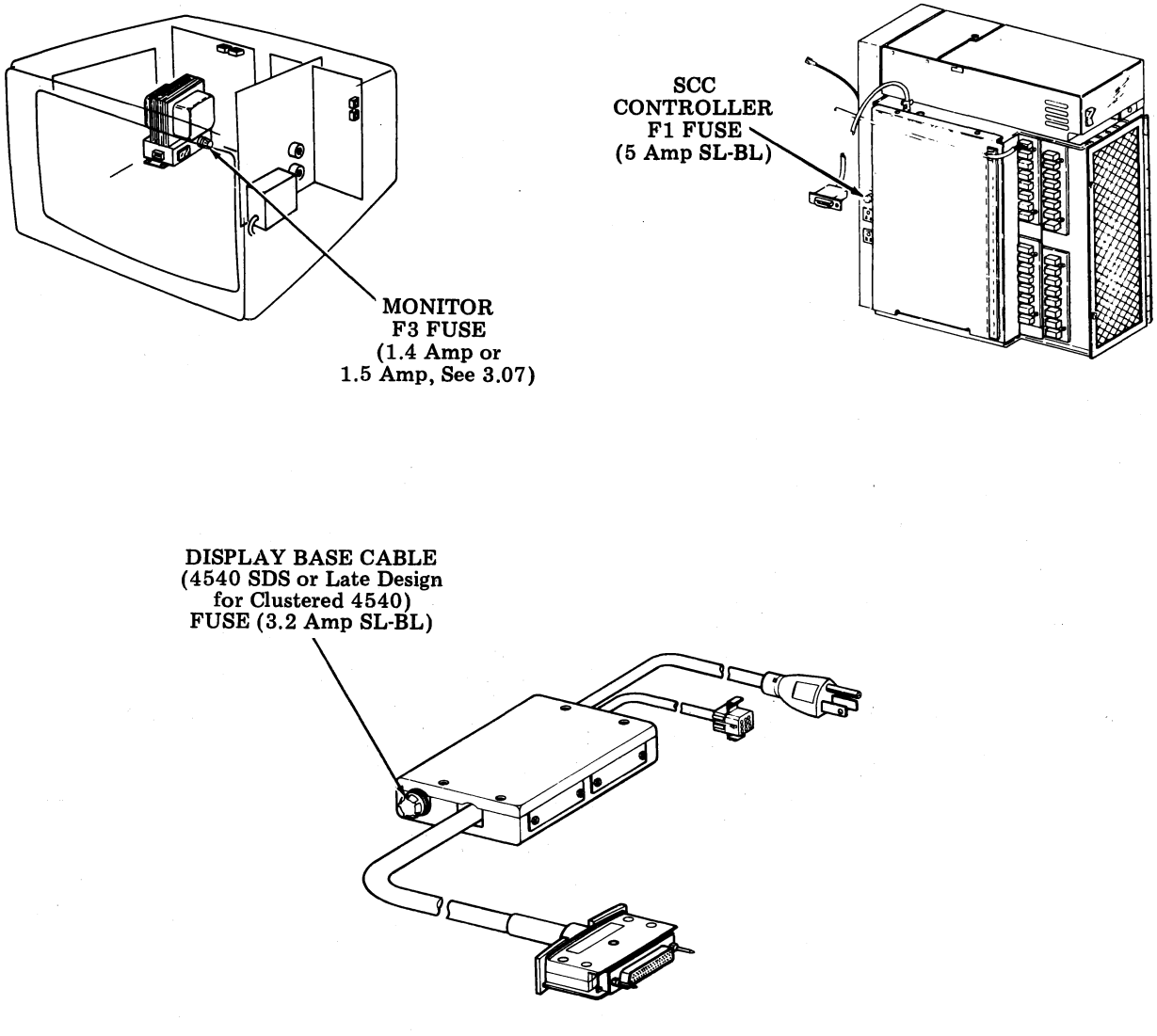
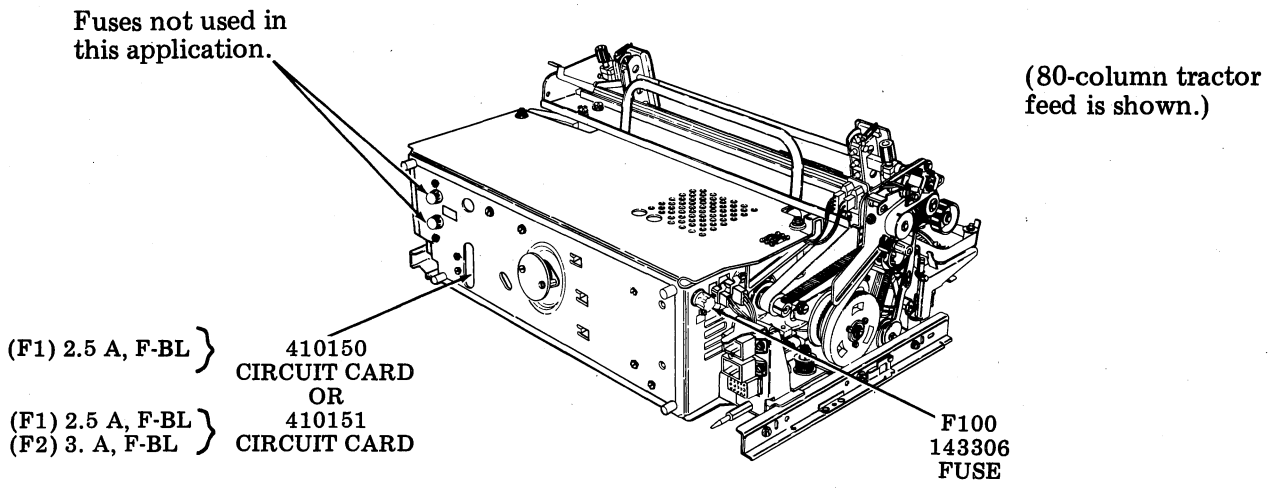


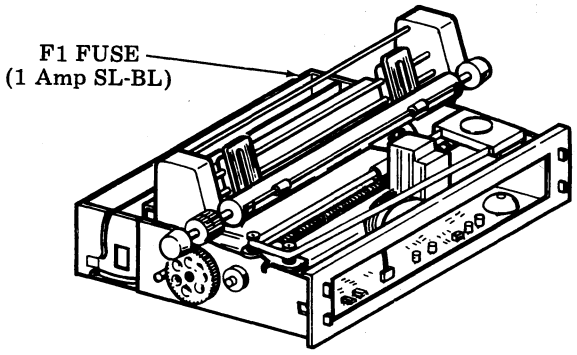
Fig. 11—Fuse Locations



80-Column Friction, 80-Column Tractor,
132-Column Tractor and 80-Column
Forms Access Printers

720009 — 3. A, SL-BL (F2-F3) 72004 Regulator Circuit Card
720010 — 6. A, F-BL (F1) 72004 Regulator Circuit Card
720011 — 1. A, SL-BL (F1) 720007 Motor Driver Circuit Card
720012 — 1.5 A, SL-BL (F2) 720007 Motor Driver Circuit Card
720013 — 2. A, SL-BL (F3-F4) 720007 Motor Driver Circuit Card
720014 — 3. A, SL-BL (F1) Power Supply
720015 — 8. A, SL-BL (F2) Power Supply
720019 — 1.25 A, SL-BL (F1-F7) 720006 Wire Driver Circuit Card

AP200 Printer Fuse Locations



4540 Character Printer
(45P100 Series)

Fig. 11—Fuse Locations (Contd)

3.08 For printer routine maintenance, see Section 582-210-750.

4. OPERATIONAL CHECKOUT

4.01 Check for air movement by fan in SCC controller and by fan in each printer cabinet. (Does not apply to 40CAB201 friction feed cabinet.)

4.02 Perform the KD/controller check (or Local Loopback Test) at each KD:

For typewriter style keyboard: (see Fig. 13 or Fig. 14, as applies).

- Depress LOCAL key, if indicator is not lit.
- Request a local test by depressing the L/TST key while CONTROL key is held down.

For internal numeric cluster style keyboard: (see Fig. 7).

- Depress RESET key, if the LOCAL indicator is not lit.
- Request a local test by depressing the L/TST key while ALPHA key is held down.

4.03 Check each monitor for:

- Brightness — raster barely visible when brightness control is fully turned up.
- Size — display (80 characters by 24 lines) is centered on tube face as gauged by eye. 80 characters are 11-1/4 inches ±1/4 inch. 24 lines are 5-1/4 inches ±1/8 inch.
- Distortion — characters are uniform.
- Proper message.

Note: For monitor adjustments, see Section 582-300-200 or 582-300-205.

4.04 Checkout of printers is given in Section 582-210-750.

4.05 If checkout was successful, routine is complete. If the checkout responses indicate a need for more testing, refer to Section 582-300-500 (for clustered 4540) or 582-300-505 (for 4540 SDS).

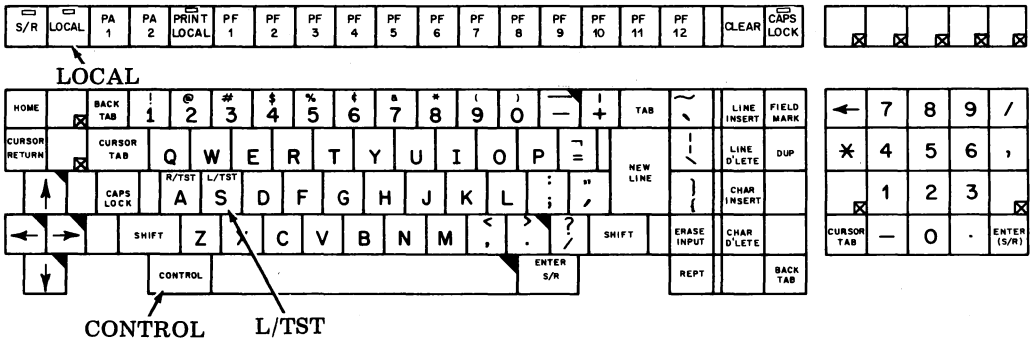


Fig. 12—Typewriter Style Keyboard (45K301)

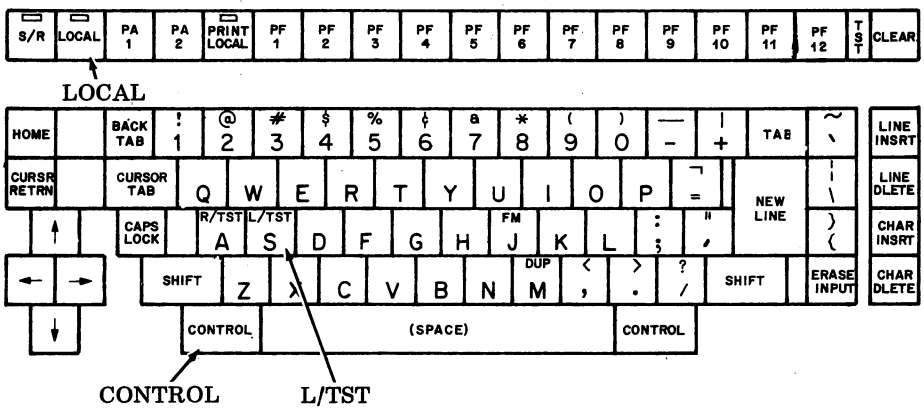


Fig. 14—Typewriter Style Keyboard (40K104, 40K203)

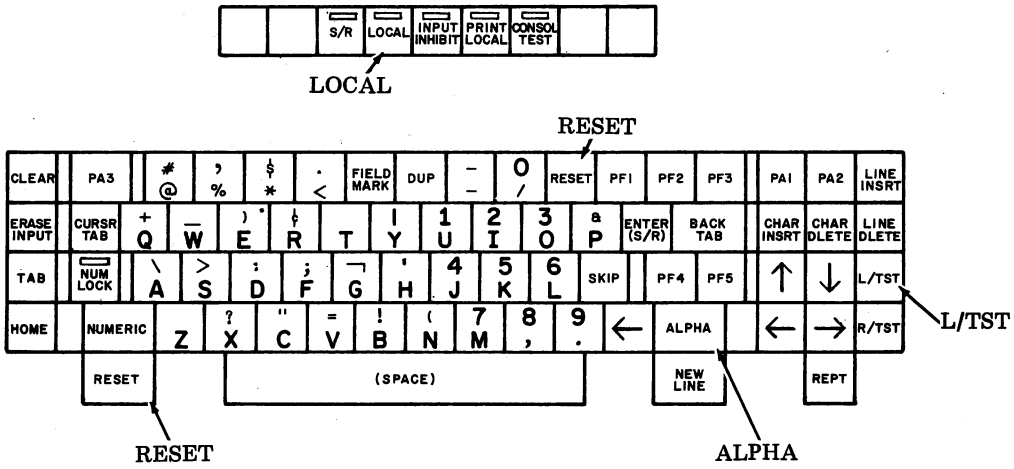


Fig. 15—Internal Numeric Cluster Style Keyboard (40K105)