

“DATASPEED\*” 40/4 SINGLE DISPLAY STATION ARRANGEMENTS

DISASSEMBLY/REASSEMBLY AND PARTS

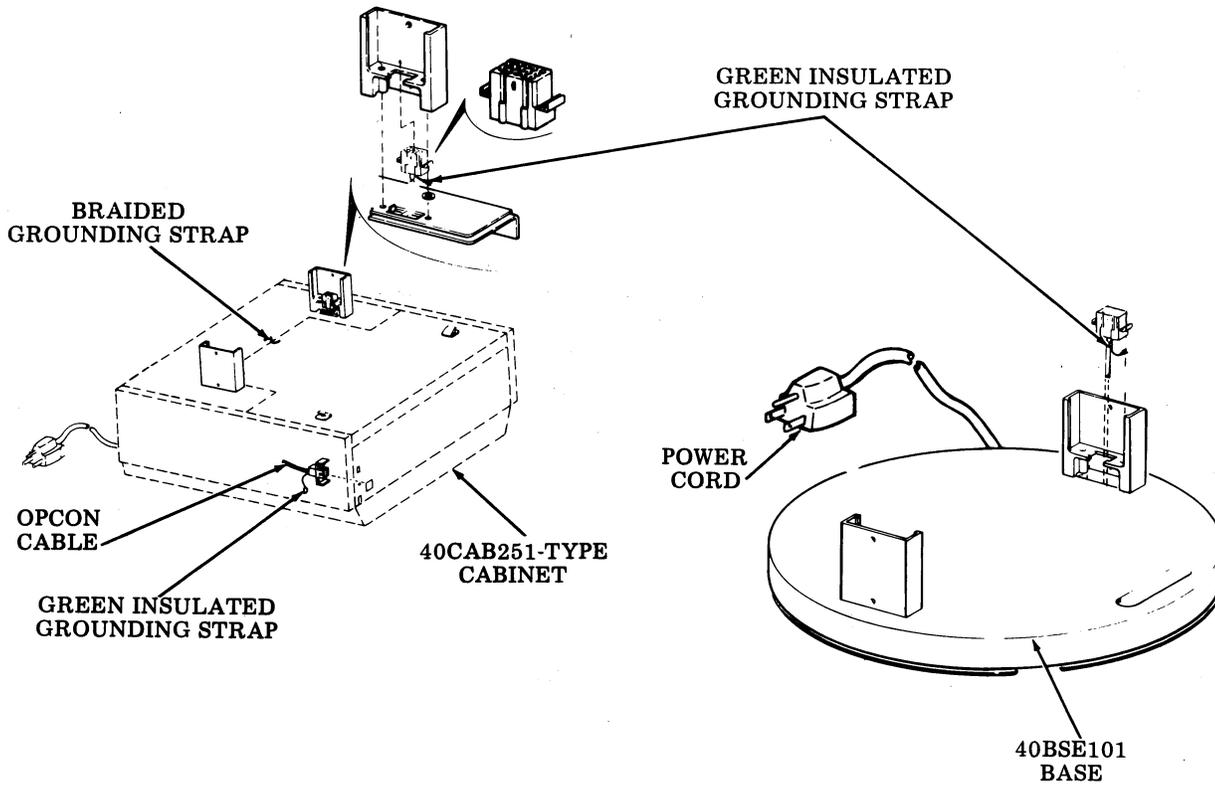
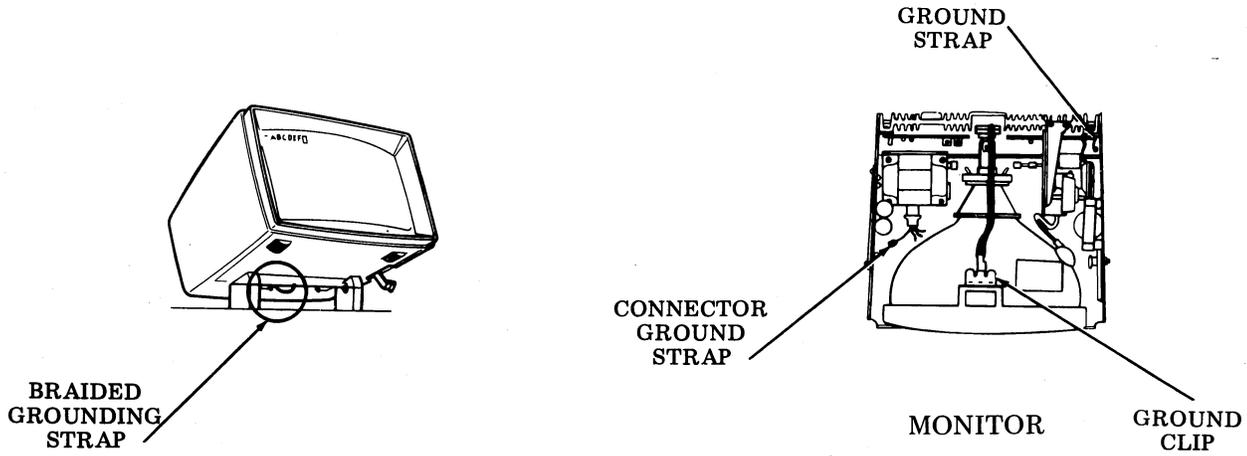
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OPCON.....	4	1.01 This part contains all necessary informa- tion on the removal and replacement of various components of DATASPEED 40/4 Single Display Station Arrangements. The Single Display Station (SDS), is available with a 40C304-type controller (mounted below the monitor) or 40C305-type controller (mounted in a pedestal). This section also includes locations of test switches and indicators used in trouble analysis and testing of the station.	
PRINTERS .....	6	1.02 This part is reissued to provide informa- tion for the new 412410 ventilation assem- bly and new 410351 back panel.	
A. Friction Feed Printers .....	6	1.03 To disassemble or reassemble parts (or units) of this section, the following tools (or equivalents) are required:	
B. Tractor Feed Printer (80, 132 Column) .....	7	Screwdriver, 1/8 inch blade	
C. Forms Access Printer.....	8	Screwdriver, 1/4 inch blade	
PEDESTALS AND CABINETS.....	9	Socket wrench, 1/4 inch	
POWER SUPPLY USED WITH 40C304-TYPE CONTROLLER.....	9	Socket wrench, 5/16 inch	
40C304-TYPE CONTROLLER.....	10	Open-end wrench, 1/4 inch	
A. Circuit Cards (40C304).....	10	Open-end wrench, 1/2 inch	
B. Cables (40C304) .....	11	Static ground strap, 346392 (required only if circuit cards are handled)	
C. Back Panel (40C304).....	15	Terminal extractor, 402840	
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POWER SUPPLY USED WITH 40C305-TYPE CONTROLLER.....	18	<i>Note:</i> When ordering replaceable components, unless otherwise specified, prefix each part number with the letters “TP” (ie, TP410055).	
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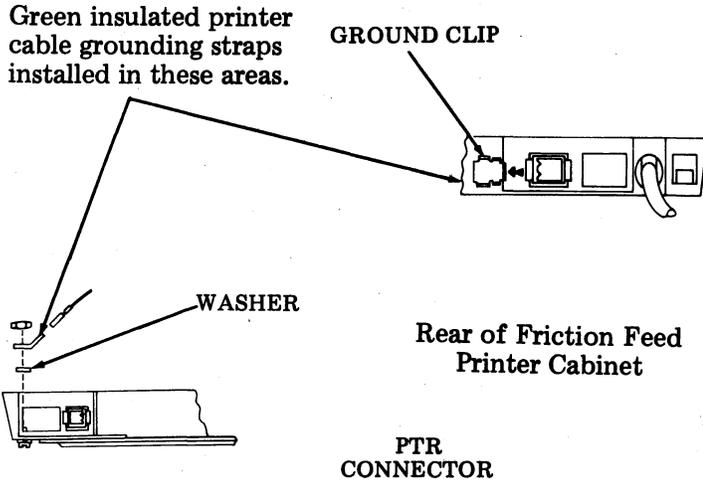
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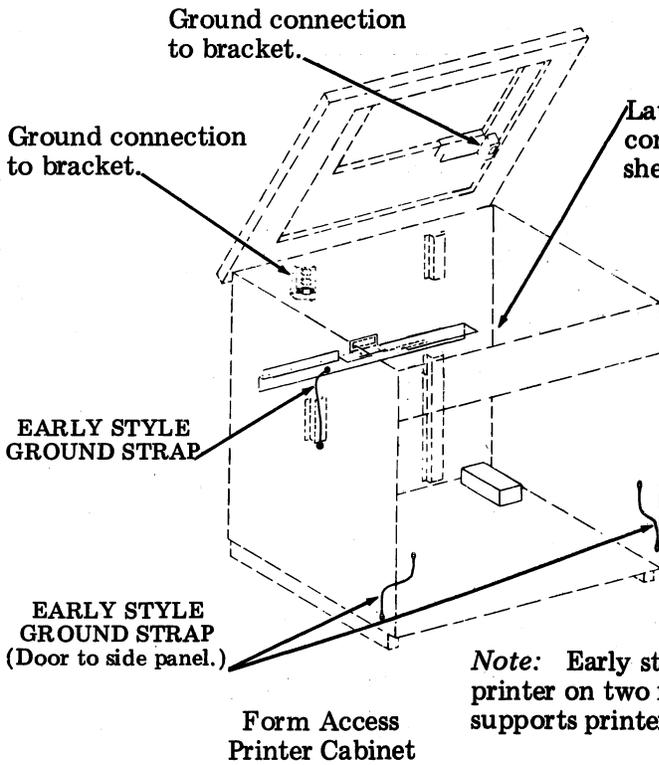
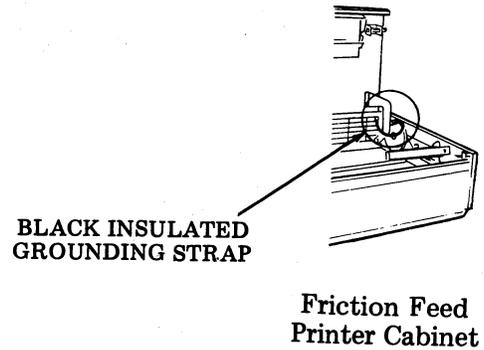
1.04 Grounding Strap Locations

Note: Remove strapping only when necessary.

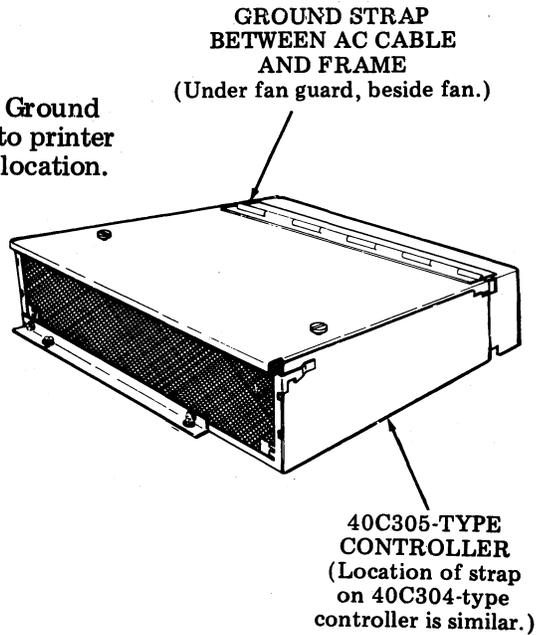




Rear of Tractor Feed Printer Cabinet



Late Style: Ground connection to printer shelf in this location.



Note: Early style cabinet supports printer on two rails. Late design supports printer on solid shelf.

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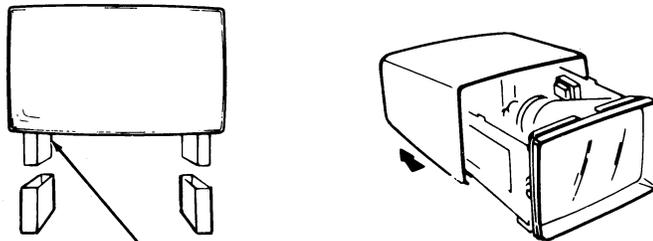
2. DISASSEMBLY/REASSEMBLY

*Caution: Remove all power from the set before performing any component replacement or conversions. This does not apply to cover removal for access to test switches, or to power-on adjustments of the monitor.*

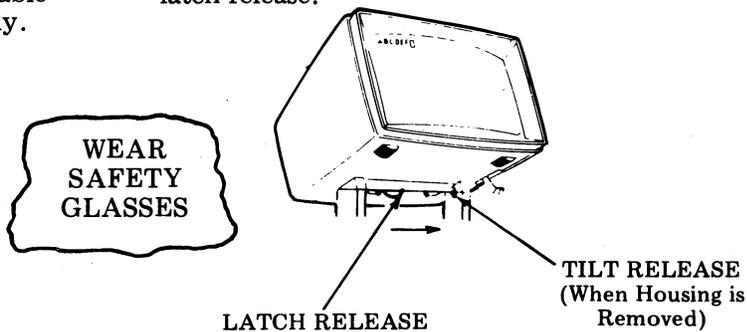
MONITOR

- 2.01 To remove the monitor: See ①.  
To remove only the monitor housing, see ②.

Removal of entire monitor unit from set:  
Grasp monitor by sides near supports (late design — on rear of left support press latch release) and simply lift up. Electrical cable connectors are part of support assembly.



- ② Removal of monitor housing:  
Tilt monitor back and disengage latch.  
Early design — release by hand.  
Late design — insert a thin blade screwdriver into cutout in latch and push to the right to release. Slide housing back partially. Position monitor to its normal position making sure it locks in that position.  
Remove housing completely.



- 2.02 To replace the monitor (see Danger and Warning), reverse the procedures of 2.01. For further disassembly of the monitor refer to Section 582-213-701.

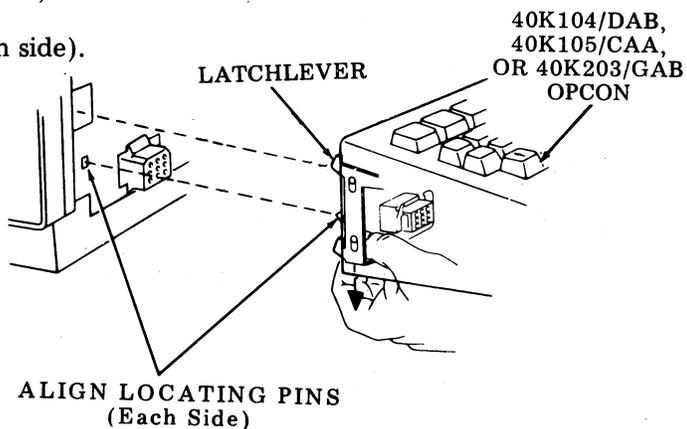
*Danger: When replacing (installing) the monitor keep your hands clear of the bottom of the monitor posts to avoid injury.*

OPCON

- 2.03 To remove the opcon use the appropriate steps given below or on following page:

Attached KD (Always applies to SDS equipped with 40C304, can apply to 40C305.)

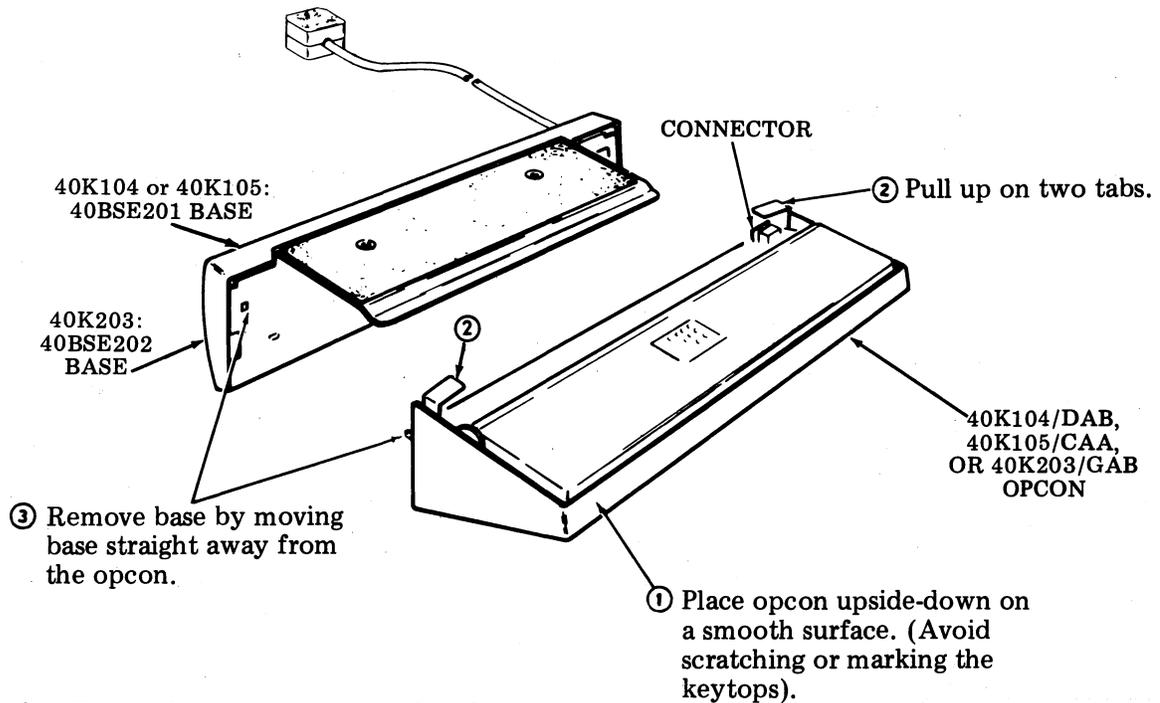
- ① Place thumb on inward tab of opcon (both sides).
- ② Press downward into unlatched position (each side).
- ③ Remove opcon by pulling straight away from the cabinet.



Free-Standing KD (Only applies to SDS equipped with 40C305.)

- ② Pry bottom portion slightly, remove the drive fasteners. Lift off the 408894 cover with pad (not shown). If replacement drive fasteners are required, order by part number 453959.

*Note 1:* 40BSE201 uses 408894 cover with pad (not shown). 40BSE202 uses 346921 cover with pad (not shown).



*Note 2:* To replace opcon, spread sides of opcon cover slightly to aid engagement.

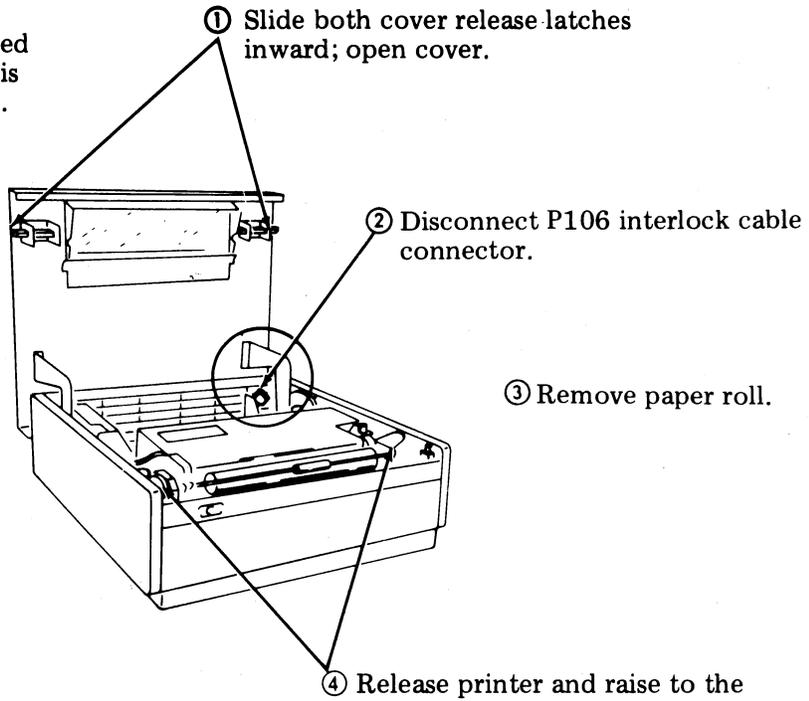
2.04 To replace the opcon, reverse the procedures of 2.03. When replacing opcon, make sure locating pins are fully engaged before pushing latchlevers into locked position. For further disassembly of opcon, refer to Section 582-213-701.

PRINTERS

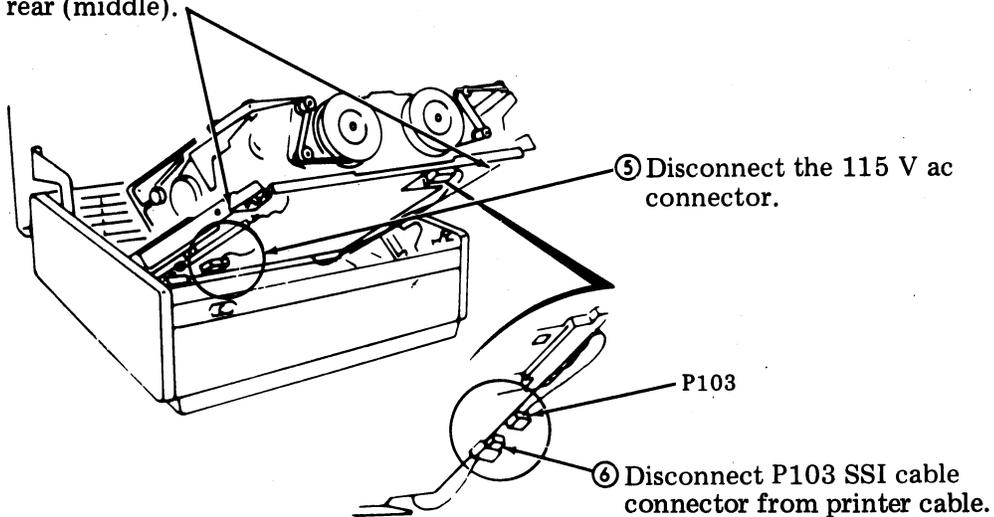
A. Friction Feed Printer

2.05 To remove the entire printer assembly:

*Note:* The circuit card can be removed after Step 4 of disassembly. If printer is not being removed omit Steps 2 and 3.



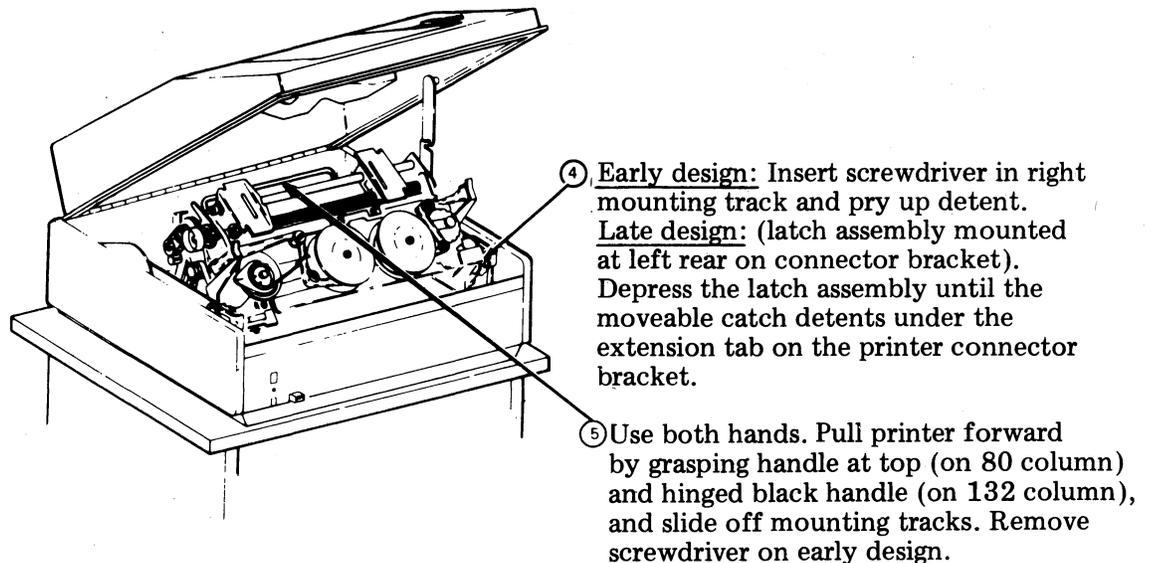
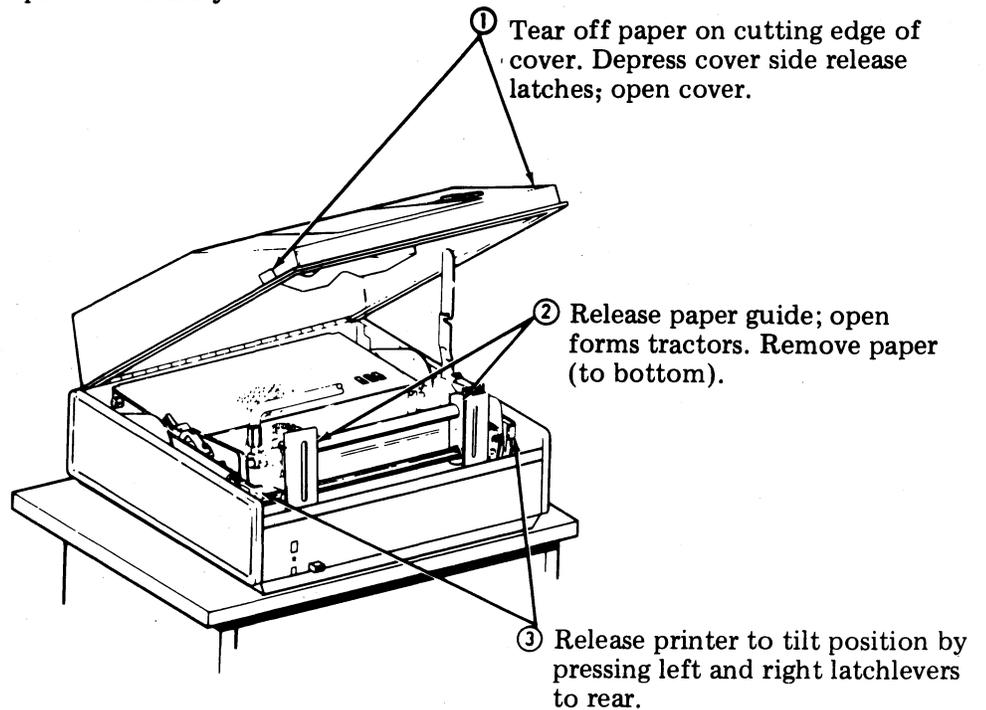
⑦ Use both hands. Release (push in) the printer slide detents and pull the printer out by grasping it by the frame (front bottom) then also by the rear (middle).



2.06 To replace the printer, reverse the procedures of 2.05. For further disassembly of printer, refer to Section 582-210-702. For further disassembly of printer cabinet, refer to Section 582-212-700.

## B. Tractor Feed Printer (80, 132 Column)

2.07 To remove the entire printer assembly:



2.08 To replace the printer, reverse the procedures of 2.07. For further disassembly, refer to Section 582-210-702 for printers and Section 582-212-700 for cabinets.

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C. Forms Access Printer

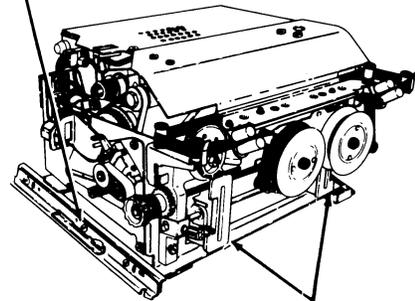
2.09 To remove the entire printer assembly:

① Early design cabinet — Open left cabinet door depress lid release button. Raise cabinet cover, close door. Late design — Open cabinet doors. Raise and latch lid, close doors.

② Disconnect cable a rear of printer.

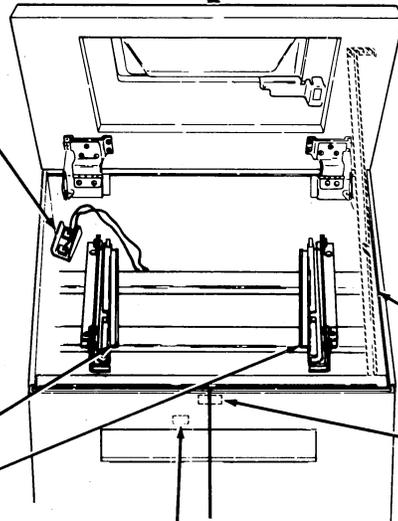
Early design cabinet — uses mounting rails.  
Late design — uses solid printer shelf.

⑤ Grasp printer on the sides just above the side rails and using both hands lift printer out of cabinet.



FORM TRACTORS

③ Tear off form from top of printers. Open form tractors, and drop forms to bottom of cabinet.

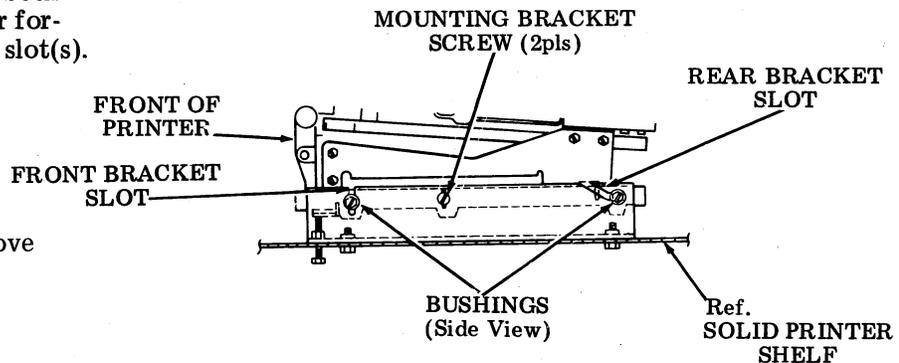


Late design cabinet — uses lid latch.

Late design cabinet — location of only one interlock switch.

④ Early design cabinet — early design printer, raise tab only on right side. Late design printer, raise tabs on both sides and slide printer forward to clear the tab slot(s).

Early design cabinet — location of lid release button of ①.



For late design cabinet — remove two beacket mounting screws (one on each side of printer) and do Step 5.

Forms Access Printer Cabinet

2.10 To replace the printer, reverse the procedures in paragraph 2.09. Late design cabinet and printer with modified frame — grasp printer as in Step 5, lower printer into cabinet mounting shelf and seat bushings in bracket slots. Install the two mounting bracket screws (one on each sides). For further disassembly refer to Section 582-210-702 for printer and Section 582-212-700 for cabinet.

## PEDESTALS AND CABINETS

2.11 Refer to Section 582-212-700 for assembly or disassembly of a pedestal or cabinet.

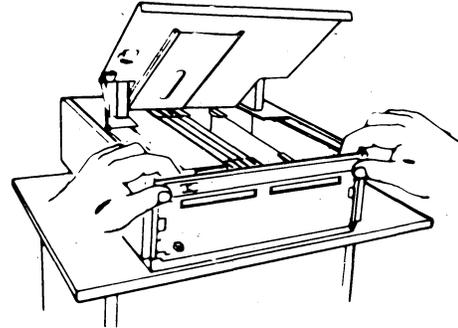
## POWER SUPPLY USED WITH 40C304-TYPE CONTROLLER

2.12 To remove the 40PSU101 power supply, follow Steps 1 through 8 (also see Warning following Step 8).

- ① Release lid latches and open lid.
- ② Insert fingers as shown and lift then pull module forward.

*Note 1:* Do not attempt to lift at opcon (if present).

- ③ Move module forward until blocked by latch.
- ④ Use handle to lift out power supply.



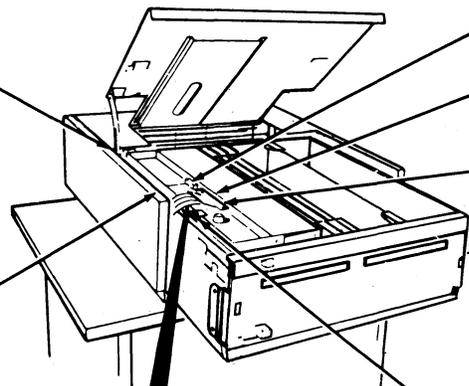
(Monitor and opcon not shown.)

*Warning: Do not attempt to force power supply up. Late design power supplies are secured with hardware from the bottom. (See Note 2.)*

- ⑤ Replace power supply making sure to seat on locating pins.

- ⑥ Slip on cable terminals and tighten screws.

- ⑦ Replace insulator. Plug in ac power cord. Reposition retainer bracket; tighten bracket screw. Move module to rear. Lower and latch lid.



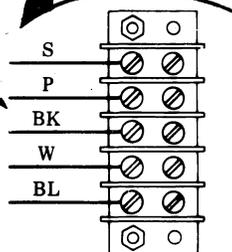
- ④ Disconnect ac power cord.

- ⑤ Remove screws that secure insulator; remove insulator.

- ⑥ Loosen five screws from terminal strip; remove cable terminals from terminal strip.

- ⑦ Loosen bracket screw sufficient to raise and turn retainer bracket away from handle.

*Comment:* Controllers manufactured after July 1980 omit this screw and bracket.



*Note 2:* If the Warning applies, complete removal of power supply by:

- Removing 406046 monitor cable, but only from retainer and back panel (2.19).
- Removing 406036 or 454208 or 406066 cable, but only from data set or data auxiliary set — as applies (2.23).
- Removing 406039 printer cable, but only from printer (2.25).
- Removing logic package from cabinet (Steps 1, 2, and 3 of 2.27).
- Turning logic package so that it rests on the left side, removing power supply mounting hardware from bottom of logic package. Remove power supply.

2.13 To replace power supply, follow Steps 9 through 11 of 2.12.

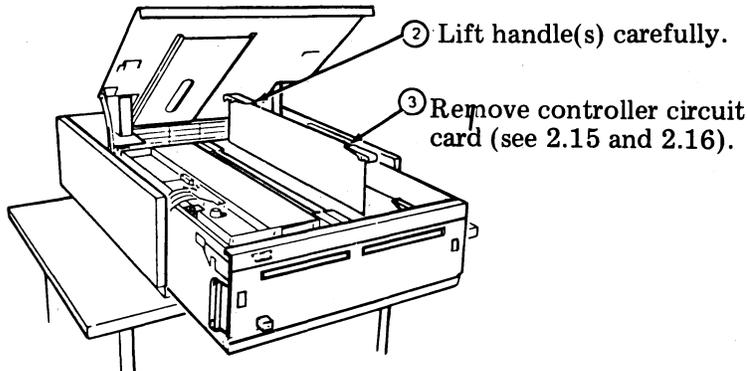
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### 40C304-TYPE CONTROLLER

#### A. Circuit Cards (40C304)

2.14 To gain access to the circuit cards:

- Perform Steps 1 and 2 of 2.12.
- ① Move module forward until blocked by latch to provide sufficient clearance for card removal.

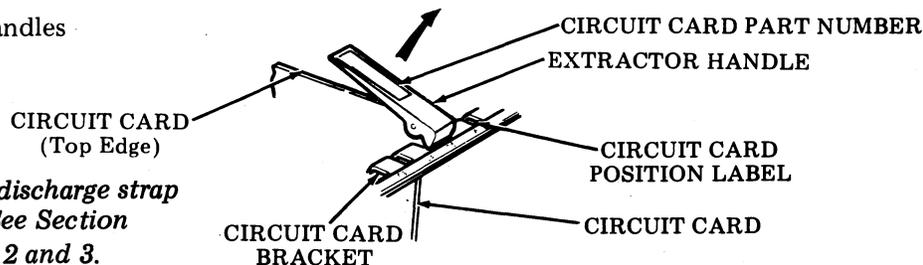


Note 1: To remove controller from cabinet, refer to Note 2 of 2.12.

Note 2: The required circuit cards and their locations are given in Section 582-200-205.

2.15 To remove a controller circuit card (see 2.16 for 410260 or 410350 series circuit card removal):

Lift up on extractor handles and lift straight up.



**Warning:** Wear 346392 static discharge strap when removing circuit cards. See Section 582-200-205, 1.05 Warnings 1, 2 and 3.

2.16 To remove 410260 or 410350 series circuit cards hereafter called 41026X or 41035X:

- ① Remove 410251, 410352 or 410353 circuit card; (410251 only) observe black plastic retainer near top edge of card.
- ② Collapse tab of retainer and lift the 41026X circuit card.
- ③ Work the top edge over the tab, then even up the rear edge; remove 41026X circuit card.

2.17 To replace a controller circuit card (see 2.18 for 41026X circuit card replacement):

- ① Check that card is proper for location (see Section 582-200-205).
- ② Check that pins on card are straight (not bent) by sighting down the two rows of pins.

**Warning:** Attempting to insert a card with bent pins into the back panel may result in damaging the back panel or the card.

- ③ Place card in slot, then depress until card is fully seated.

2.18 To replace 41026X circuit card:

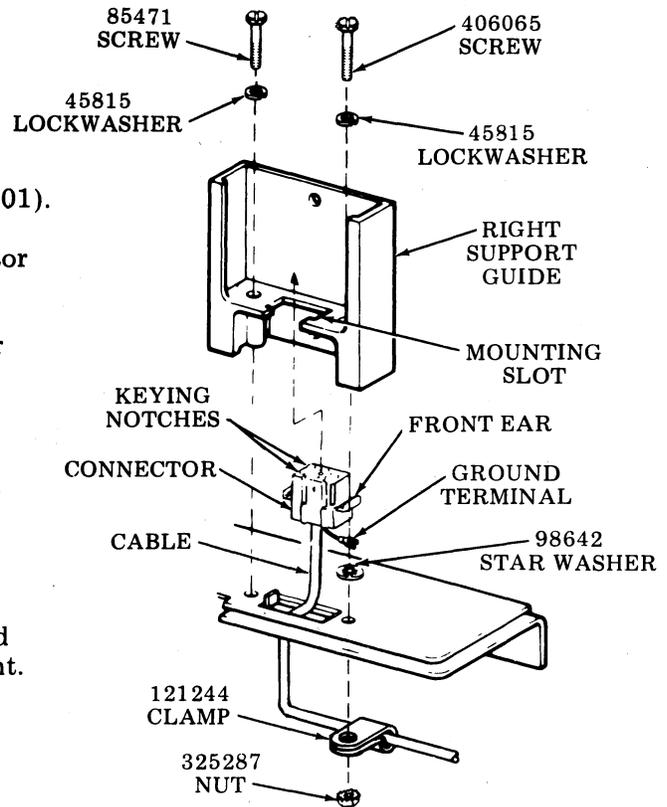
- ① Remove 410251 circuit card (if not already removed).
- ② Check that mating pins on 41026X circuit card are straight.
- ③ Place 41026X circuit card (component side up) over 410251 circuit card (component side up); mount the 41026X circuit card. The tab of the black plastic retainer near the top edge of 410251 circuit card will secure the 41026X circuit card.

## B. Cables (40C304)

## 406046 Monitor Cable

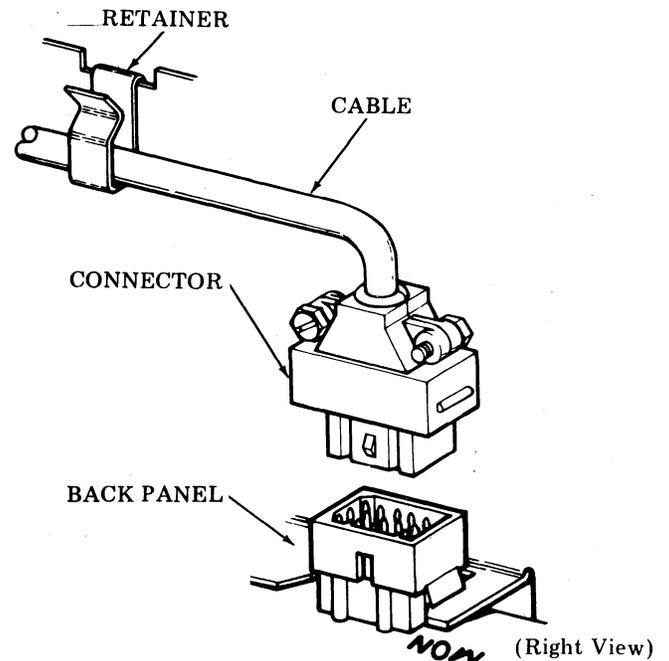
2.19 To remove 406046 monitor cable:

- Disconnect ac power and remove monitor (2.01).
- ① Use flat blade of screwdriver against connector front ear and use screwdriver shank against right support guide to hold ear in. With your other hand push down on front of connector to drop ear below mounting slot. Hold rear ear in and push down on connector.
- ② Remove two screws and lockwashers from right support guide (retain nut when 406065 screw is removed).
- ③ Push connector down through hole in cover. Notice that connector keying notches face rear of unit and that star washer is positioned under connector ground terminal on the front.



④ Perform Steps 1, 2 and 3 of 2.12.

- ⑤ Remove cable from retainer by opening retainer and lifting cable out. Disconnect connector from back panel by pulling up while rocking connector back and forth.



2.20 To install 406046 monitor cable, reverse the procedures of 2.19. At right support guide end, route cable to just below mounting slot. Install right support guide on cover (insure that the ground terminal and starwasher are in place). Push one ear into mounting slot, rock connector back and forth to engage other ear (keying notches to rear).

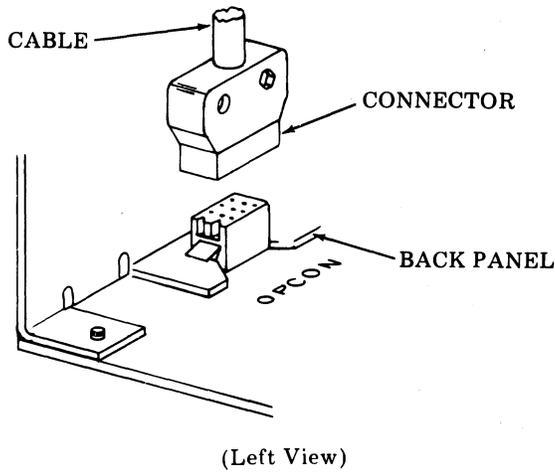
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406048 Opcon Cable (40C304)

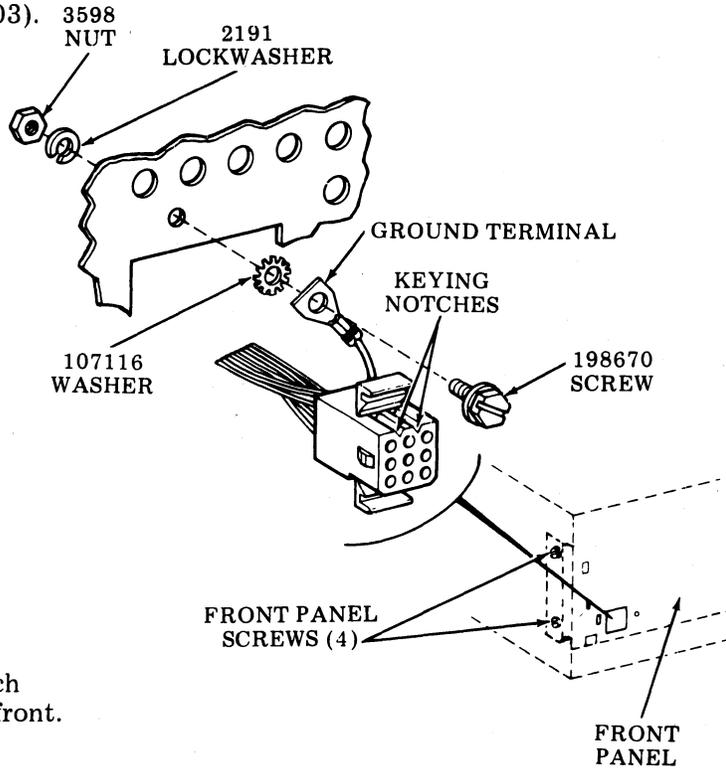
2.21 To remove 406048 opcon cable:

- Disconnect ac power and remove opcon (2.03).
- Remove 40PSU101 power supply (2.12).

① Disconnect connector from back panel.



② While holding one connector ear down, ease connector from the mounting slot toward inside of frame.



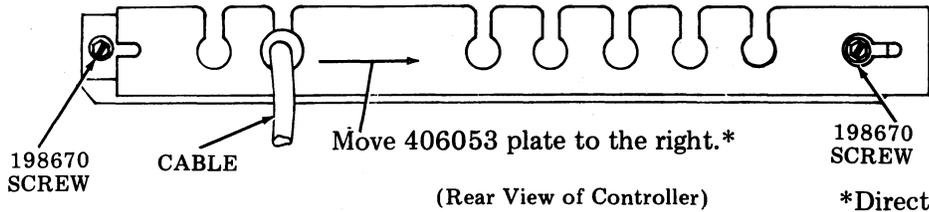
③ Remove four front panel screws (two on each side). Remove front panel and cable to the front.

④ Remove ground terminal screw and washer from front panel and a lockwasher and nut from inside the front panel.

2.22 To install 406048 opcon cable, reverse the procedures of 2.21.

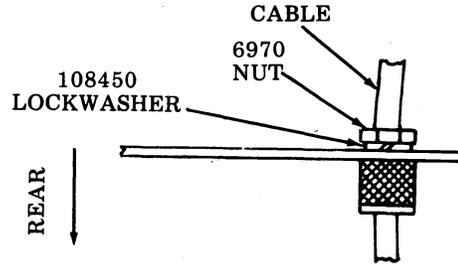
406036 or 454208 EIA Cable (40C304)

2.23 To remove cable:



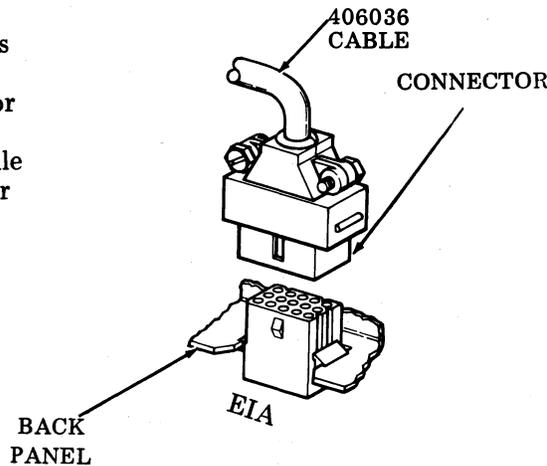
\*Directions are given as from rear of station.

- ① At the rear of controller, loosen two plate mounting screws (do not remove). Move plate to the right (as shown in illustration).
- ② Loosen nut and lockwasher that retains cable. Slide cable up from slot in plate.

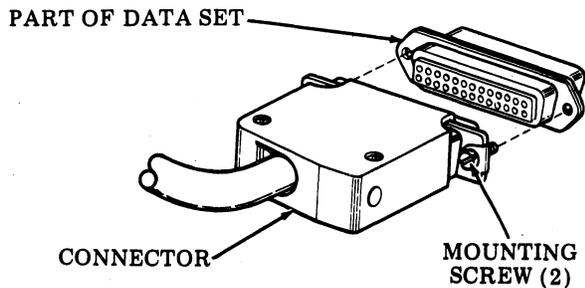


(Top View)

- ③ Release lid latches and raise lid. Disconnect connector from back panel by pulling up while rocking connector back and forth.



- ④ EIA Cable only: At data set end, loosen two connector mounting screws. Disconnect connector. An EIA extension cable (408065, 408066, or 408067) may be connected between the EIA cable and the data set.



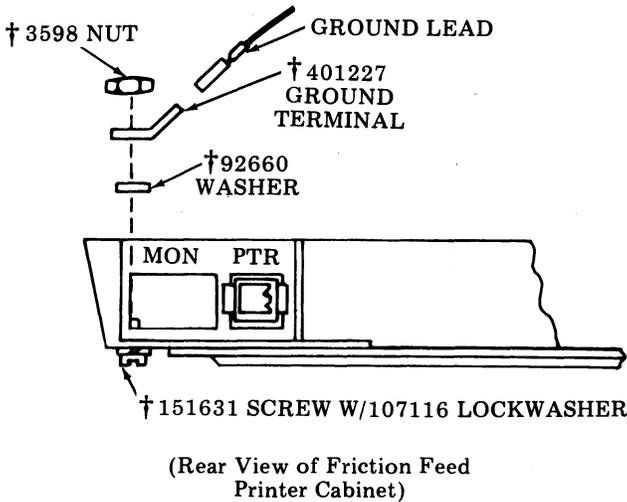
2.24 To install 406036 or 454208 cable, reverse the procedures of 2.23.

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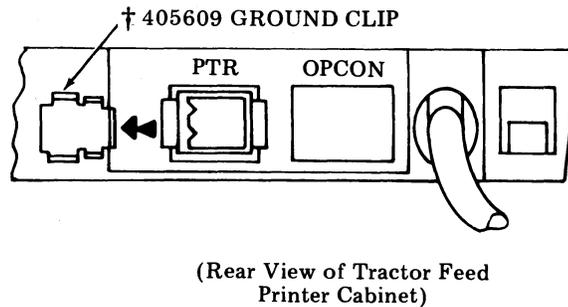
406039 Printer Cable (40C304)

2.25 To remove 406039 printer cable:

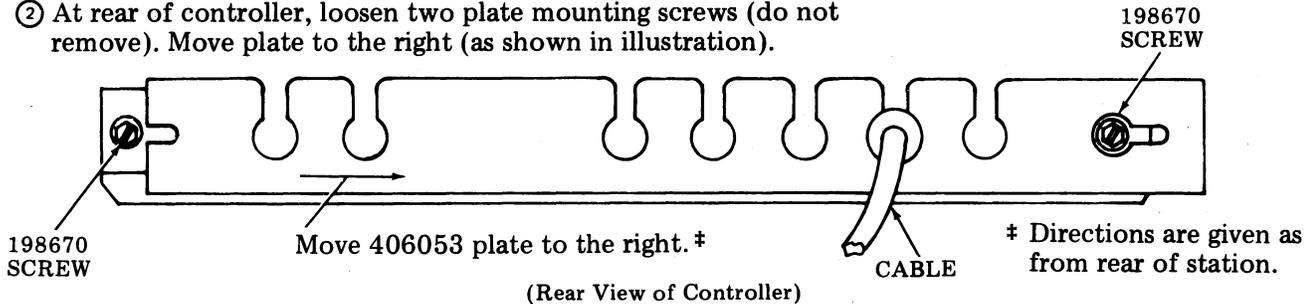
- ① Disconnect connector from rear of printer cabinet. Remove ground lead from cabinet ground terminal (friction feed) or cabinet ground clip (tractor feed). A printer extension cable (405306, 405307, 405308 or 405309) may be connected between the printer cable and the printer.



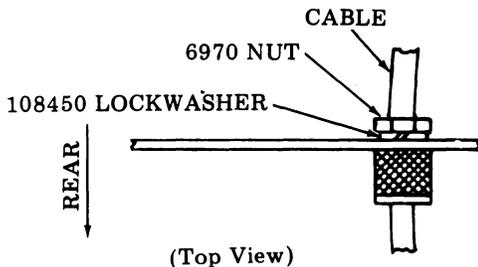
† Hardware supplied with 406039 printer cable. Do not remove hardware when removing ground lead.



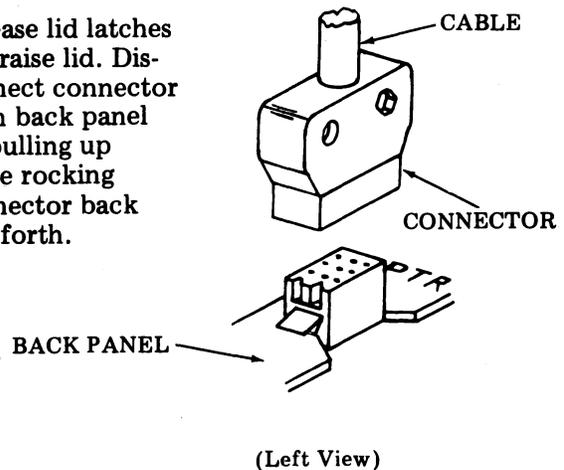
- ② At rear of controller, loosen two plate mounting screws (do not remove). Move plate to the right (as shown in illustration).



- ③ Loosen nut and lockwasher that retains cable. Slide cable up from its slot in the plate.



- ④ Release lid latches and raise lid. Disconnect connector from back panel by pulling up while rocking connector back and forth.

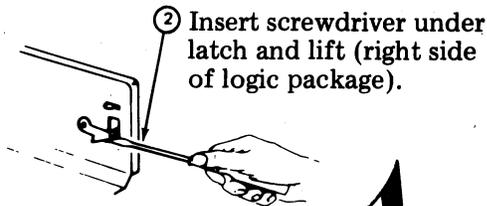


2.26 To install 406039 printer cable, reverse the procedures of 2.25.

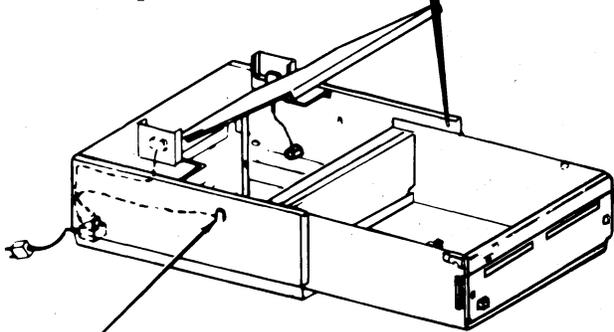
C. Back Panel (40C304)

2.27 To remove 410276, 410277 or 410351 back panel:

- Disconnect ac power and remove 40PSU101 power supply (2.12).
- Remove controller circuit cards (2.14).
- Remove 406046 monitor cable from controller (Step 5 of 2.19).
- Remove opcon (2.03) and disconnect 406048 opcon cable from controller.
- Remove 406036 or 454208 EIA interface cable from controller — as applies (Step 1 and 3 of 2.23).
- Remove 406039 printer cable from controller — if present (Steps 3 and 5 of 2.25).

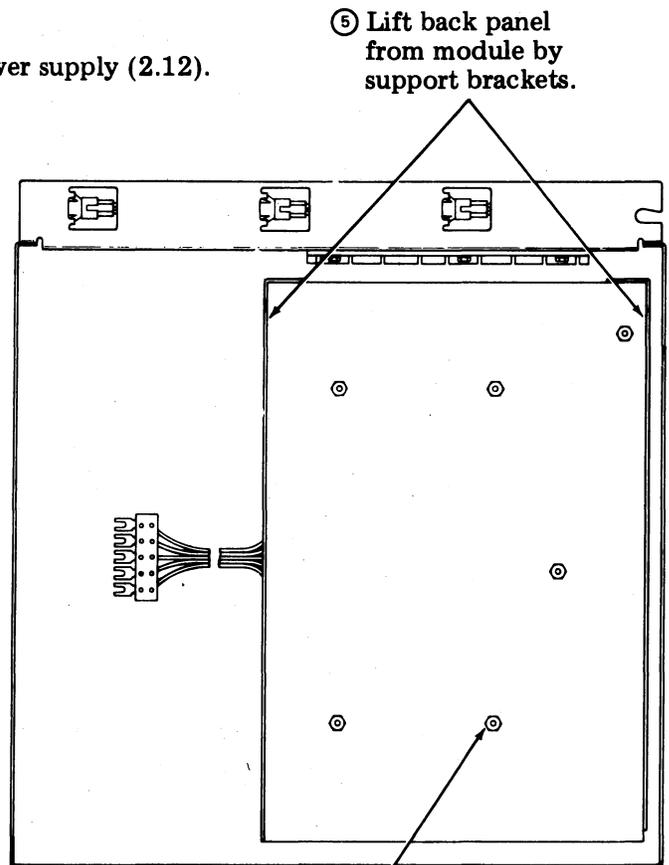


Note 1: Monitor can remain in place.



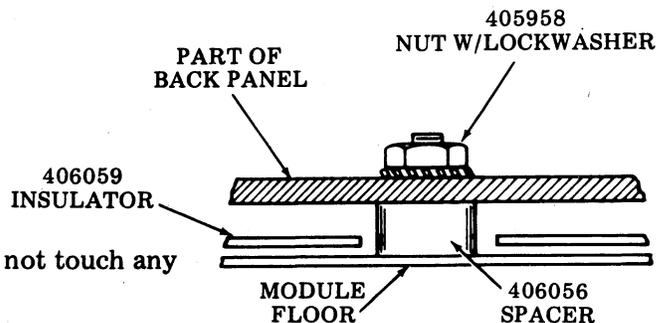
- ① Disconnect 3-pin connector of 405047 ac input cable from 408017 (Early design) or 412409 (Late design) fan/power supply cable (see illustration of 2.29).

Note 2: The insulator should not touch any spacers.



(Top View of Module)

- ④ Remove six 405958 mounting nuts from back panel.



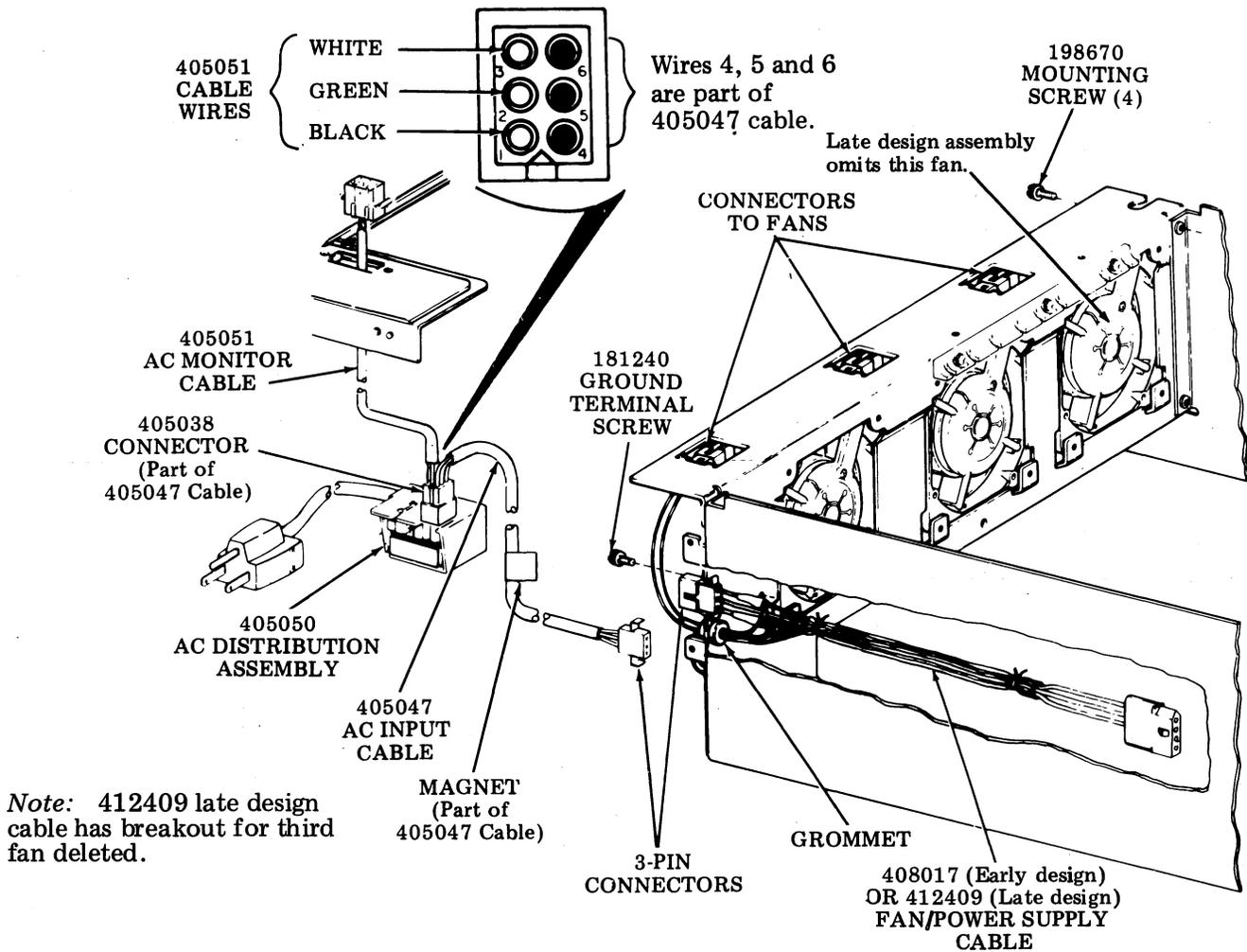
2.28 To install back panel, reverse the procedures of 2.27.

D. Ventilation Assembly (40C304)

408017 (Early design) or 412409 (Late design) Fan/Power Supply Cable

2.29 To remove fan/power supply cable:

- Disconnect ac power and remove 40PSU101 power supply (2.12).
- Remove controller circuit cards (2.14).
- Remove 406046 monitor cable from controller (Step 5 of 2.19).
- Remove opcon (2.03).
- Remove 406036 or 454208 EIA interface cable from controller — as applies Steps 1 and 3 of 2.23).
- Remove 406039 printer cable from controller — if present (Steps 3 and 5 of 2.25).
- Perform Steps 1, 2, and 3 of 2.27.



- ① Remove ground terminal screw. Remove ring terminal cable from screw.
- ② Perform Steps 1 and 2 of 2.31.
- ③ Disconnect each connector to a fan; pull connector out while rocking it back and forth.
- ④ Slide grommet and 3-pin connector of fan/power supply cable off ventilation assembly.

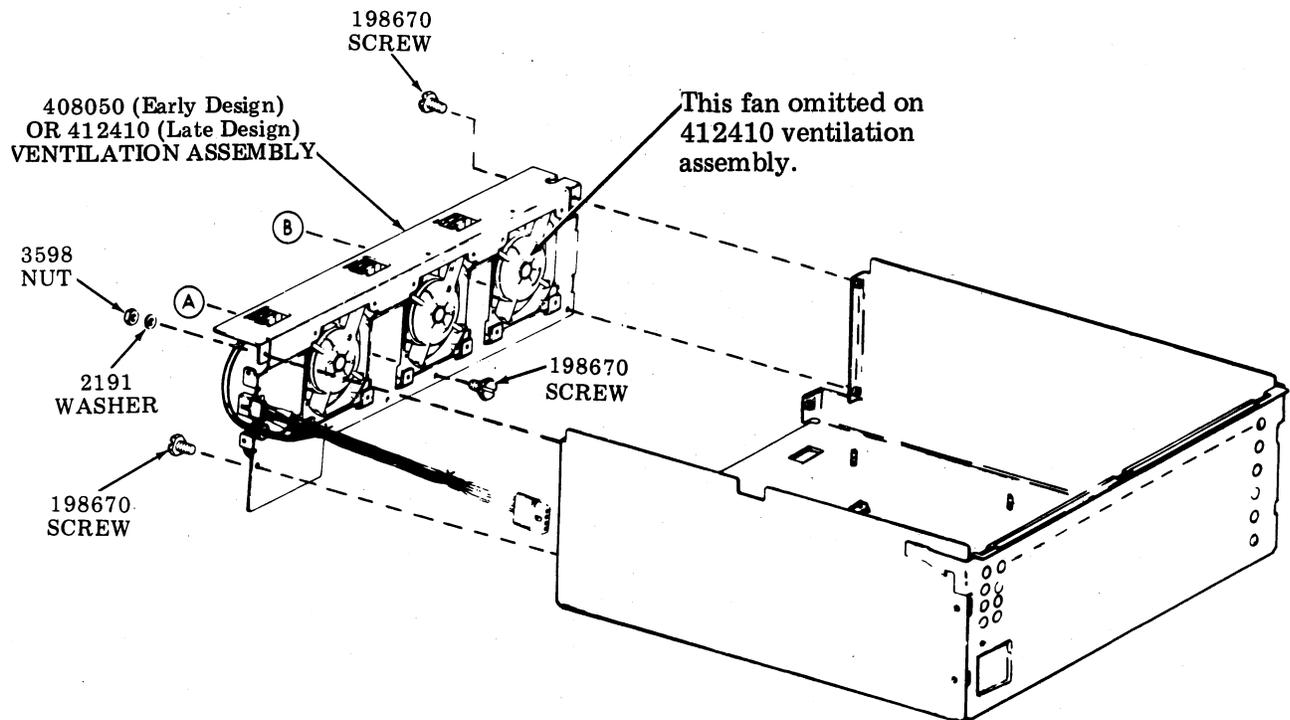
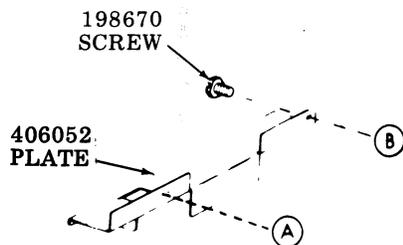
2.30 To install fan/power supply cable, reverse the procedures of 2.29.

## 408050 (Early design) or 412410 (Late design) Ventilation Assembly (40C304)

## 2.31 To remove ventilation assembly:

- Disconnect ac power and remove 40PSU101 power supply (2.12).
- Remove controller circuit cards (2.14).
- Remove 406046 monitor cable from controller (Step 5 of 2.19).
- Remove opcon (2.03).
- Remove 406036 or 454208 EIA cable from controller — as applies (Steps 1 and 3 of 2.23).
- Remove 406039 printer cable from controller — if present (Steps 3 and 5 of 2.25).
- Perform Steps 1, 2, and 3 of 2.27.

- ① Remove two screws that secure 406052 plate. Remove plate.
- ② Remove two remaining screws, 3598 nut, and 2191 lockwasher. Remove ventilation assembly.



- 2.32 To install ventilation assembly, reverse the procedures of 2.31.

SECTION 582-200-705

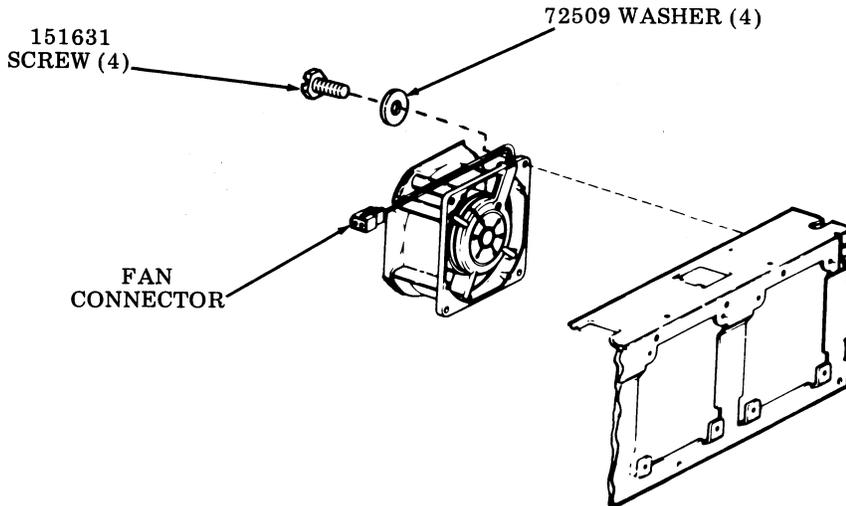
408015 Fan (40C304)

2.33 To remove a 408015 fan:

- Perform all Steps of 2.31.

① Remove four screws and washers that secure fan.

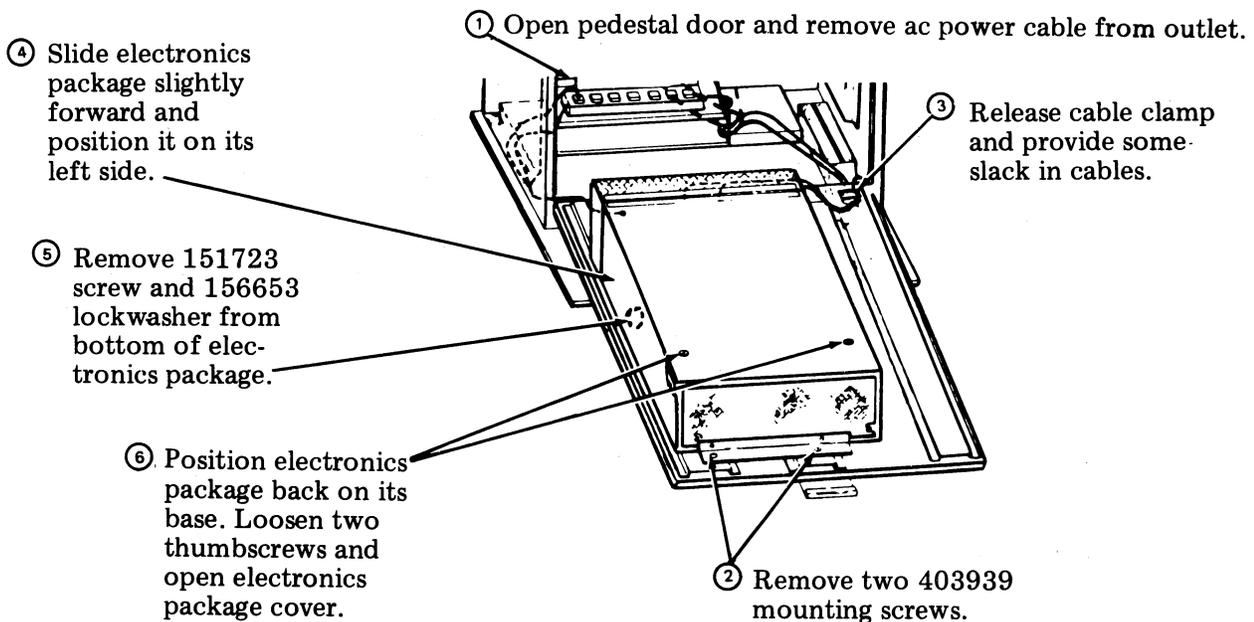
② Disconnect fan connector from 408017 or 412409 fan/power supply cable connector. Remove fan.



2.34 To install fan, reverse the procedures of 2.33.

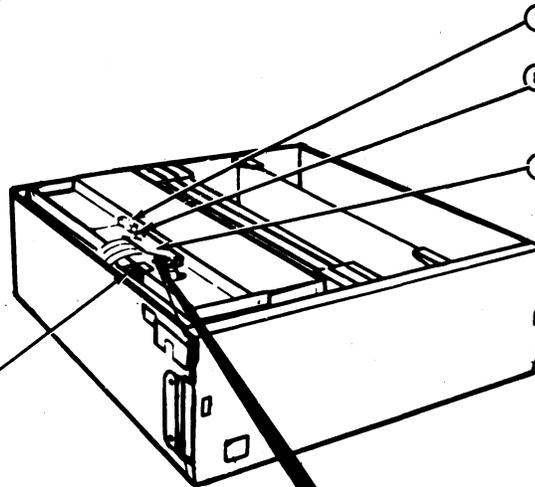
POWER SUPPLY USED WITH 40C305-TYPE CONTROLLER

2.35 To remove the 40PSU101 power supply, follow Steps 1 through 11:



- ⑪ Use handle to lift out power supply.

*Warning: Do not attempt to force power supply up. Late design power supplies are secured with hardware from the bottom. (See Step 5.)*

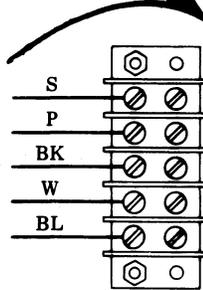


- ⑦ Disconnect ac power cord.  
 ⑧ Remove screws that secure insulator; remove insulator.  
 ⑨ Loosen five screws from terminal strip; remove cable terminals from terminal strip.

- ⑫ Replace power supply making sure to seat on locating pins.

- ⑩ Loosen bracket screw sufficient to raise and turn retainer bracket away from handle.

Replace insulator. Plug in ac power cord. Reposition retainer bracket; tighten bracket screw. Move module to rear. Lower and latch lid.



- ⑬ Slip on cable terminals and tighten screws.

2.36 To replace the power supply, follow Steps 12 through 14 of 2.35.

#### 40C305-TYPE CONTROLLER

*Note:* To remove controller from door:

- Refer to 2.35, Steps 1 through 3.
- Remove monitor/controller cable from controller (2.43).
- Remove opcon/controller cable from controller (2.49).
- Remove controller.

#### A. Circuit Cards (40C305)

2.37 To gain access to circuit cards, open pedestal door, loosen the thumbscrews on cover, and raise cover.

*Note:* The required circuit cards and their locations are given in Section 582-200-205.

2.38 To remove or replace a circuit card, refer to 2.15 through 2.18.

SECTION 582-200-705

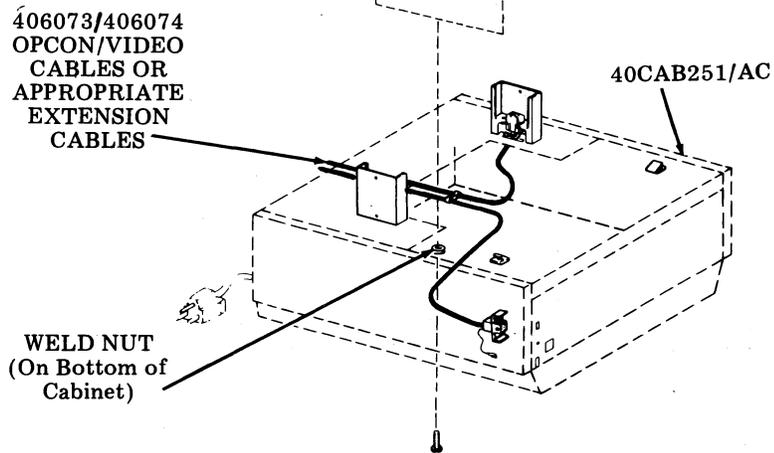
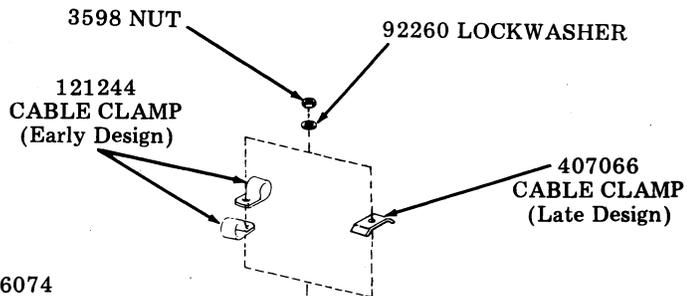
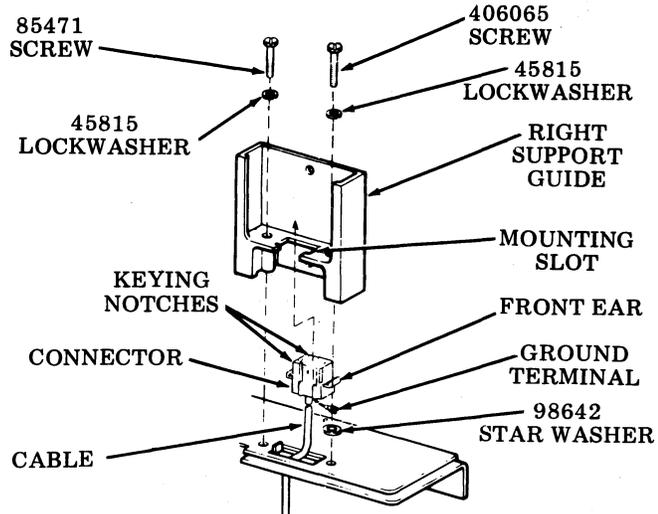
B. Cables (40C305)

Monitor/Controller Cable at Attached KD (406074, 405375, or 405376)

2.39 To remove cable:

- Disconnect ac power and remove monitor (2.01).

- ① Use flat blade of screwdriver against connector front ear and use screwdriver shank against right support guide to hold ear in. With your other hand push down on front of connector to drop ear below mounting slot. Hold rear ear in and push down on connector.
- ② Remove two screws and lockwashers from right support guide (retain nut when 406065 screw is removed).
- ③ Push connector down through hole in cover. Notice that connector keying notches face rear of unit and that star washer is positioned under connector ground terminal on the front.
- ④ Remove 3598 nut and 92260 lockwasher. Remove cable from cable clamp.



2.40 To install cable, reverse the procedures of 2.39. At right support guide end, route cable to just below mounting slot. Install right support guide on cover (insure that the ground terminal and starwasher are in place). Push one ear into mounting slot, rock connector back and forth to engage other ear (keying notches to rear).

### Monitor/Controller Cable at Free-Standing KD (406074, 405375, or 405376)

#### 2.41 To remove monitor cable from free-standing KD:

- Disconnect ac power and remove monitor (201).

① Remove monitor base bottom plate (see Section 582-200-205).

② Perform Steps 1, 2, and 3 of 2.39. Do not remove right support guide from monitor base.

#### 2.42 To install cable to free-standing KD see Section 582-200-205.

### Monitor/Controller Cable at Controller (406074)

#### 2.43 To remove cable from controller:

- Gain access to controller (2.37).
- Disconnect ac power then disconnect cable from controller (2.19, Step 5).
- Loosen nut that attaches cable to 406053 plate at rear of controller and slide cable off of plate (2.23, Steps 1 and 2).

#### 2.44 To install cable on controller, reverse the procedure of 2.43.

### Opcon/Controller Cable at Attached KD (406073, 405375, or 405376)

#### 2.45 To remove cable:

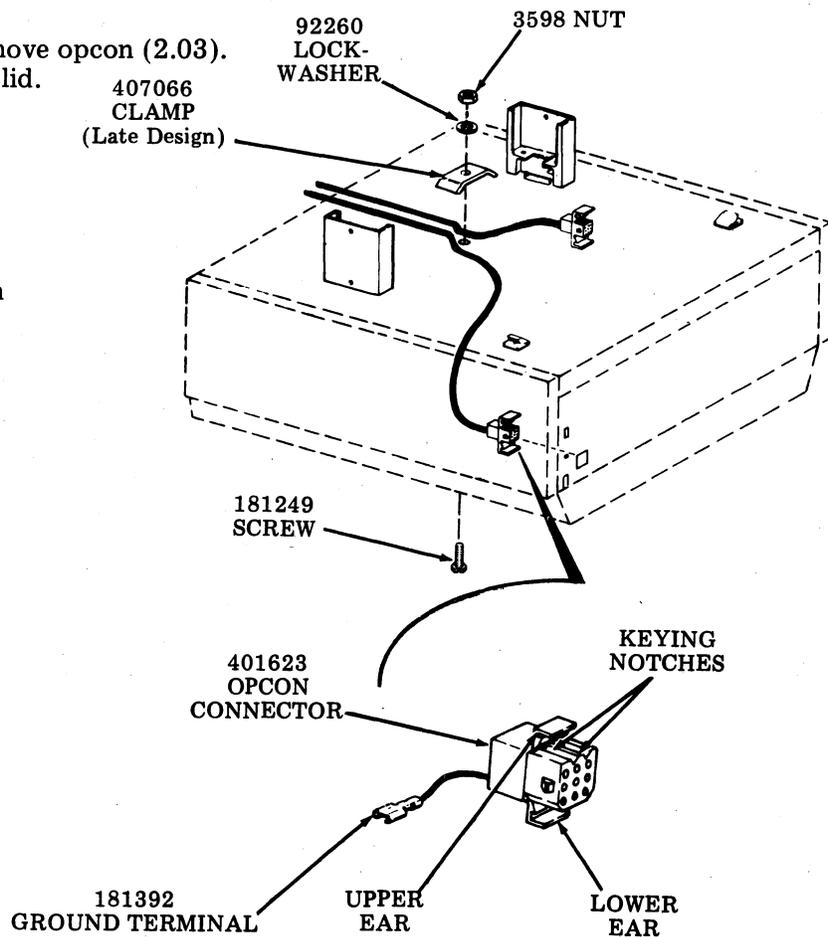
- Disconnect ac power then remove opcon (2.03).
- Tilt monitor up, raise cabinet lid.

① Use flat blade of screwdriver against upper ear of 401623 opcon connector. With your other hand, rock connector toward inside of cabinet. Push up on lower ear of connector and remove connector from front panel toward inside of cabinet.

② Disconnect 181392 ground terminal of the cable from cabinet ground lug.

③ Remove 3598 nut and 92260 lockwasher. Remove cable from clamp. (Early design clamp is shown in 2.39.)

④ Remove cable from cabinet through opening at rear.



SECTION 582-200-705

2.46 To install cable, see Section 582-200-205.

Opcon/Controller Cable at Free-Standing KD (406073, 405375, or 405376)

2.47 To remove cable from free-standing KD:

- Disconnect ac power and remove monitor (2.01).

① Remove monitor base bottom plate (see Section 582-200-205).

② Remove cable including ground terminal from monitor base assembly (see Section 582-200-205).

2.48 To install cable to free-standing KD, see Section 582-200-201.

Opcon/Controller Cable at Controller (406073)

2.49 To remove cable from controller:

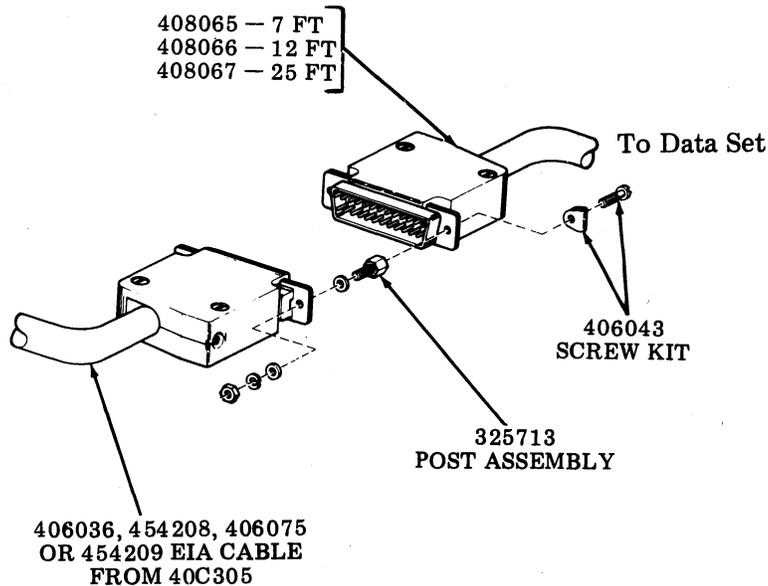
- Gain access to controller (2.37).
- Disconnect ac power then disconnect cable from controller (2.21, Step 1 only).
- Loosen nut that attaches cable to 406053 plate at rear of controller and slide cable off of plate (2.23, Steps 1 and 2).

2.50 To install cable on controller, reverse the procedure of 2.49.

406036, 454208, 406075 or 454209 EIA Cable (40C305)

2.51 To remove cable:

- Access the controller (2.37).
- Remove cable (2.23). An EIA extension cable (408065, 408066, or 408067) may be connected between the EIA cable and the data set.

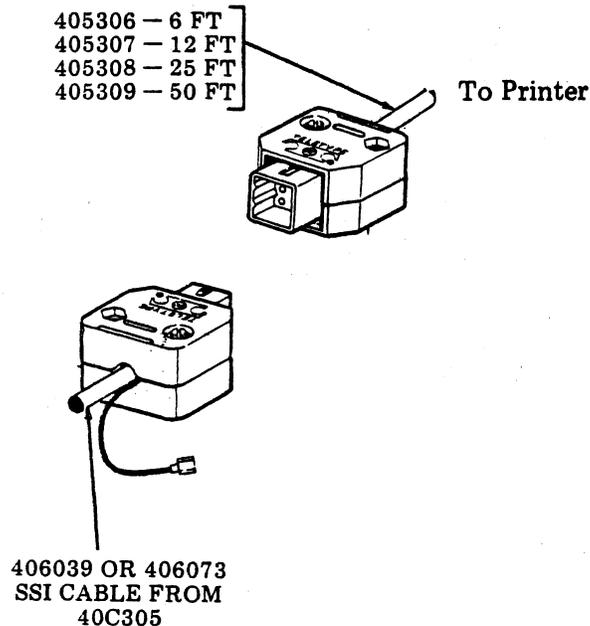


2.52 To install cable, reverse the procedures of 2.51.

## 406073 Printer Cable (40C305)

## 2.53 To remove cable:

- Access the controller (2.37).
- Remove cable (2.25). A printer extension cable (405306, 405307, 405308, or 405309) may be connected between the printer cable and the printer.



2.54 To install cable, reverse the procedures of 2.53.

## C. Back Panel (40C305)

## 2.55 To remove 410277 or 410351 back panel:

- Access the controller, disconnect ac power then remove 40PSU101 power supply (2.35).
- Remove controller circuit cards (2.15 through 2.18).
- Remove monitor/controller cable from controller (2.43).
- Remove opcon/controller cable from controller (2.49).
- Remove EIA cable or private line interface cable, as applies (2.25 Steps 3, 4, and 5).
- Remove printer cable from controller (2.25).
- Remove back panel (2.27 Steps 4 and 5).

2.56 To install back panel, reverse procedures of 2.55.

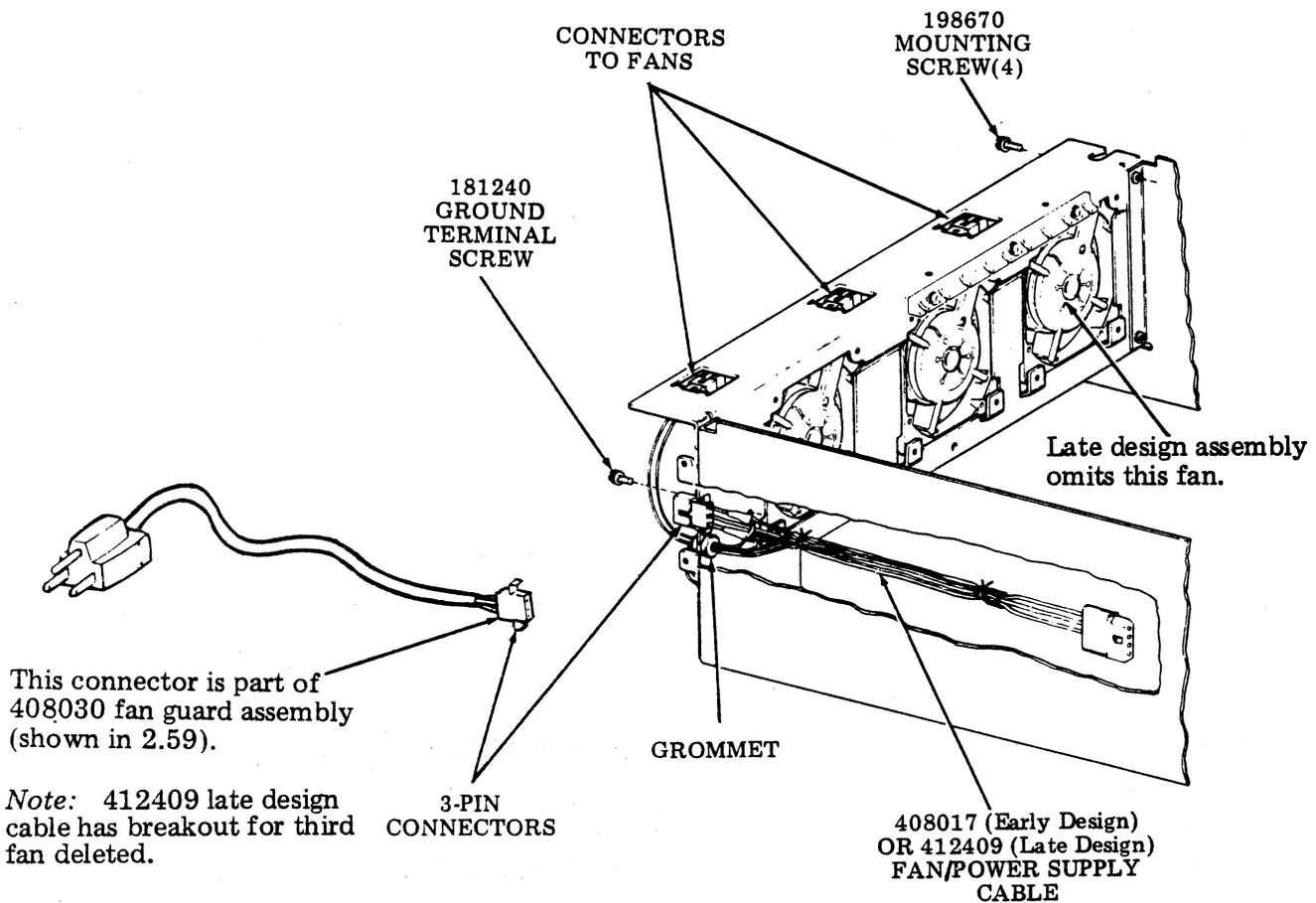
SECTION 582-200-705

D. Ventilation Assembly (40C305)

408017 (Early design) or 412409 (Late design) Fan/Power Supply Cable

2.57 To remove cable:

- Access Controller (2.37), disconnect ac cord and remove power supply (2.35).
- Remove controller cards (2.37).
- Remove monitor/controller cable from controller (2.43).
- Remove opcon/controller cable from controller (2.49).
- Remove printer cable from controller (2.25, Steps 3,4, and 5).
- Remove EIA or interface cable (2.51).



- ① Remove ground terminal screw. Remove ring terminal of cable from screw.
- ② Perform Steps 6 and 7 of 2.59.
- ③ Disconnect each connector to a fan; pull connector out while rocking it back and forth.
- ④ Slide grommet and 3-pin connector of fan/power supply cable off ventilation assembly.

2.58 To install fan/power supply cable, reverse the procedures of 2.57.

408050 (Early Design) or 412410 (Late Design) Ventilation Assembly (40C305)

2.59 To remove the 408050 or 412410 ventilation assembly:

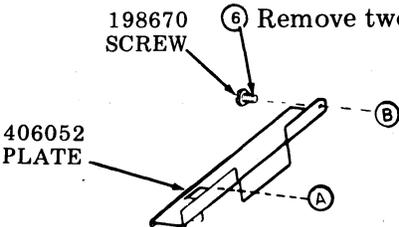
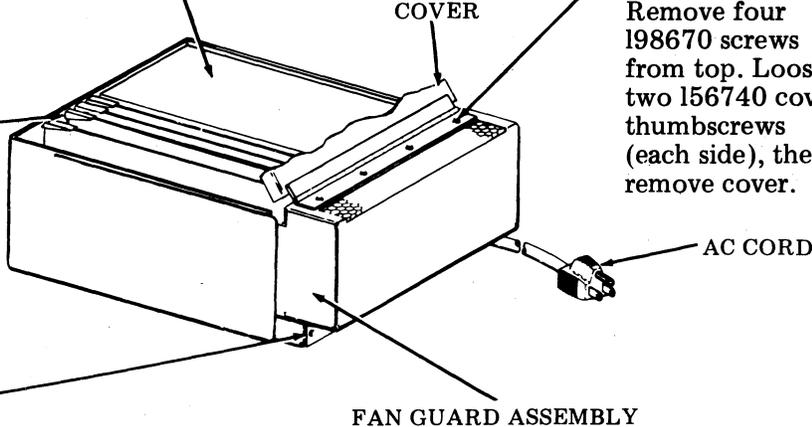
⑤ Remove monitor/controller cable (2.43), opcon/controller cable (2.49), printer cable (2.25 Steps 3 through 5), and EIA or interface cable (2.51).

② Remove power supply (2.35).

① Disconnect ac cord. Remove four 198670 screws from top. Loosen two 156740 cover thumbscrews (each side), then remove cover.

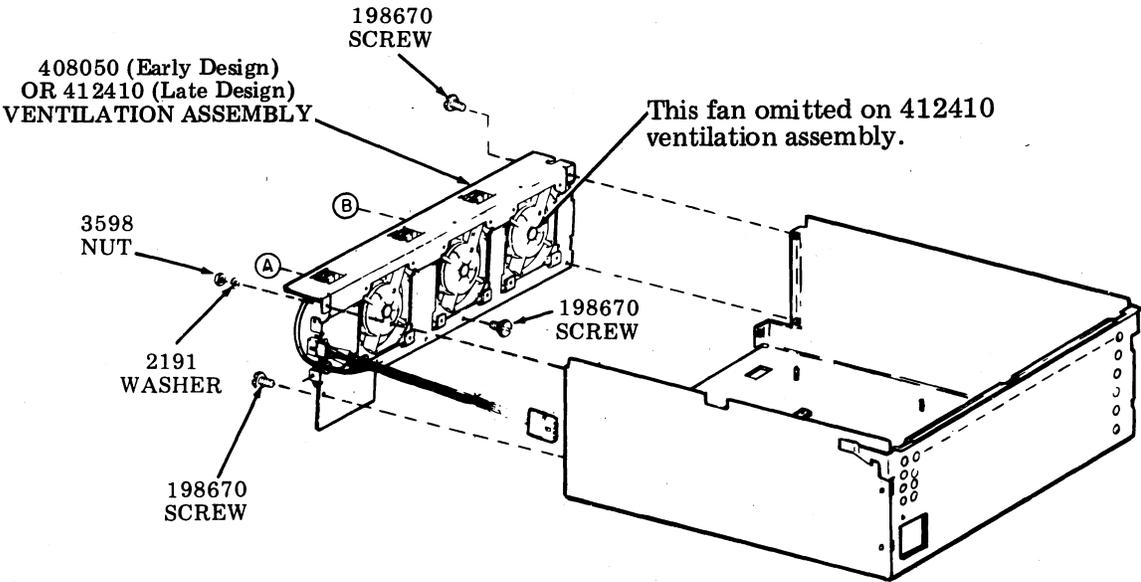
③ Remove circuit cards (see 2.37).

④ Loosen four 156720 screws. Remove 408030 fan guard assembly from controller.



⑥ Remove two screws that secure 406052 plate. Remove plate.

⑦ Remove two remaining screws, 3598 nut, and 2191 lockwasher. Remove ventilation assembly.



2.60 To install ventilation assembly, reverse the procedures of 2.59.

## SECTION 582-200-705

### 408015 Fan (40C305)

2.61 To remove a 408015 Fan:

- Perform all Steps of 2.59.
- Perform Steps 1 and 2 of 2.33.

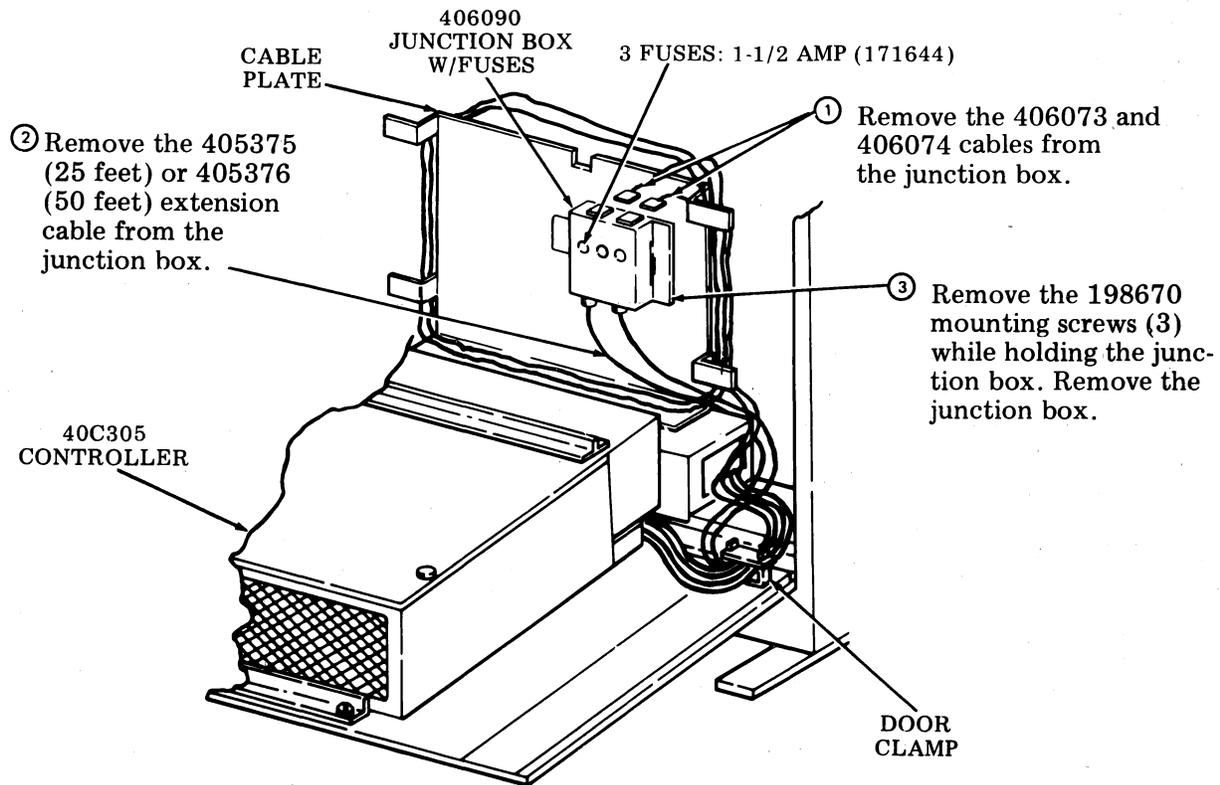
2.62 To install fan, reverse the procedures of 2.61.

### E. 406094 Modification Kit to add a KD Extension Cable

2.63 The 406094 modification kit is required to connect the KD to the controller via a 405375 or 405376 extension cable (otherwise 406094 is not used). The modification kit consists of 198670 mounting screws (3) and 406090 junction box (1) with fuses and associated documents.

2.64 To remove the 406090 junction box with fuses:

- Access controller (2.37), disconnect ac cord.



2.65 To install the 406090 junction box with fuses, reverse the procedures of 2.64.

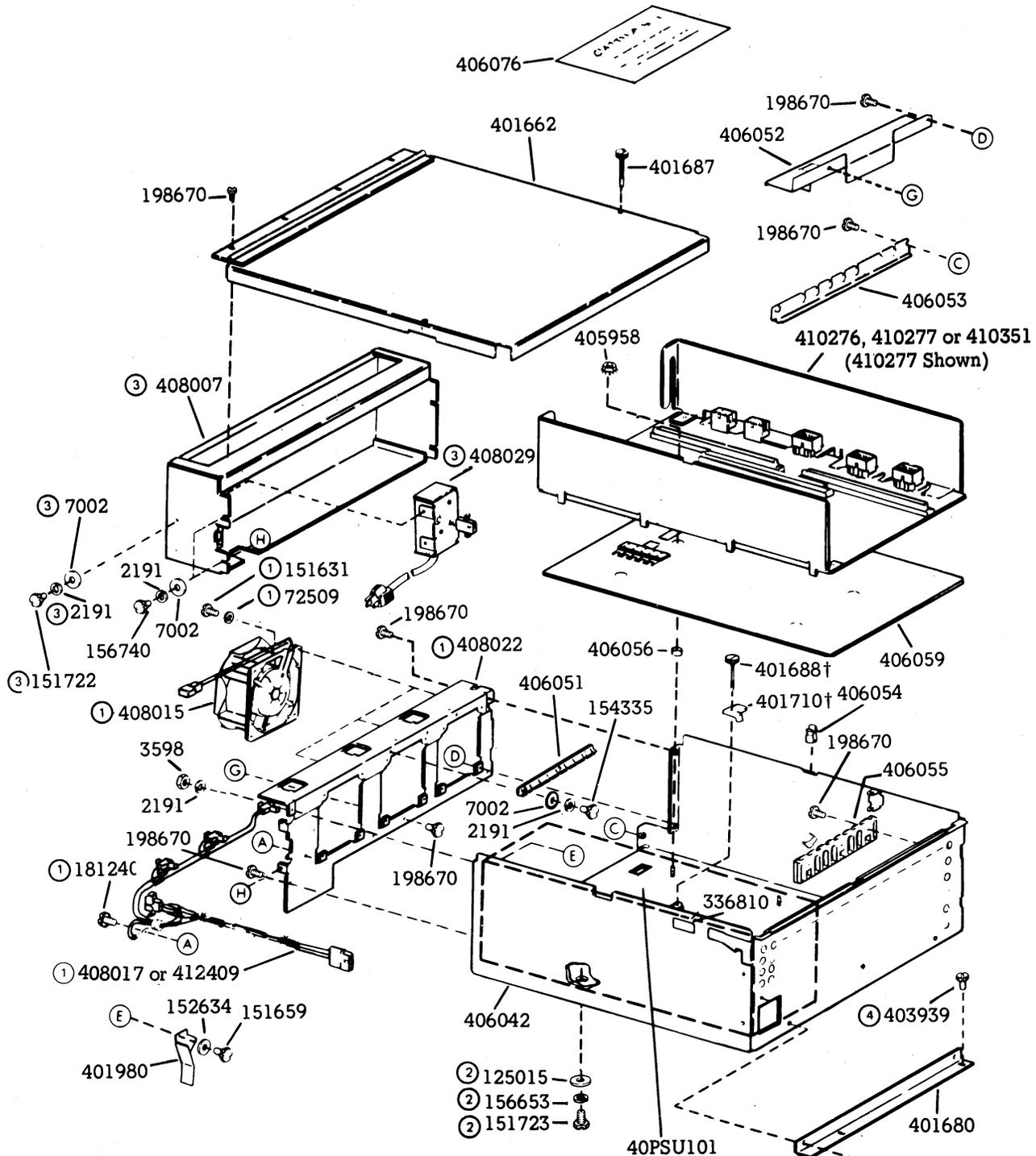
## 3. PARTS

3.01 For parts information on interconnect cables, Section 582-200-405.

3.02 Parts information for individual components (printer, monitor, etc) are not illustrated in this section. Refer to appropriate BSP Sections.

3.03 Field replaceable components of controller are listed in the index which follows the parts illustration, see 3.04.





- ① Part of 408050 (early design) or 412410 (late design) fan assembly
- ② Present only on 406042 logic module (late design); used only for 40PSU101 power supply (late design)
- ③ Part of 408030 fan guard assembly
- ④ In Muslin Bag

Note: 406073, 406074 and 406075 are loose cables not illustrated.

†Omitted on controllers manufactured after July 1980.

40C305-Type Controller

## INDEX OF REPLACEABLE PARTS

3.04 The index below contains field replaceable parts. The index shows the section or page number of the part on which access is provided. See Note 2.

*Note 1:* When ordering replaceable components, unless otherwise specified, prefix each part number with the letters "TP" (ie TP410055).

*Note 2:* Where page numbers in the index are given with a slash "/", the number before the slash is for a 40C304 controller and the number after the slash is for a 40C305 controller.

APPLICATION	PART NO. OR APPARATUS CODE	DESCRIPTION	SECTION OR PAGE NO. (40C304/40C305)
Monitor	40MN101/AA	Monitor (60 Hz)	4
	40MN201/AA	Monitor (50-60 Hz)	4
	341578	Fuse, 1.4 Amp	Section 582-200-751
	341686	Fuse 1.5 Amp	Section 582-200-751
Opcon	40K104/DAB	Opcon (EBCDIC, Typewriter Style)	4
	40K105/CAA	Opcon (EBCDIC, internal numeric cluster style)	4
	40K203/GAB	Opcon (EBCDIC, external numeric cluster style)	4
	Various	Keypops for ASCII	Section 582-200-205
Printer	40P101/ZZ	Printer, Friction Feed	6
	40P102/ZZ	Printer, Friction Feed	6
	40P151/ZZ	Printer, Tractor Feed — 80 Column	7
	40P154/ZZ	Printer, Tractor Feed — 80 Column	7
	40P201/ZZ	Printer, Tractor Feed — 132 Column	7
	40P202/ZZ	Printer, Tractor Feed — 132 Column	7
	40P204/ZZ	Printer, Tractor Feed — 132 Column	7
	40P253/ZZ	Printer, Forms Access — 80 Column	8
	Various Numbers	Type Carriers	Section 582-210-702
	143306	Fuse, 1 Amp SL-BL MDL-1	Section 582-200-751

## SECTION 582-200-705

APPLICATION	PART NO.OR APPARATUS CODE	DESCRIPTION	SECTION OR PAGE NO. (40C304/40C305)
Printer Type Carrier (Std is Standard) (Block is OCR-B)	400645	80 Column, Mono ASCII Std (AA)	
	400785	80 Column, Mono EBCDIC Std (AQ)	
	400629	80 Column, Up-Low ASCII Std (AB)	
	400784	80 Column, Up-Low EBCDIC Std (AN)	
	408392	80 Column, Mono ASCII Block (BD)	
	408524	80 Column, Mono EBCDIC Block (BM)	
	400629	80 Column, Up-Low ASCII Block (BB)	
	408525	80 Column Up-Low EBCDIC Block (BN)	
	400780	132 Column, Mono ASCII Std (AL)	
	400887	132 Column, Mono EBCDIC Std (AS)	
	400777	132 Column, Up-Low ASCII Std (AG)	
	400783	132 Column, Up-Low EBCDIC Std (AM)	
	408393	132 Column, Mono ASCII Block (BE)	
	408522	132 Column, Mono EBCDIC Block (BK)	
	408391	132 Column, Up-Low ASCII Block (BC)	
	408523	132 Column, Up-Low EBCDIC Block (BL)	

APPLICATION	PART NO. OR APPARATUS CODE	DESCRIPTION	SECTION OR PAGE NO. (40C304/40C305)
Controller	40C304 (type) 40C305 (type) 40PSU101 129920  408015 408050 or 412410 410276  410277 410351 Various Numbers	Controller (SDC) Controller (SDC) Power Supply Fuse, 5 Amp SL-BL (for 40PSU101) Fan Ventilation Assembly Back Panel  Back Panel Back Panel Circuit Cards	10/& 27/ /19 &/28 9/18  18/26 17/25 15/  15/23 15/23 10/20 (Locations Given in Section 582-200-205)
Cabinets and Pedestals	Various Numbers	Cabinets and Pedestals	Section 582-212-700
Cable	406036 or 454208 406075 or 454209 408065 408066 408067 406039 406073 405306  405307  405308  405309  406046 406074 406048 406073 405375 405376 408017 or 412409 406094 406090	EIA Cable EIA Cable EIA Extension Cable EIA Extension Cable EIA Extension Cable Printer Cable Printer Cable Printer Extension Cable Printer Extension Cable Printer Extension Cable Printer Extension Cable Printer Extension Cable Monitor Cable Video Cable Opcon Cable Opcon Cable Extension Cable Extension Cable Fan/Power Supply Cable Modification Kit Junction Box With Fuses	13/22 /22 13/22 13/22 13/22 14/23 /23 14/23  14/23  14/23  14/23  11/ /21 12/ /21 /21 /21 16/24 /26 /26