

INTEGRATED ASYNCHRONOUS "DATASPEED*" 40 RECEIVE-ONLY PRINTER STATION
DISASSEMBLY/REASSEMBLY AND PARTS

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OPERATOR CONSOLE (Opcon) . . .	2	1.01 This section provides instructions for dis-	
PRINTER	5	assembly and reassembly of Integrated	
CONTROLLER	6	DATASPEED 40 Receive-Only Printer (ROP)	
CABINET	14	Stations in both DATAPHONE† (40/1 and 40/2)	
3. PARTS	15	and multipoint private line (40/3) service. A list	
GENERAL	15	of field-replaceable parts for the controller and	
INDEX OF PARTS	15	its cables, indexed to the instructions for their	
A. Opcon	15	access, is included.	
B. Printer	15	1.02 This section is reissued to include the alter-	
C. Controller	15	nate method for option implementation.	

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

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†Registered Service Mark of AT&TCo.

SECTION 582-200-704

2. DISASSEMBLY/REASSEMBLY

OPERATOR CONSOLE (Opcon)

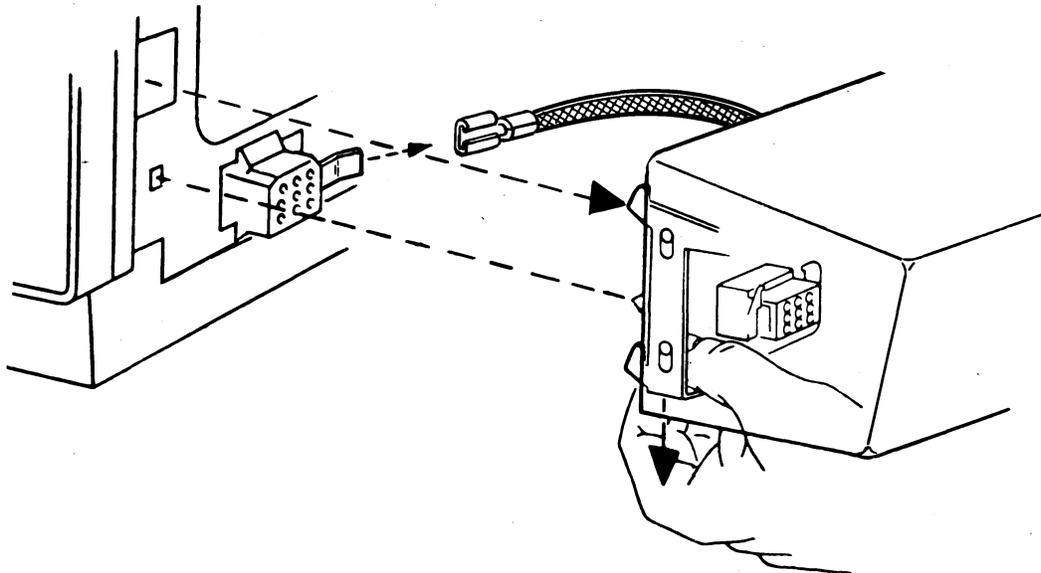
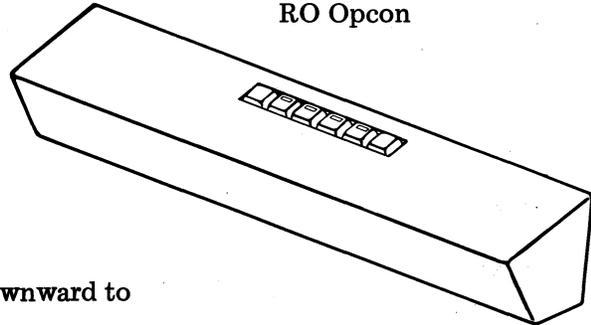
2.01 Reference in the procedures to left or right and up or down and top or bottom, etc, refer to the opcon in its normal operating position.

2.02 For removal of subassembly or parts from the opcon refer to Section 582-211-700.

2.03 To remove 40K001/AAA or 40K004/AAA opcon from cabinet:

- ① Place thumb on left inward tab of opcon and press downward to unlatched position.
- ② Hold opcon firmly with left hand, and with right hand place thumb on right inward tab and press downward to unlatched position.
- ③ Pull opcon forward lightly to disengage from cabinet.
- ④ Slide opcon ground strap terminal off of cabinet terminal tab.

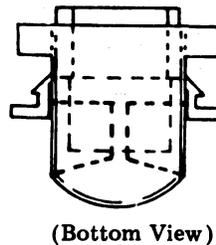
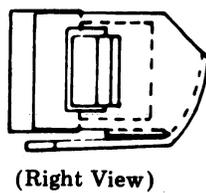
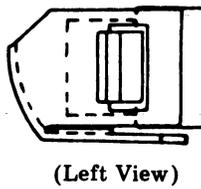
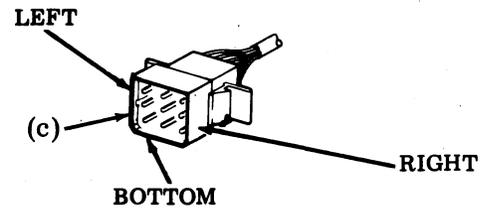
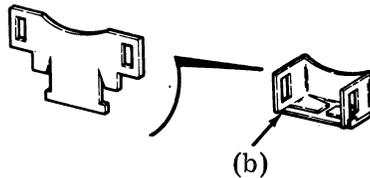
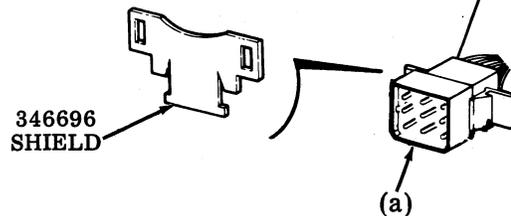
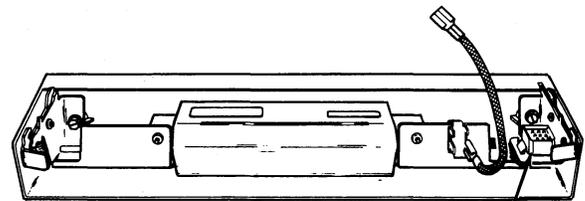
40K001/AAA or 40K004/AAA
RO Opcon



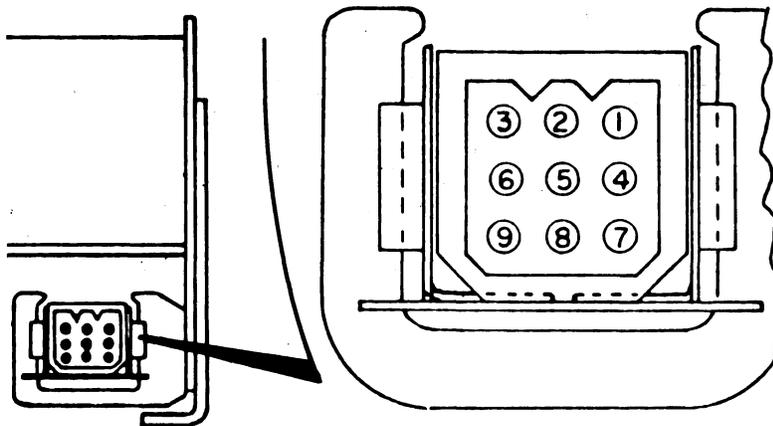
2.04 To replace the 40K001/AAA or 40K004/AAA opcon reverse the steps of 2.03.

Note: Check opcon interface connector and make sure 346696 shield is present. It is a **MUST** requirement when opcon is used with integrated controller. If not present, install one using the following instructions.

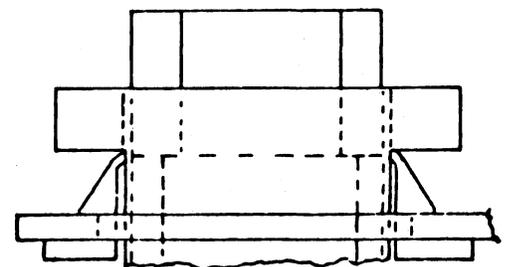
- (a) Remove interface connector from its bracket.
- (b) Fold 346696 shield approximately along the indicated area to assist in installation.
- (c) Viewing terminal end of connector as shown, place left then right slotted holes over left and right connector ears.



- (d) With all tabs folded, insert connector with shield into its mounting bracket so that shield tabs go through the bracket.



(Installed - Rear View)

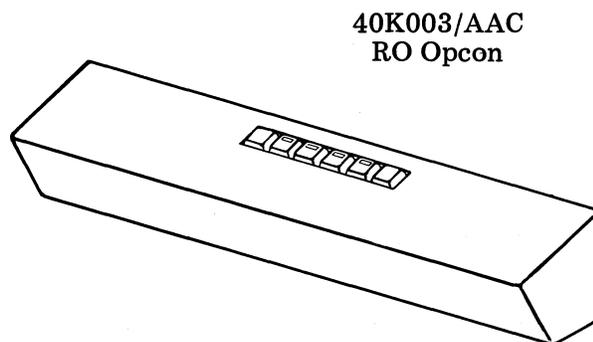


(Installed - Bottom View)

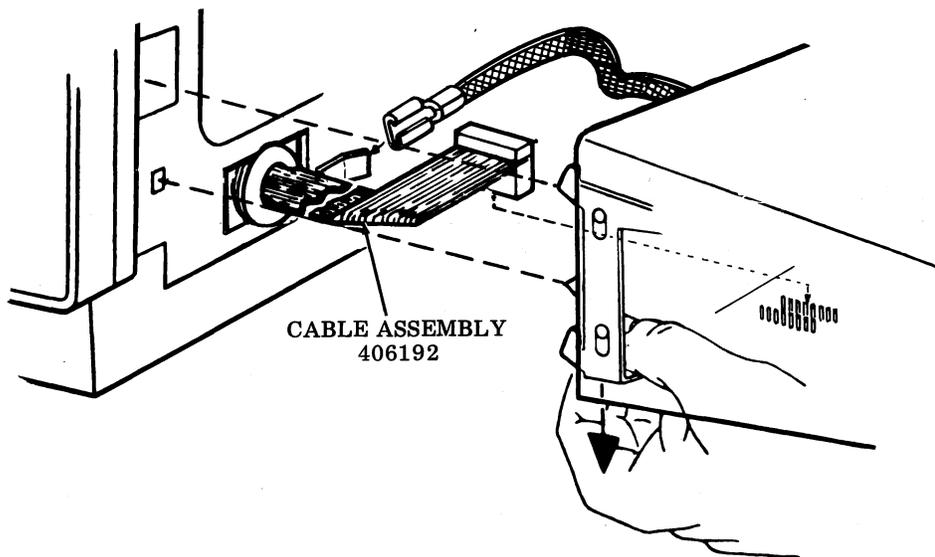
SECTION 582-200-704

2.05 To remove 40K003/AAC opcon from cabinet:

- (a) Place thumb on left inward tab of opcon and press downward to unlatched position.
- (b) Hold opcon firmly with left hand; with right hand place thumb on right inward tab and press downward to unlatched position.
- (c) Pull opcon forward.
- (d) Slide opcon ground strap terminal off of cabinet terminal tab.
- (e) Remove connector of cable 406192 from opcon circuit card.



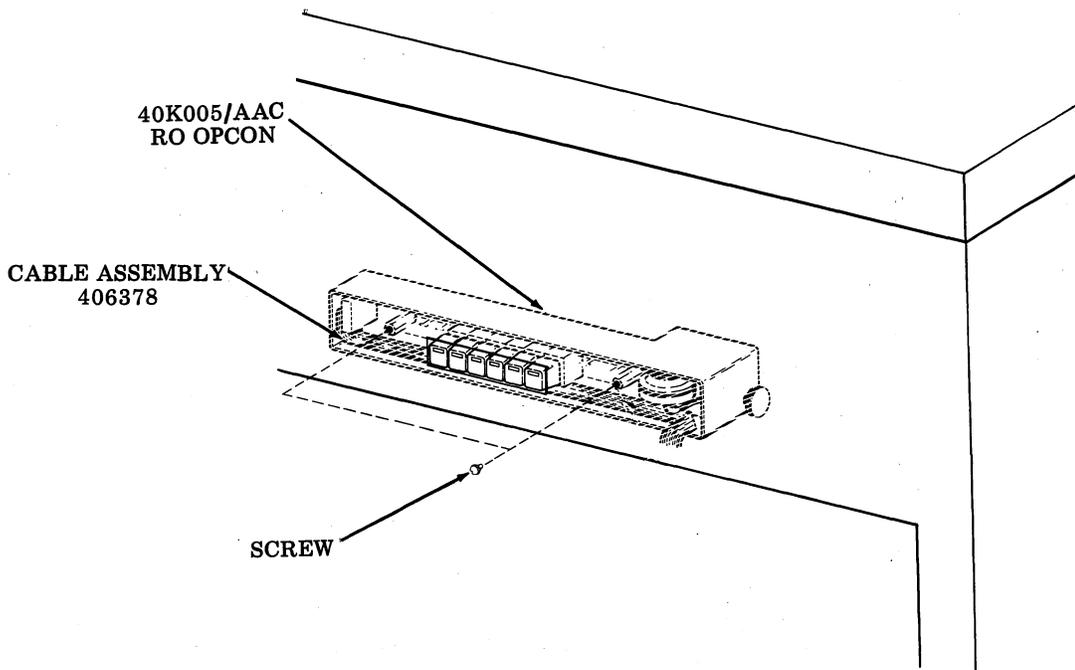
2.06 To replace the 40K003/AAC opcon reverse the steps of 2.05.



2.07 To remove 40K005/AAC opcon from forms access cabinet:

- (a) Open right and left doors of cabinet.
- (b) Hold opcon firmly with left hand.
- (c) Remove two screws.
- (d) Remove opcon from inside of cabinet.
- (e) Remove connector of 406378 cable from opcon circuit card.

2.08 To replace the 40K005/AAC opcon reverse the steps of 2.07.

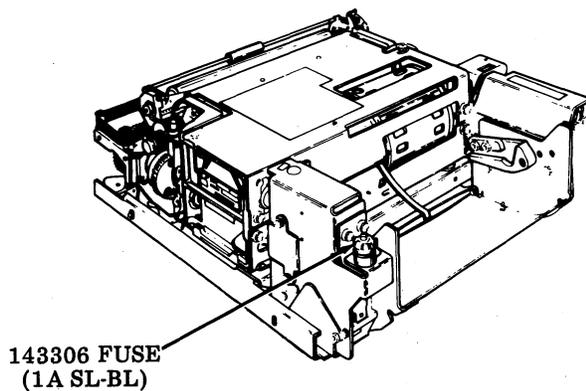


PRINTER

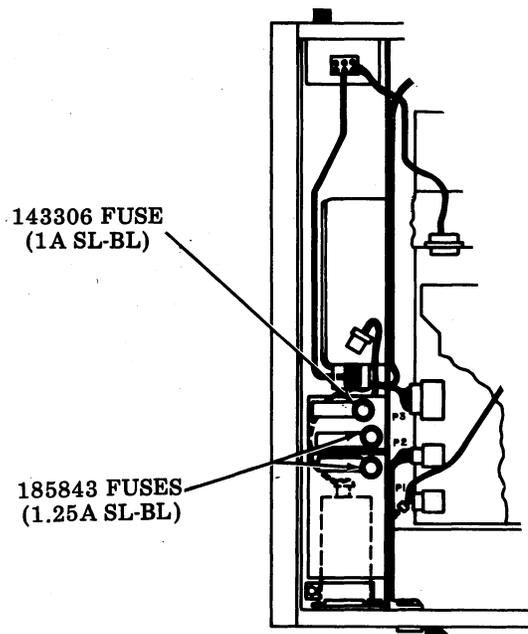
2.09 To remove printer from cabinet and replace refer to Section 582-210-750.

2.10 Location of fuses:

Friction Feed Printer and Cabinet



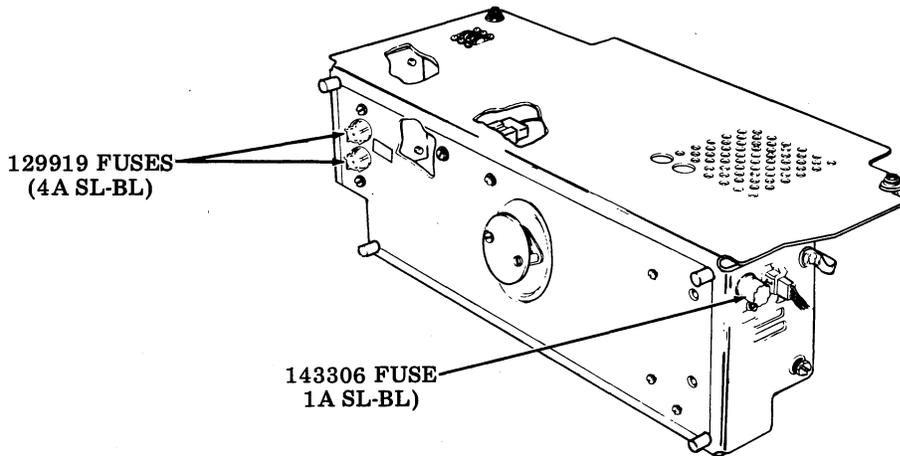
Friction Feed Printer
40P102/ZZ



Left Side of 40CAB371/ZZ Cabinet

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Tractor Feed Printer



CONTROLLER

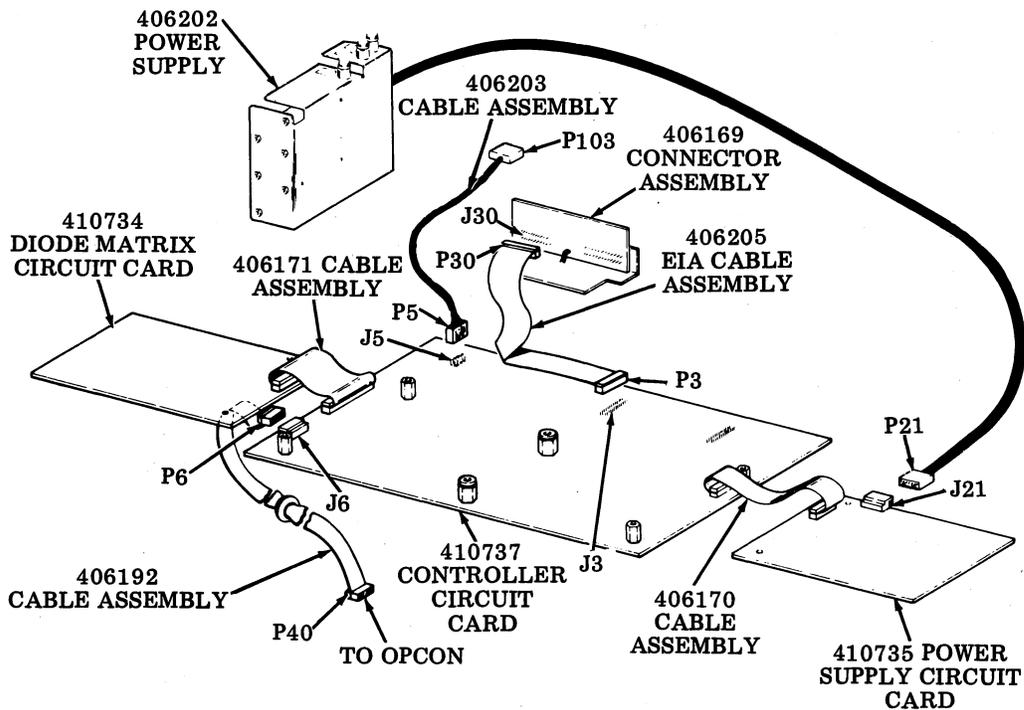
Caution: BEFORE handling the integrated controller, observe and follow the static discharge grounding precautions detailed in Section 582-200-204.

2.11 Precautions should be taken to assure that the controller is disassembled and reassembled under clean conditions. No oil, grease, or other liquids should be present on loose parts, circuit cards, or cable connectors.

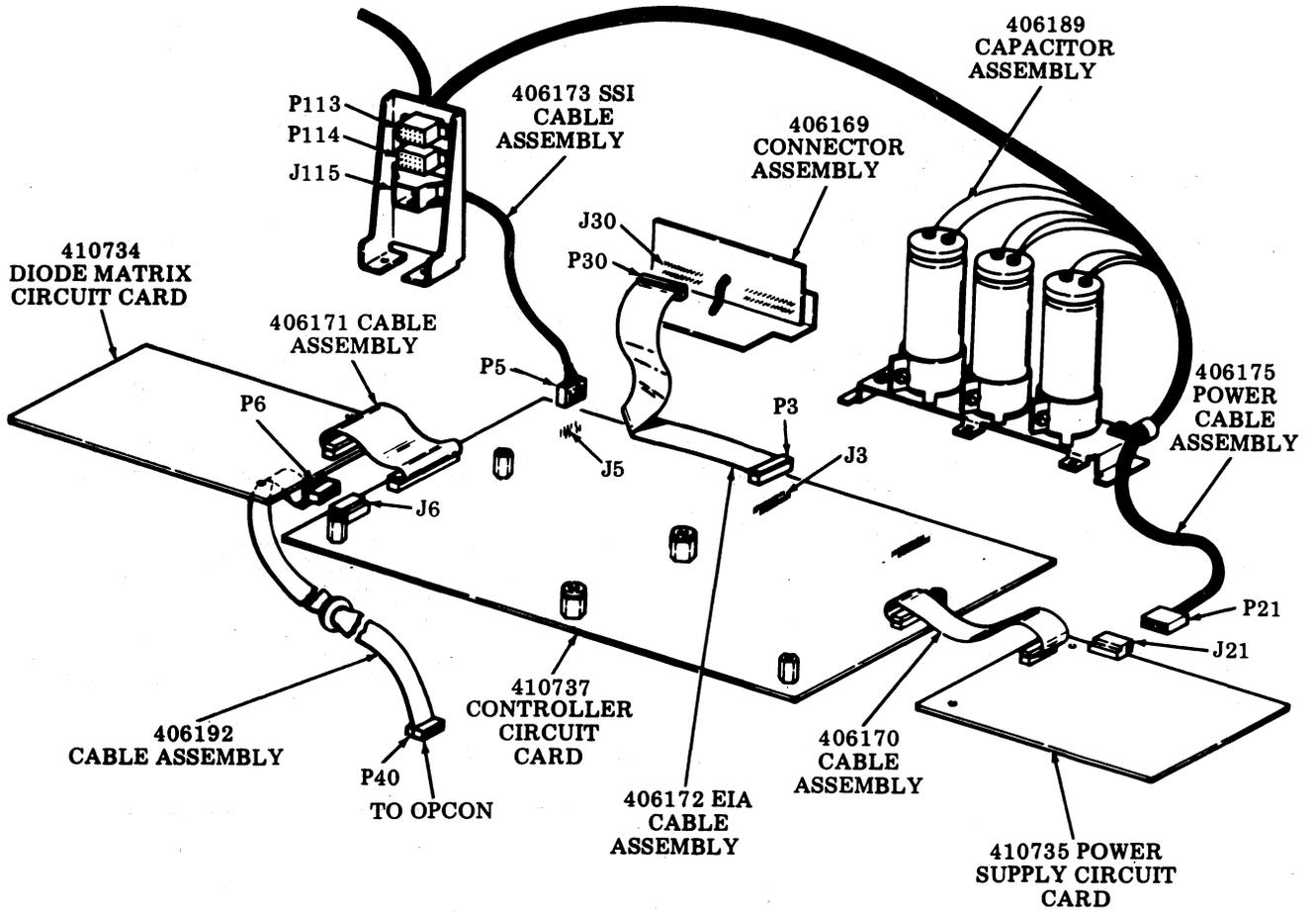
2.12 To remove controller from cabinet and replace refer to Section 582-200-204.

2.13 Controller cabling and connections.

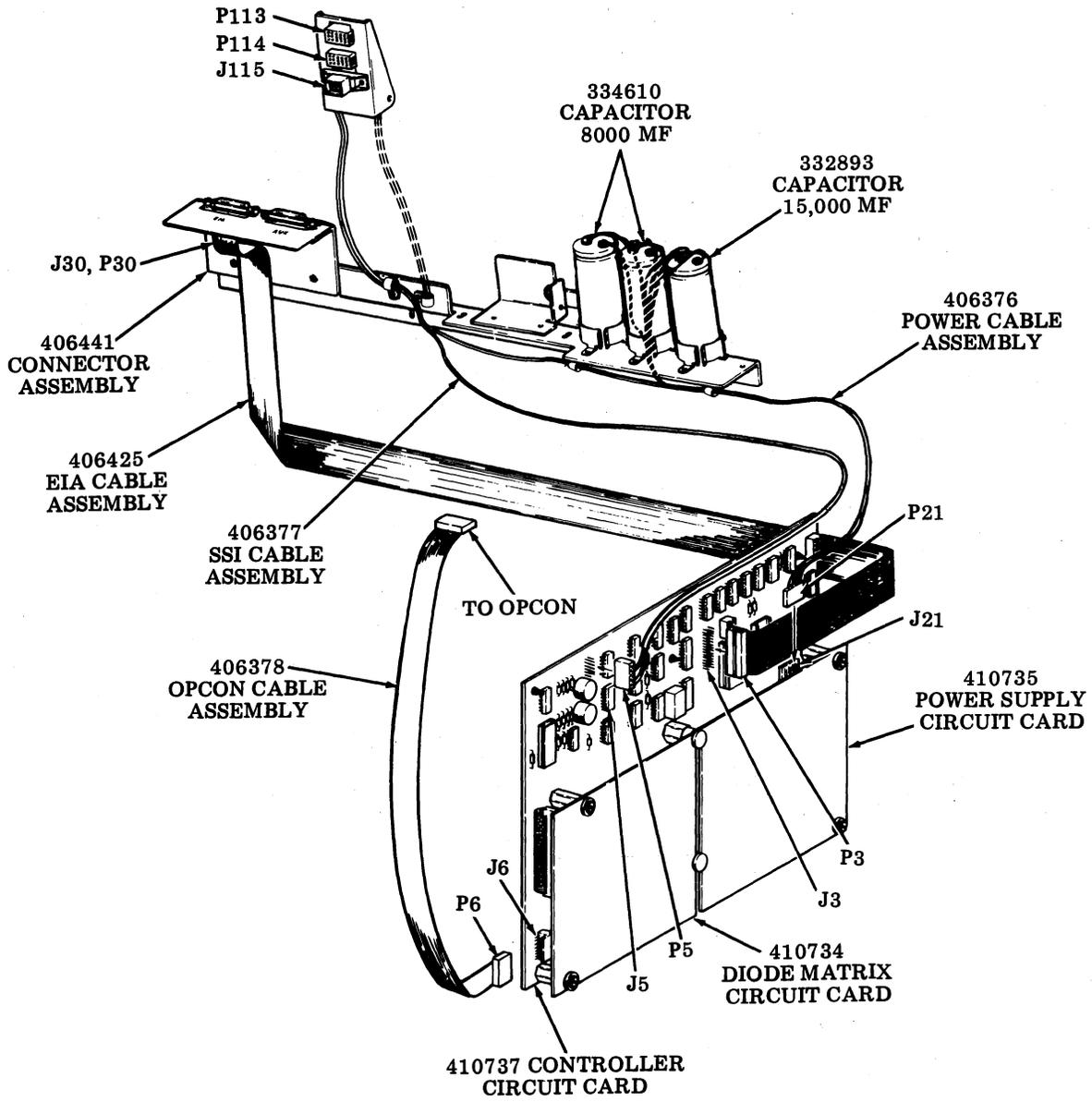
40C303AD Controller for Friction Feed Applications



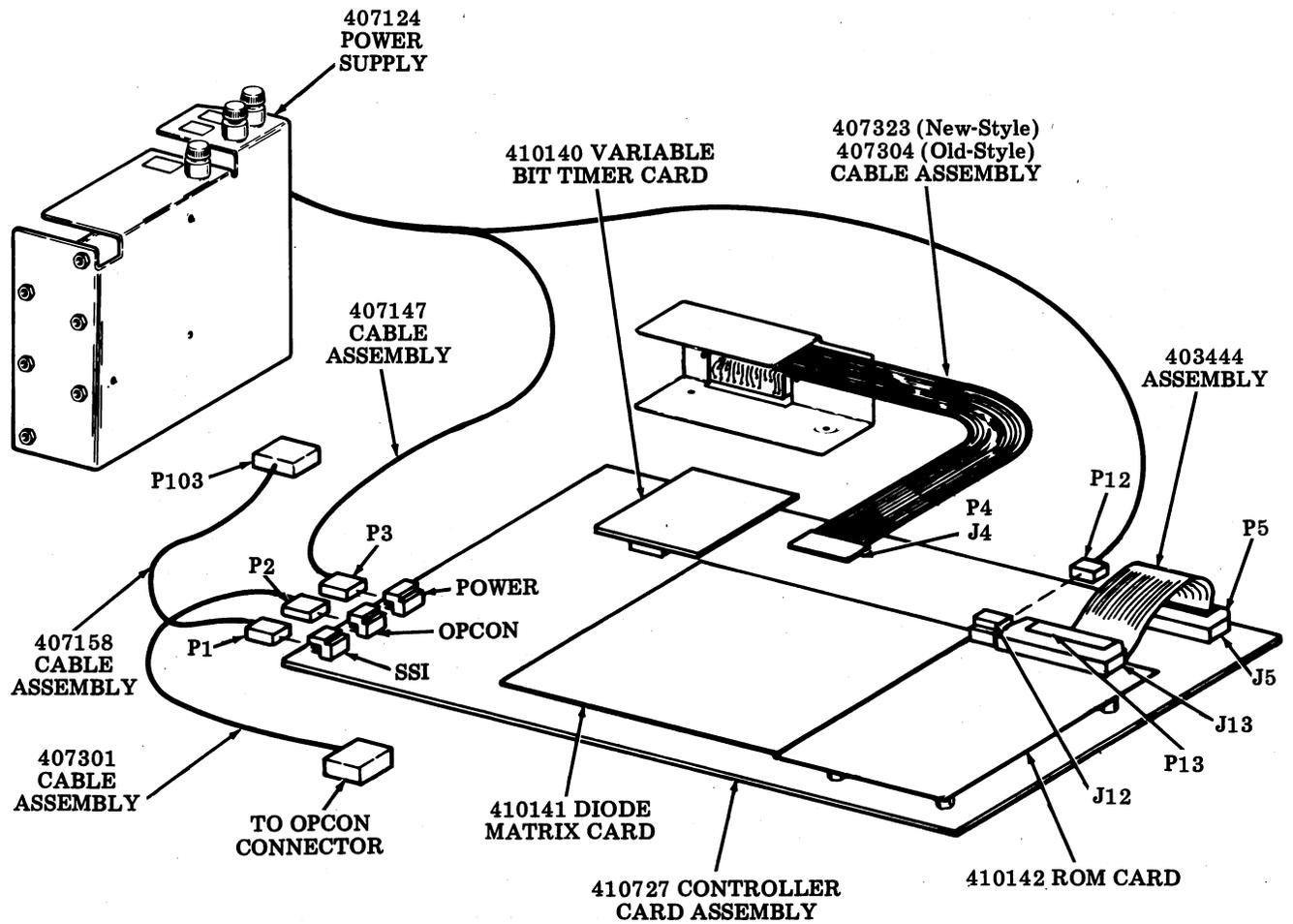
40C303AD Controller for Tractor Feed Applications



40C303AD Controller for Forms Access Applications

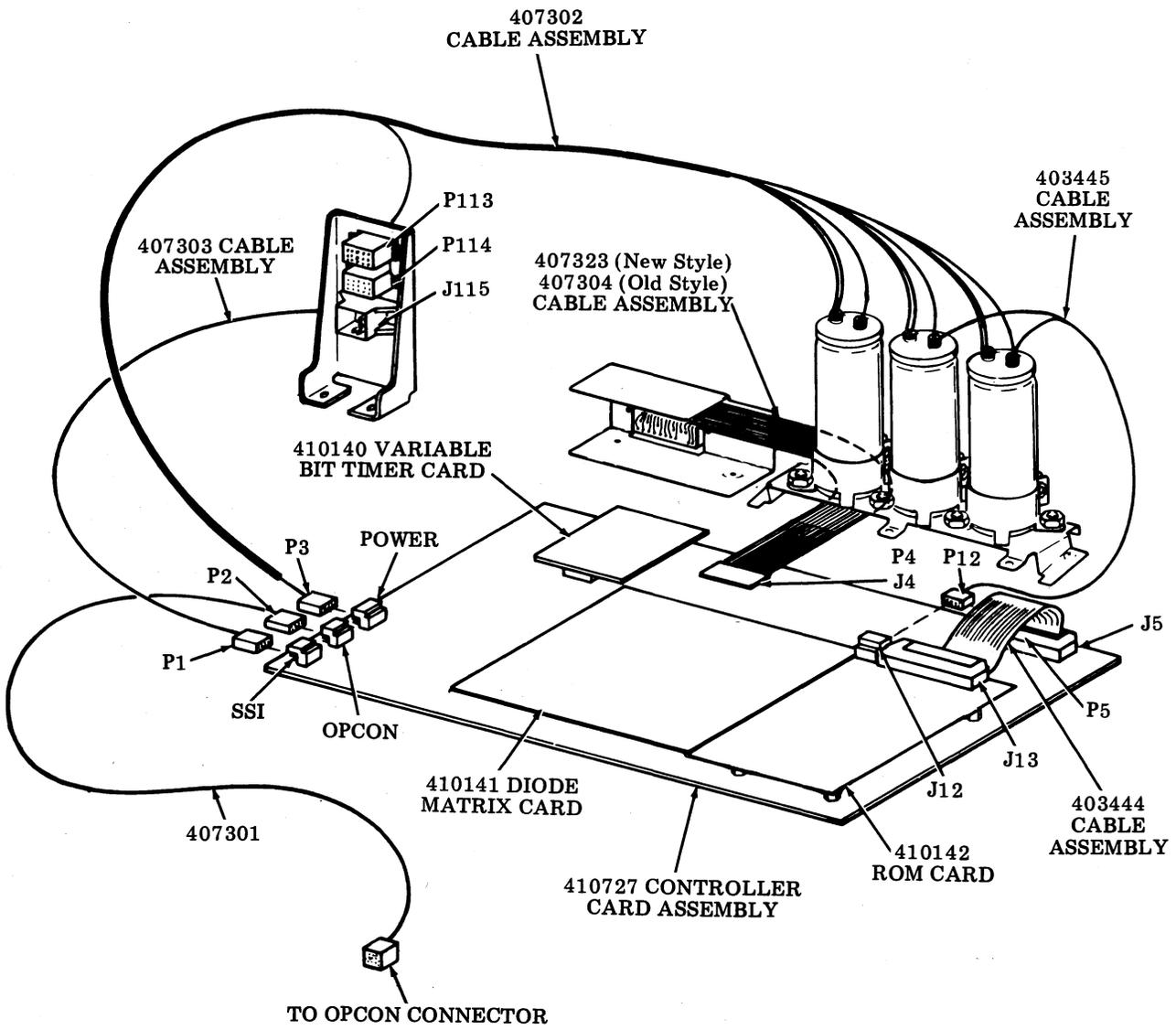


40C303AA/001 Controller for Friction Feed Applications



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40C303AA/001 Controller for Tractor Feed Applications



2.14 To remove diode from card:

- Remove controller (refer to Section 582-200-204).
- Remove controller cover (refer to Section 582-200-204).
- Remove diode matrix card and invert (refer to Section 582-200-204).

① For option purposes, diode should be cut at each end with 408071 cutting pliers and removed completely.

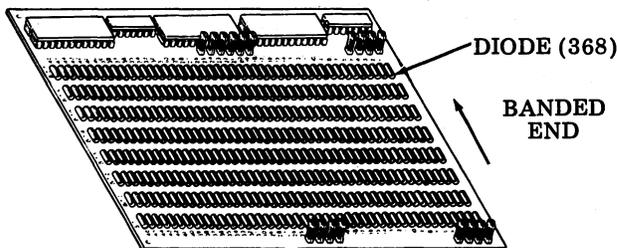
Alternate Method

- Cut diode on one side leaving as much lead as possible for resoldering.
 - Pry free end of diode up so that free end of lead is at least 1/8 inch from the surface of the circuit board.
 - The diode (including free end) must be covered with suitable insulating sleeving. The sleeving must be friction tight so as not to fall off when the circuit card is handled. The sleeving must be obtained locally.
- ② To reinstall a cut diode, unsolder the cut ends of the previous diode and remove. Insert new diode (see Note) with banded end facing circuit packs as shown below, bend leads, clip off excess, and resolder.

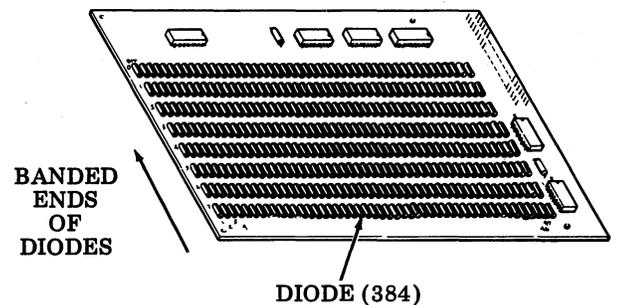
Alternate Method

- Remove sleeving from diode to be resoldered.
- Solder free end of diode using a low (25 watts or less) wattage soldering iron.
- After resoldering, the diode must be checked with a volt/ohm meter for shorts or opens.
- After the controller has been reassembled into the set, a diode matrix print out must be obtained to assure that there are no open diodes present or that there are no shorts caused by solder splashes.

Note: Early design 410141 circuit cards (40C303AA/001) had 177108 diodes. Late design 410141 circuit cards (40C303AA/001) and 410734 circuit cards (40C303AD) have 407336 diodes. 407336 and 177108 diodes are interchangeable.



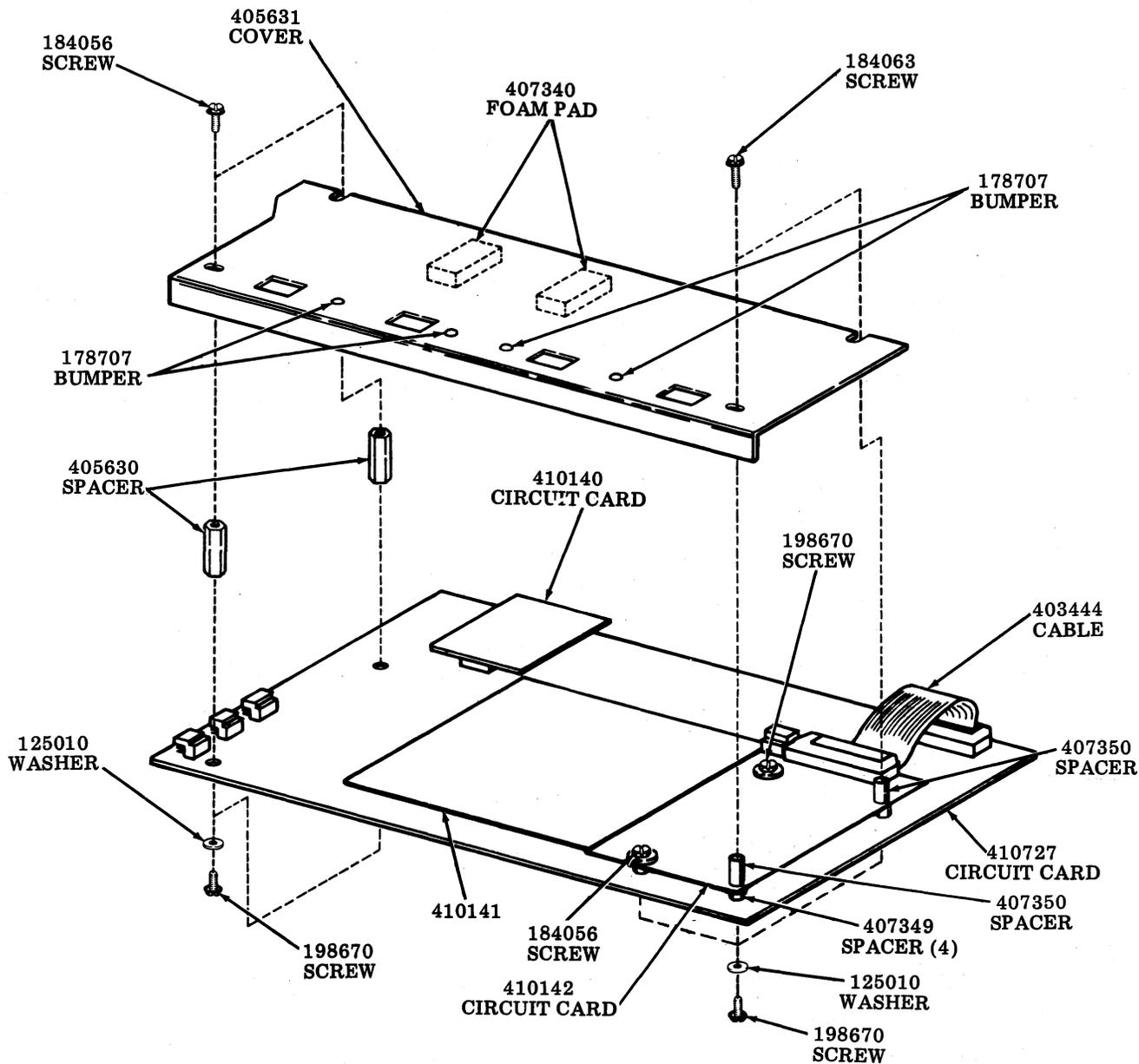
410141 Diode Matrix Card (Inverted)
(40C303AA/001 Controller)



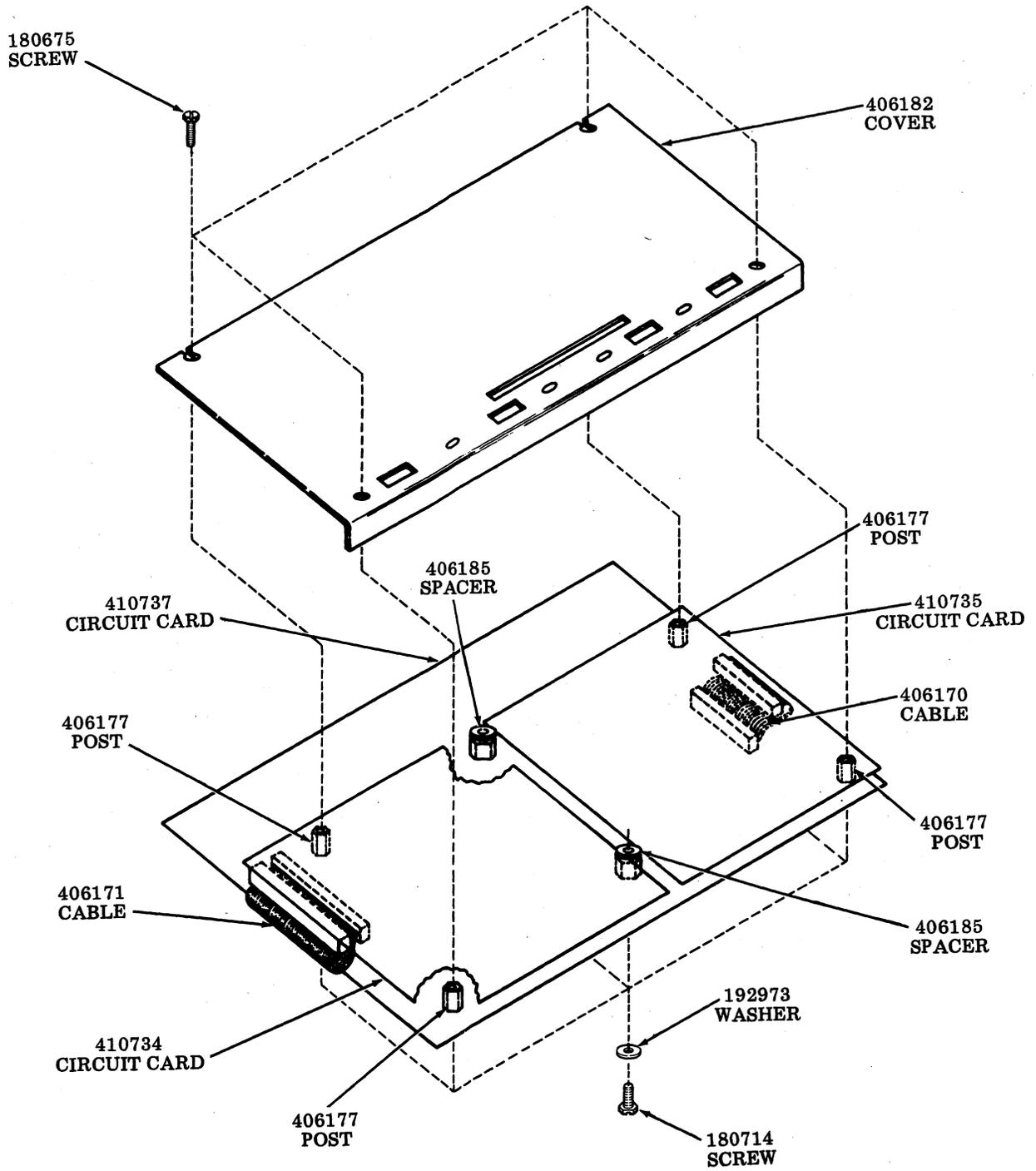
410734 Diode Matrix Card (Inverted)
(40C303AD Controller)

2.15 Parts Location

40C303AA/001 Controller



40C303AD Controller

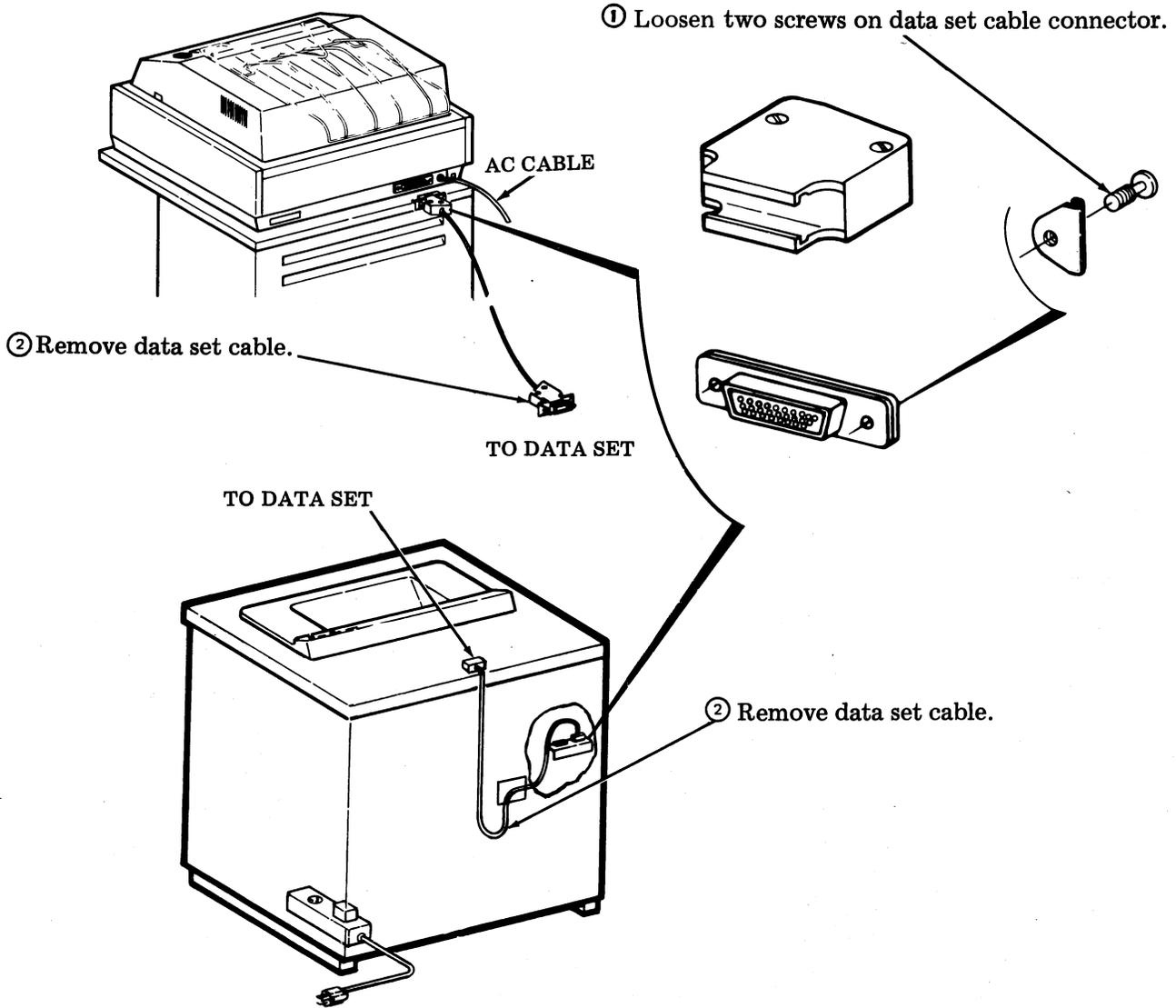


SECTION 582-200-704

CABINET

2.16 For removal of subassemblies or parts from the cabinet refer to Section 582-212-700.

2.17 To remove data set cables:



3. PARTS

section on which their access is provided. An illustration of each component will be found on the indicated page.

GENERAL

3.01 All field-replaceable components of the controller and its cables are listed in the following index, showing the page number of this

3.02 Orders for components should prefix each part number with the letters "TP" (ie, TP410055).

INDEX OF PARTS

A. Opcon

OPCON		
PART NO.	DESCRIPTION	PAGE NO.
346696	Shield	3
40K001/AAA	Opcon	2
40K003/AAC	Opcon	4
40K004/AAA	Opcon	2
40K005/AAC	Opcon	4, 5

B. Printer

PART NO.	DESCRIPTION	PAGE NO.
129919	Fuse, 4A SL-BL	6
143306	Fuse, 1A SL-BL MDL-1	5, 6

C. Controller

40C303AA/001 CONTROLLER		
PART NO.	DESCRIPTION	PAGE NO.
125010	Washer, Insulating	12
177108	Diode (Early Design)	11
178707	Bumper, Rubber	12
184056	Screw, w/Lockwasher, 6-40 x 1/4 Hex	12
184063	Screw, w/Lockwasher, 6-40 x 7/8 Hex	12
198670	Screw, w/Lockwasher, 6-40 x 5/16 Hex	12
403444	Cable Assembly	9, 10, 12
405630	Spacer	12
405631	Cover	12
407336	Diode (Late Design)	11
407340	Foam Pad	12
407349	Spacer	12
407350	Spacer	12
410140	Circuit Card	9, 10, 12
410141	Circuit Card	9, 10, 11, 12
410142	Circuit Card	9, 10, 12
410727	Circuit Card	9, 10, 12

40C303AD CONTROLLER		
PART NO.	DESCRIPTION	PAGE NO.
180675	Screw, # 6 Self-Tapping	13
180714	Screw, # 6 Self-Tapping	13
192973	Washer, Insulating	13
406170	Cable Assembly	6, 7, 13
406171	Cable Assembly	6, 7, 13
406177	Post	13
406182	Cover	13
406185	Spacer	13
407336	Diode	11
410734	Circuit Card	6, 7, 8, 11, 13
410735	Circuit Card	6, 7, 8, 13
410737	Circuit Card	6, 7, 8, 13

D. Cabinets

40CAB302/ZZ FORMS ACCESS CABINET		
PART NO.	DESCRIPTION	PAGE NO.
332893*	Capacitor	8
334610*	Capacitor	8
406376*	Cable Assembly, Power	8
406377*	Cable Assembly, SSI	8
406378s	Cable Assembly, Opcon	4, 5, 8
406425*	Cable Assembly, EIA	8
406441*	Connector Assembly, EIA	8

*Part of 406372 modification kit (406372 modification kit converts a 40CAB302/ZZ cabinet into a 40CAB302/AA — refer to Specification 50953S). The 406372 modification kit is used with 40C303AD controller.

s Part of 40K005/AAC opcon.

40CAB351 OR 40CAB353/YZ TRACTOR FEED CABINET		
PART NO.	DESCRIPTION	PAGE NO.
403445 ¶	Cable Assembly, Power	10
406169**	Connector Assembly, Dual	7
406172**	Cable Assembly, EIA	7
406173**	Cable Assembly, SSI	7
406175 ††	Cable Assembly, Power	7
406189**	Bracket Assembly, Capacitor	7
406192**	Cable Assembly, Opcon	7
407301 ¶	Cable Assembly, Opcon	10
407302 ¶	Cable Assembly, Power	10
407303 ¶	Cable Assembly, SSI	10
407304 ¶	Cable Assembly, EIA (Early Design)	10
407323 ¶	Cable Assembly, EIA (Late Design)	10

¶Part of 407024 modification kit (407024 modification kit converts a 40CAB351/YZ cabinet into a 40CAB351/AC and a 40CAB353/YZ cabinet into a 40CAB353/AB — refer to Specification 50829S). Cabinets coded 40CAB351/ZZ and 40CAB353/ZZ may also be used with the 407024 modification kit. The 407024 modification kit is used with 40C303AA/001 controller.

**Part of 406190 modification kit (406190 modification kit converts a 40CAB351/YZ cabinet into a 40CAB351/AE and a 40CAB353/YZ cabinet into a 40CAB353/AD — refer to Specification 50915S). Cabinets coded 40CAB351/ZZ and 40CAB353/ZZ may also be used with the 406190 modification kit, however, the cabinet must have a 1-inch by 5-inch cutout in the lower left rear corner to accommodate the dual EIA connector assembly (406169). The 406190 modification kit is used with 40C303AD controller.

††Part of 406175 capacitor bracket assembly.

40CAB371/ZZ FRICTION FEED CABINET		
PART NO.	DESCRIPTION	PAGE NO.
143306** §§	Fuse, 1A SL-BL MDL-1	5
185843** §§	Fuse, 1.25A SL-BL	5
406169**	Connector Assembly, EIA	6
406192**	Cable Assembly	4, 6
406202**	Power Supply Assembly	6
406203**	Cable Assembly, SSI	6
406205**	Cable Assembly, EIA	6
407124 §§	Power Supply Assembly	9
407147**	Cable Assembly, Power	9
407158 §§	Cable Assembly, SSI	9
407301 §§	Cable Assembly, Opcon	9
407304 §§	Cable Assembly, EIA (Early Design)	9
407323 §§	Cable Assembly, EIA (Late Design)	9

** Part of 406204 modification kit (refer to Specification 50989S). The 406204 modification kit is used with 40C303AD controller.

§§ Part of 407101 modification kit (407101 modification kit converts a 40CAB371/ZZ into a 40CAB371/AB — refer to Specification 50854S). The 407101 modification kit is used with 40C303AA/001 controller.