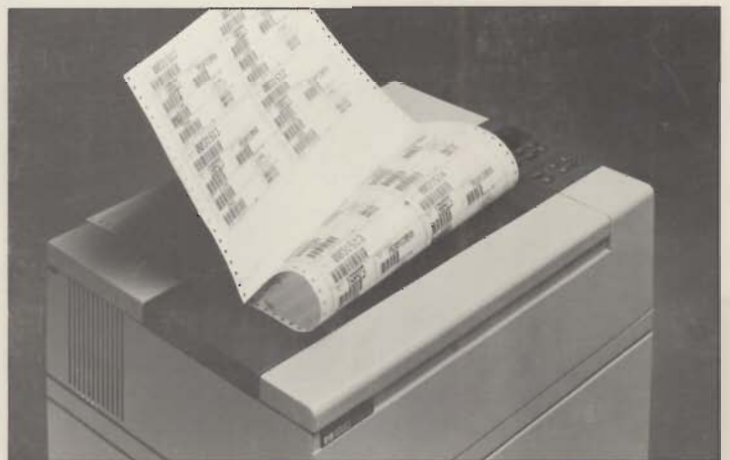
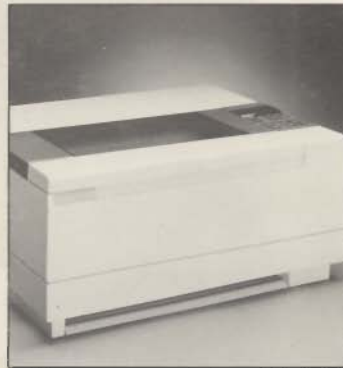


COMPUTER APPLICATIONS PTY. LTD.  
UNIT 2/340 GEORGE ST.  
WATERLOO NSW 2017  
PH: (02) 318 2911



## HP 2563A/B Parts and Diagrams Manual



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# HP 2563A/B PARTS AND DIAGRAMS MANUAL

MANUAL PART NUMBER 02563-90926



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# Publication History

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# PARTS AND DIAGRAMS HP2563A/B

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# PARTS AND DIAGRAMS

## HP2563A/B

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# PARTS AND DIAGRAMS

## HP2563A/B

## PARTS AND DIAGRAMS

### 1. INTRODUCTION

This manual contains illustrated parts breakdowns (IPBs), parts location diagrams, schematics, and replacement parts lists for the standard configurations of the HP2563A and HP2563B Line Printer.

### 2. USING THIS MANUAL

Parts location diagrams, parts lists, IPBs, and schematics for an assembly are located on the same or following pages.

It is important to properly match the diagrams and parts lists with the unit needing repair. Each printed circuit assembly (PCA) is labeled with an assembly number, other printer assemblies are not labeled but can be identified from the IPBs (exploded view diagrams).

### 3. DESCRIPTION OF PARTS LIST

The columns in the parts lists provide the following information:

a. REFERENCE DESIGNATOR.

This column lists the reference designator which identifies the particular part on the IPB or the parts location diagram.

b. DESCRIPTION

This column gives the name or a brief description of the part.

c. HP PART NO

This column lists the Hewlett-Packard part number for each item.

# PARTS AND DIAGRAMS

## HP2563A/B

### 4. PARTS ORDERING PROCEDURE

To order parts from Hewlett-Packard or obtain further information call the nearest Hewlett-Packard Sales and Service Office (listed in the back of this manual) and provide the following information:

- a. Printer model and serial number.
- b. Hewlett-Packard part number
- c. Description of the part
- d. The series code for the PCA

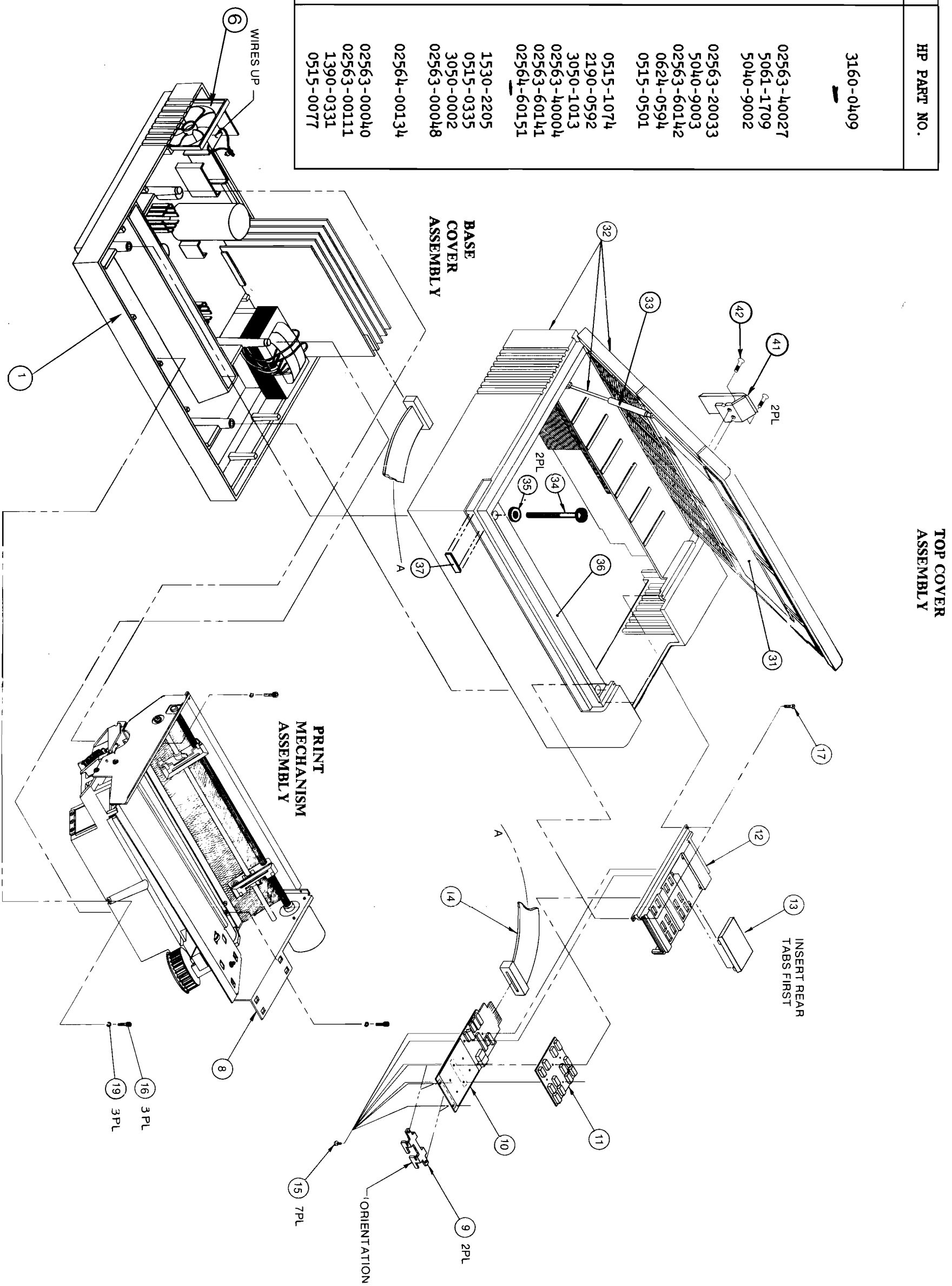
### 5. ILLUSTRATED PARTS BREAKDOWNS, PARTS LOCATION DIAGRAMS, SCHEMATICS, AND PARTS LISTS

The illustrated parts breakdowns, parts location diagrams, replacement parts lists, and schematics are provided on the following pages.



TABLE 1. TOP LEVEL PARTS LISTS

REF. DES.	DESCRIPTION	HP PART NO.
1	ASSY:BASE (See Figure 2) FAN:AXIAL-65CFM (Desktop only) ASSY:PRINT MECH (See Figure 3)	3160-0409
6	CLIP:INTERLOCK PCA:FRONT PANEL KEYPAD	02563-40027 5061-1709 5040-9002
8	BEZEL:CNTRL PNL WINDOW:BEZEL CBL:FRONT PANEL SCR:THRD RLG SHDCCSR:M6X1.2 LG	02563-20033 5040-9003 02563-60142 0624-0594 0515-0501
9		
10		
11		
12		
13		
14		
15		
16		
17	SCR-MACH M3X1.6LG	0515-1074
19	WSHR:M6 SPL LOCK	2190-0592
20	WASHER, Flat	3050-1013
31	WINDOW, Cover	02563-40004
32	CABINET/COVER	02563-60141 02564-60151
33	SPRING, Gas	1530-2205
34	SCREW, Mach M4X0.7	0515-0335
35	WASHER, Flat #10	3050-0002
36	CONFIGURATION, Chart (HP2563A) User Menu (HP2563B)	02563-00048 02564-00134
37	HP NAMEPLATE (HP2563A)	02563-00040
37	HP NAMEPLATE (HP2563B)	02563-00111
41	BUCKLE, Hinge	1390-0331
42	SCREW	0515-0077

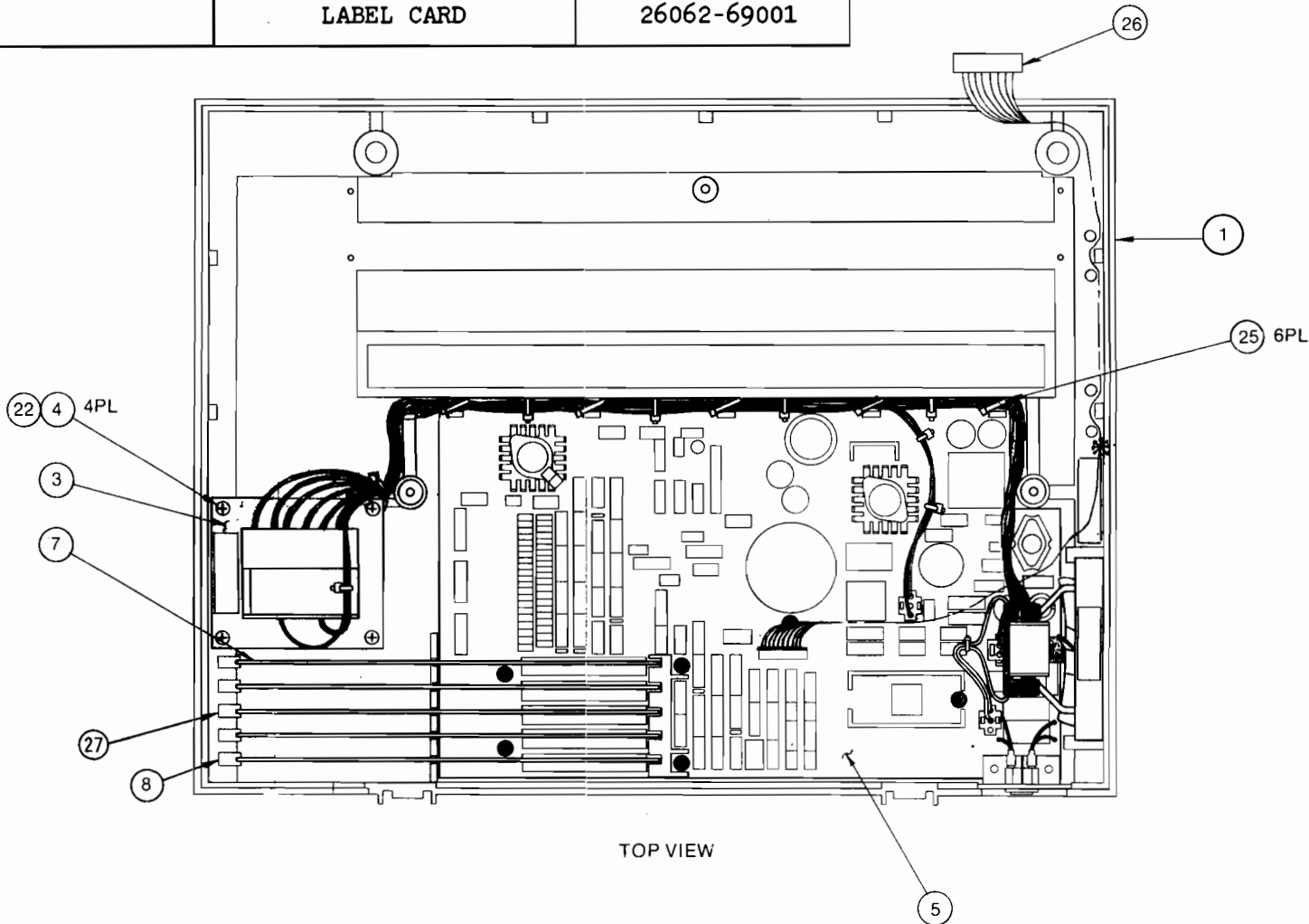


TOP COVER ASSEMBLY

FIGURE 1. Top Level, IPB

**TABLE 2. BASE COVER ASSEMBLY PARTS**

REF. DES.	DESCRIPTION	HP PART NO.
1	BASE Assy(63B w/stand)	02564-60117
1	BASE Assy(w/out stand)	02563-60140
3	TRANSFORMER, Power	9100-4309
4	SCR:MCH M4X50POZ	0515-0906
5	PCA: ANALOG/BACKPLANE	02563-60006
7	PCA: CONTROL	02563-60012
8	PCA: I/O	
	HPIB	5062-0477
	RS-232c	5061-1707
	RS-422a	5061-1723
	MULTIPOINT	5061-1703
	HP2608A PARALLEL	5061-1721
	CENTRONICS	5061-1708
	DATAPRODUCTS-SHRT	5061-1714
	DATAPRODUCTS-LONG	5061-1715
22	WSHR:M4 SPL LOCK	2190-0586
25	TIE:Cable, Large	1400-0493
26	CABLE: ENCODER	02563-60121
27	GRAPHICS PCA:	
	SHADE	5061-1701
	HP SHADE	5061-1747
	LABEL CARD	26062-69001



**FIGURE 2. Base Cover Assembly, IPB**

TABLE 3. PRINT MECH AND PAPER MOTION ASSY PARTS

REF. DES.	DESCRIPTION	HP PART NO.
1	PRINT BAR Assy	02563-60010
2	PRINT MECH Assy (see Figure 5)	
3	ENCODER PICKUP ASSY	02563-60163
5	BLOCK:CLAMP	02563-40023
6	PCA:ENCODER XMTR	02563-60017
7	CABLE ASSY (HP2563A)	02563-60154
7	CABLE ASSY (HP2563B)	02563-60187
9	TINSEL STRIP CARBON BRUSH (SERIES 2714 OR GREATER)	0960-0585 9300-1318
10	SCREW: TPG 8-18	0624-0575
22	SCR:MCH M4X16(HP2563A)	0515-1064
23	SCR M4X12 SEM	0515-0857
25	SCR FHD M4X10 LG	0515-1834
27	SCR-MACH M4X16LG	0515-1833
28	SCR-MACH ASSY	0515-0868
29	SCR:MCH M4X8 POZ	0515-0106
31	NUT:PLATE	02563-00075
37	SCR:M4X8 POZI TT	0515-0861
40	RIBBON SHIELD	02563-00133
41	SCR:MACH ASSY	0515-0803

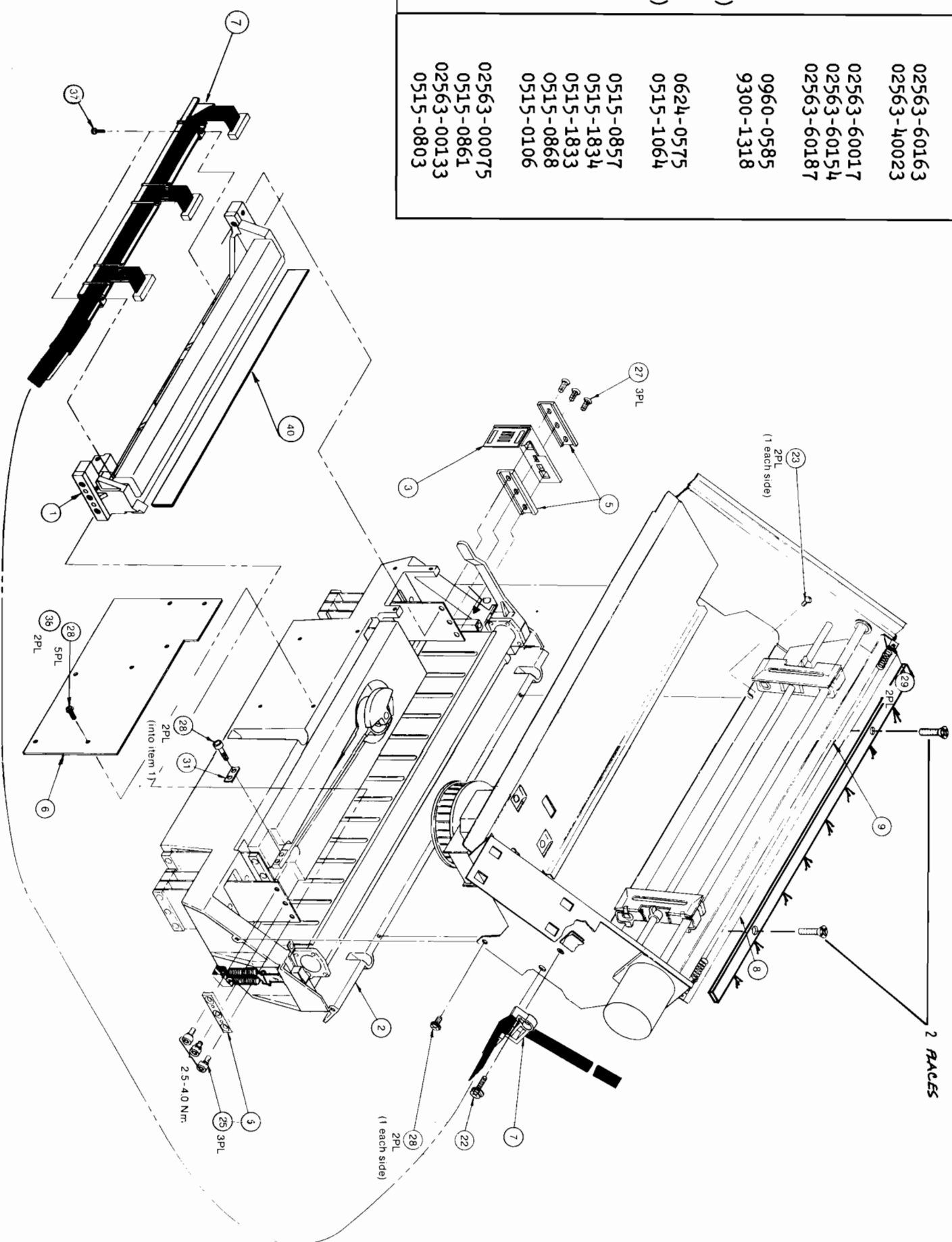


FIGURE 3. Print Mech and Paper Motion Assy, IPB

TABLE 4. PRINT MECH PAPER/RIBBON ASSY PARTS

REF. DES.	DESCRIPTION	HP PART NO.
1	ASSY: STRUCT WLD	02564-60112
2	ASSY: STRUCT WLD(55dba)	02564-60152
3	BRG: FLG BALL	1410-0632
4	SHAFT: TRCT GUIDE	02563-20003
	TRACTOR: RH (HP2563A)	1530-0397
	TRACTOR: RH (HP2563B)	1530-2202
5	TRACTOR: LH (HP2563A)	1530-0396
	TRACTOR: LH (HP2563B)	1530-2203
6	SHAFT: TRACTOR DR	02563-20002
7	COLLAR	0510-0598
8	ASSY: MOT STPR 2	3140-0690
9	SWITCH-SENSITIVE	3101-2859
10	MOT: RBN DR 50VAC	3140-0691
11	KNOB: PLATEN ADJ	02563-40007
12	LBL: WHEEL	02563-00049
13	SHAFT: PLTEN KNOB	02563-20006
14	PLGR: M4 BALL	0570-1258
15	CLIP: CABLE (HP2563A)	1400-0611
25	SCR: MCH M4X8 POZ	0515-0825
26	WSHR: M4 FLAT	3050-0893
27	WSHR: M4 SPL LOCK	2190-0586
28	SCR: M4X8 SEM	0515-0868
29	SCR: M5X12PAN SEM	0515-0758
30	SCR: M4 THD RLG	0515-0808

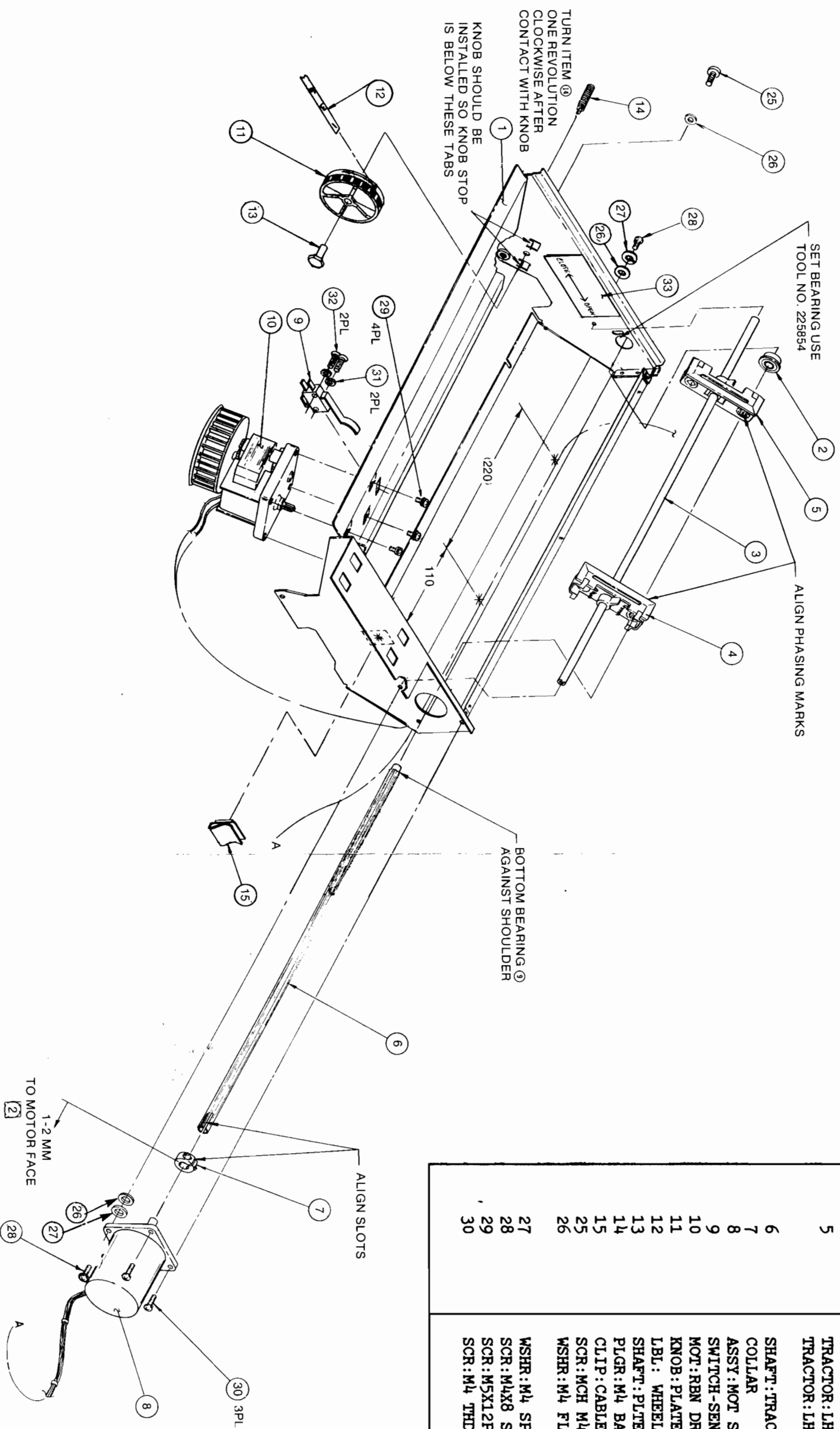


FIGURE 4. Print Mech Paper/Ribbon Assembly, IPB

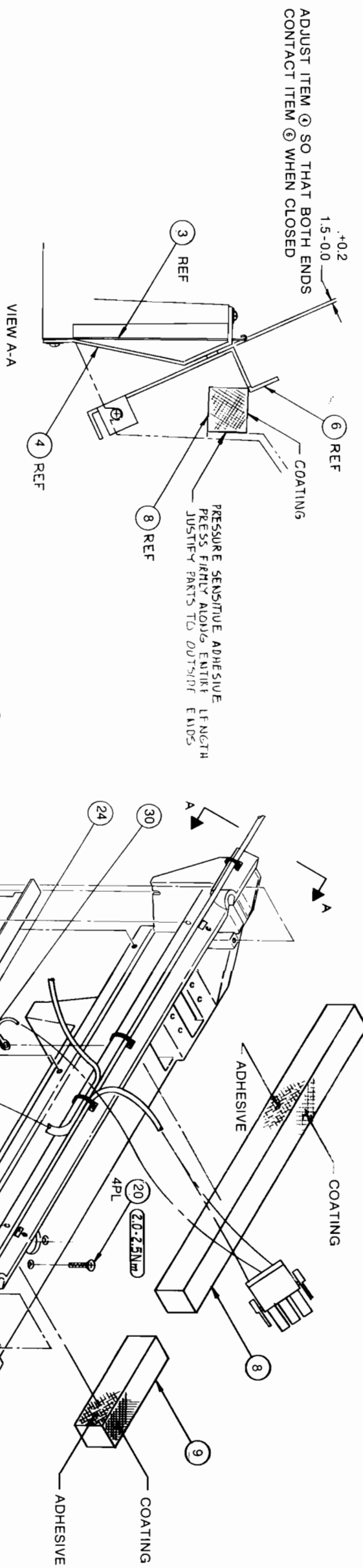


TABLE 5. PRINT MECH CASTING (Rear View) ASSY PARTS

REF. DES.	DESCRIPTION	HP PART NO.
2	MOTOR: D.C.	3140-0678
3	SPRG: PPR TENSION	02563-00109
4	GUIDE: PPR FRONT	02563-00124
5	SENSOR ASSEMBLY (see figure 8)	
6	RR GUIDE: INP PPR	02563-00004
7	SPRING: PPR PATH	02563-00073
8	FOAM: PM #3	02563-00042
9	FOAM: PM #4	02563-00043
10	CABLE: DC MOTOR	02563-60123
13	TIE, Cable, Small	1400-0249
20	SCR: MACH M4X0.7	0515-0265
21	SCR: MCH M3X1.0POZ	0515-1005
22	SCR: M4X1.2 SEM	0515-0875
23	SCR: BTN HD M4	0515-0838
24	SCR: M4X8 POZI, TT	0515-0861
30	WSHR: M4 SPL LOCK	2190-0586
31	SPRING HOOK	02564-00020

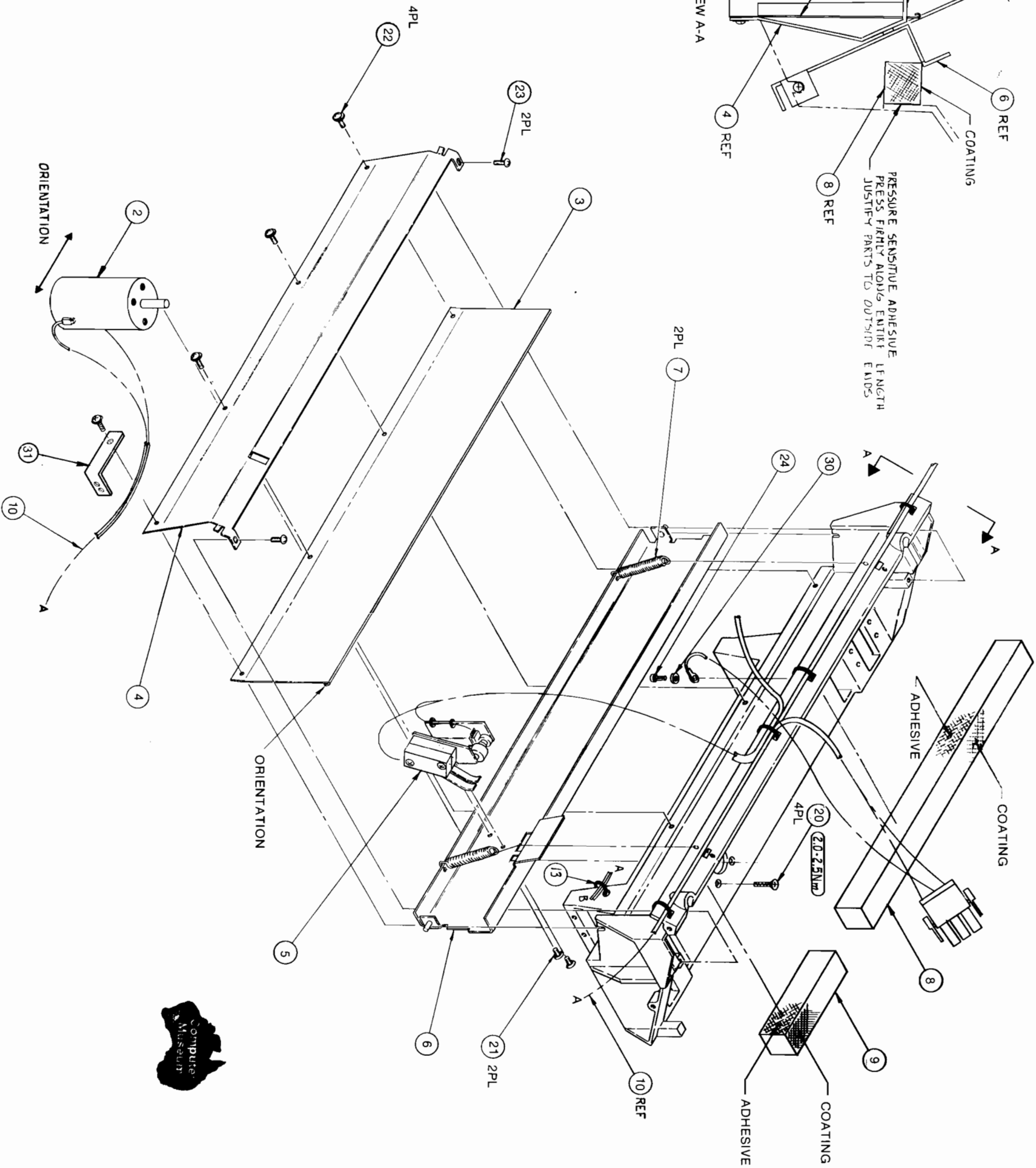
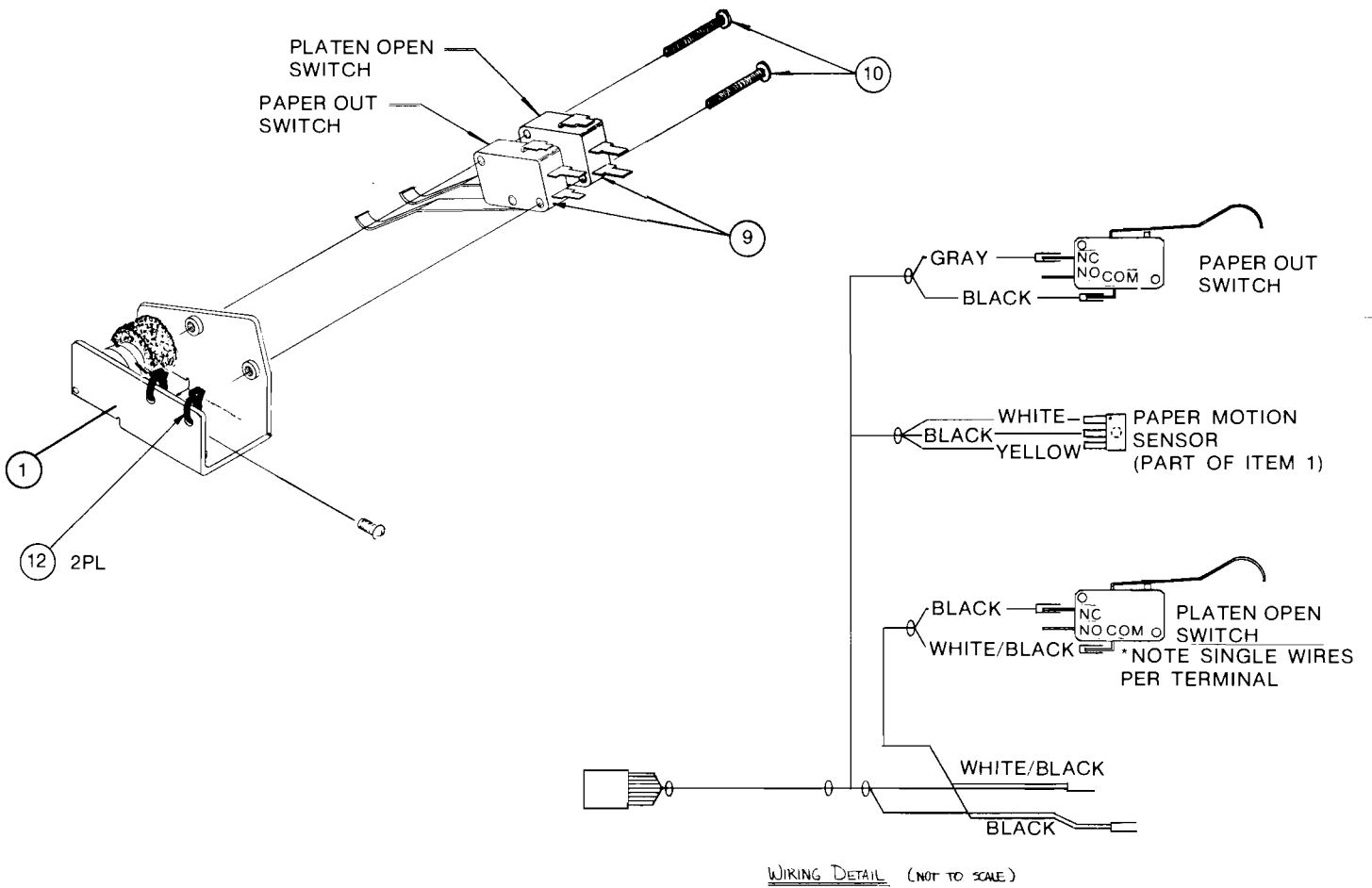


FIGURE 5. Print Mech Casting Assembly, IPB



**TABLE 6. SENSOR ASSEMBLY PARTS**

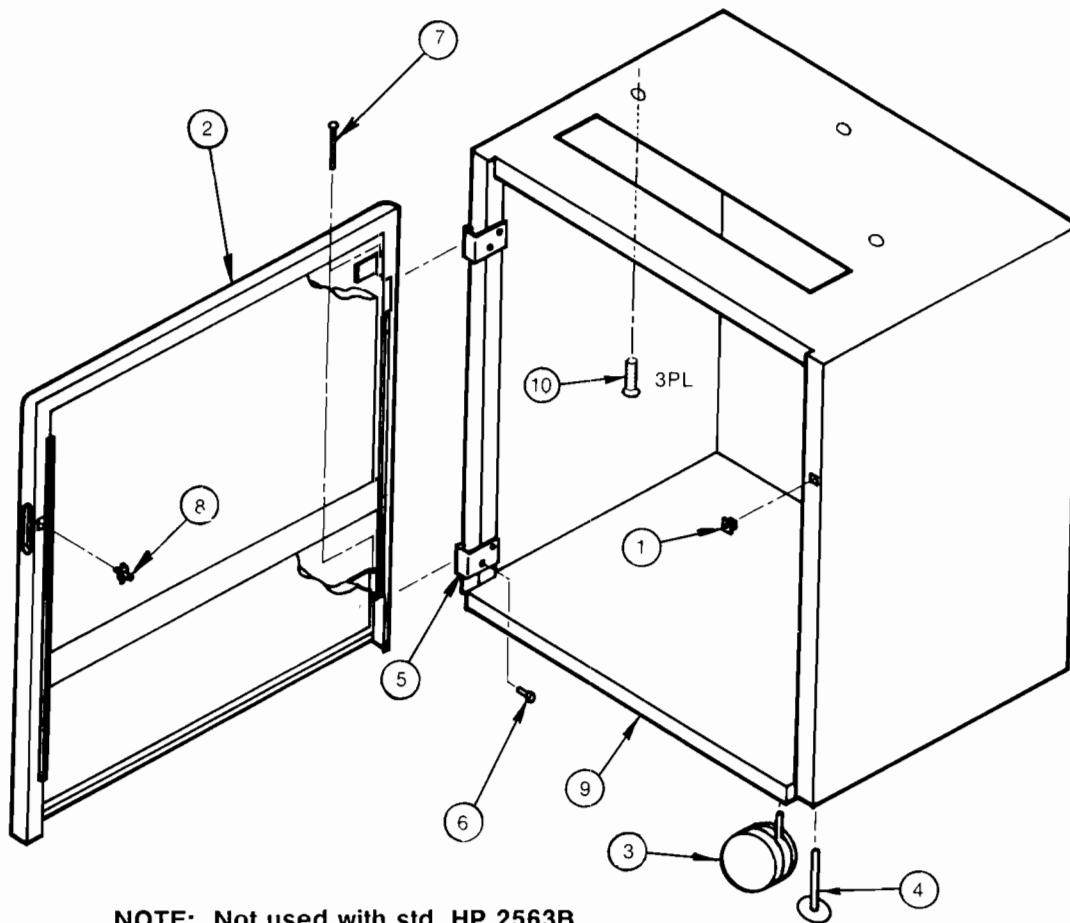
REF. DES.	DESCRIPTION	HP PART NO.
1	PAPER MOTION Assy	02563-60200
9	SWITCH	3101-2859
10	SCR:MCH M3X25POZ	0515-0919
12	TIE:CBL SMALL	1400-0249



**FIGURE 6. SENSOR ASSEMBLY , IPB**

**TABLE 7. PRINTER STAND (26762A) PARTS**

REF. DES.	DESCRIPTION	HP PART NO.
1	GROMMET, Snap-In	1390-0638
2	DOOR, Stand	5001-1919
3	CASTOR, Friction Fit	1492-0108
	CASTOR, Thread Fit	1492-0092
4	GLIDE	0403-0492
5	HINGE, Standside	5001-1916
6	SCREW, M5X12 PAN POZI	0515-0758
7	PIN, Hinge	5021-0310
8	STUD, Snap-In	1309-0639
9	TRAY, Paper	5001-1920
10	SCREW	0515-1033

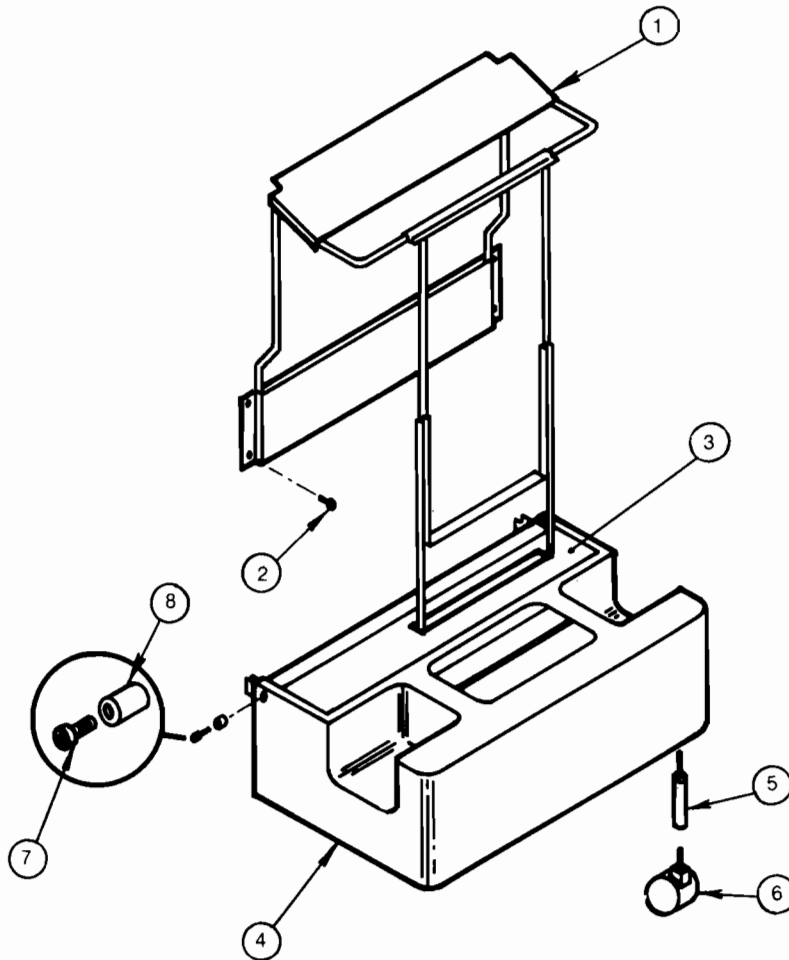


**NOTE:** Not used with std. HP 2563B

**FIGURE 7. Printer Stand (26762A), IPB**

**TABLE 8. PAPER STACKER (26763A) PARTS**

REF. DES.	DESCRIPTION	HP PART NO.
1	UPPER ASSEMBLY	02563-60151
2	SCREW	0515-0904
3	BASE SUPPORT	02563-00078
4	BASE ASSEMBLY includes Castor	02563-60150
5	STANDOFF	02563-20023
6	CASTOR	1492-0045
7	SCREW, Pivot	2360-0193
8	PIVOT	02608-40067
9	ADAPTER	02563-00078



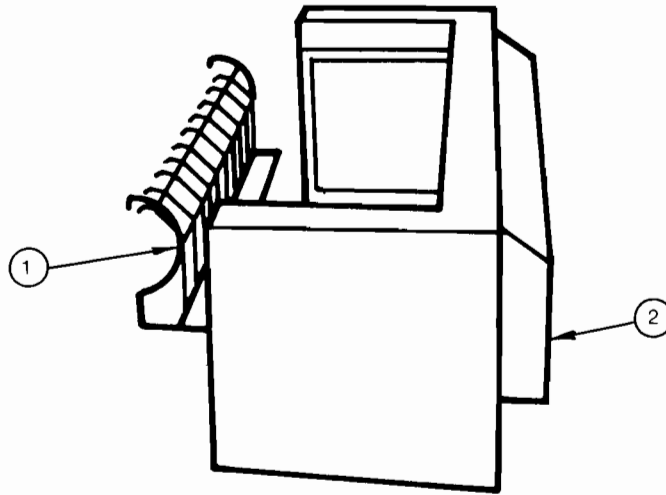
**NOTE: Not used with std. HP 2563B**

**FIGURE 8. Paper Stacker (26763A), IPB**



**TABLE 9. SOUND COVER (26764A) PARTS**

REF. DES.	DESCRIPTION	HP PART NO.
1	BAIL, Paper	02563-00055
2	COVER, Sound	02563-60145



**NOTE: Not used with std. HP 2563B**

**FIGURE 9. Sound Cover (26764A), IPB**



TABLE 10. STAND AND PRINTER BASE ASSEMBLIES

REF. DES.	DESCRIPTION	HP PART NO.
1	FAN TBAX 120FM	3160-0097
2	BRKT: FAN MTG	02564-00015
3	BRKT: LWR FAN MNT	02564-00048
5	AY: STAND FAN CBL	02564-60120
6	ASSY: MAIN STAND	02564-60158
7	ASSY: PAPER GUIDE	02564-60153
8	SCR: TPG 10-16	0624-0585
12	SCR: TPG 4-24	0624-0618
13	SCR: ASSY M4	0515-0825
14	FOAM: FAN	02564-00058
15	NUT- SHMET-U-TP	0590-0760
16	SKT HD CAP	3030-0016
19	SCR: POZ6-19X.5"	0624-0400
20	SCR: M5X12PAN SEM	0515-0758
22	TIE: CBL SMALL	1400-0249
24	FSTNR: SNP-IN	1390-0635
25	FSTNR: SNP-IN	1390-0034
26	WSHR: L DAMPER	02564-00096
27	FRONT DOOR	02564-60148

STANDARD HP2563B (55 dba Version)

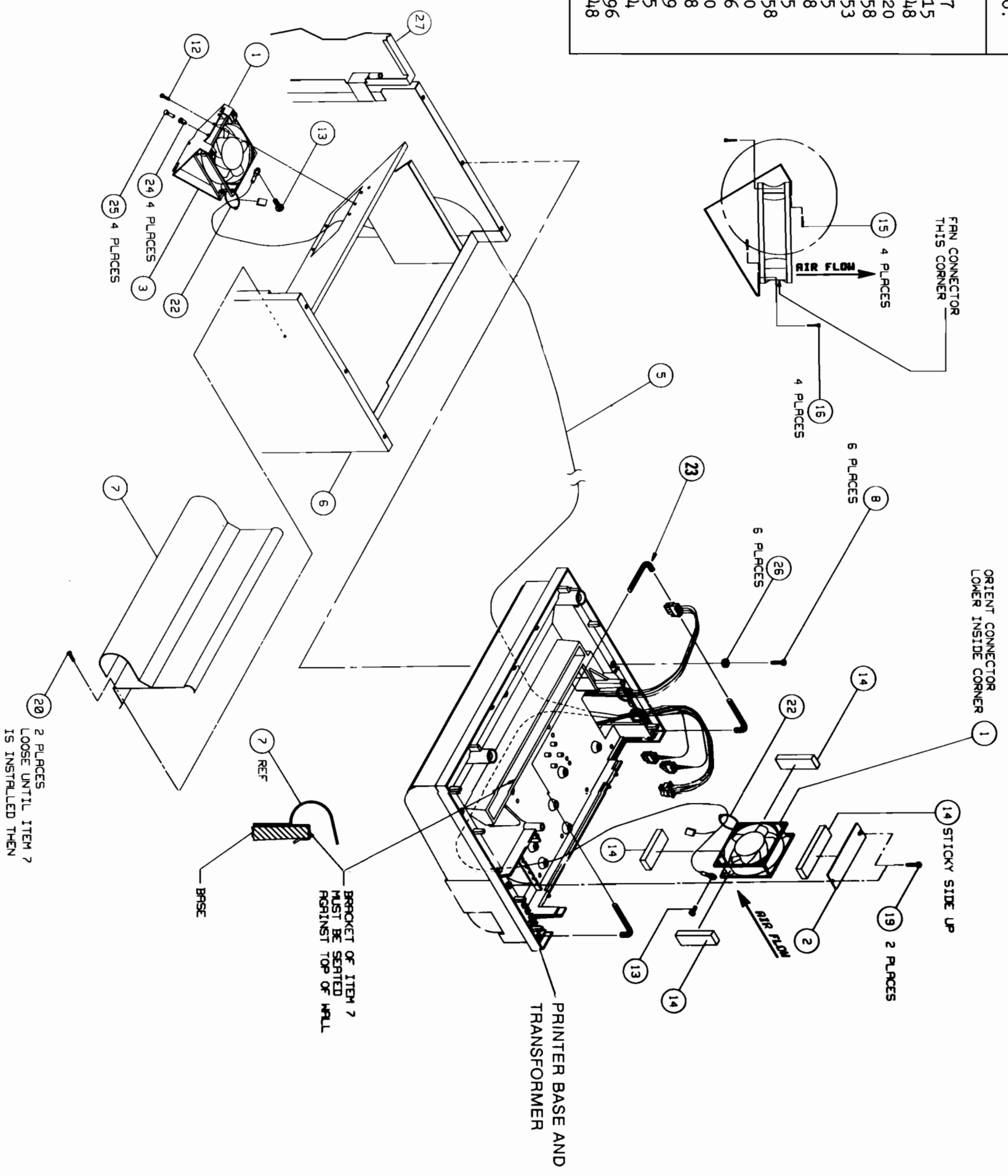


FIGURE 10. STAND AND PRINTER BASE ASSEMBLIES

TABLE 11. PRINT MECHANISM ASSEMBLY PARTS

REF. DES.	DESCRIPTION	HP PART NO.
12	ASSY: PLATEN	02564-60137
13	PLATE: SPRING HOOK	02564-00023
14	PLATEN: SPRING	02563-00090
15	SCR-MACH ASSY M4	0515-1274
28	SCR-MACH ASSY	0515-0868
31	NUT: PLATE	02563-00075
33	SCR: ASSY M4	0515-1064
34	PIVOT: PLATEN	02564-40013
41	SET SCREW	0515-0656
42	HOOK: PLATEN SPRING (2563A)	02563-00083
98	WSHR-FL MN	3050-0180

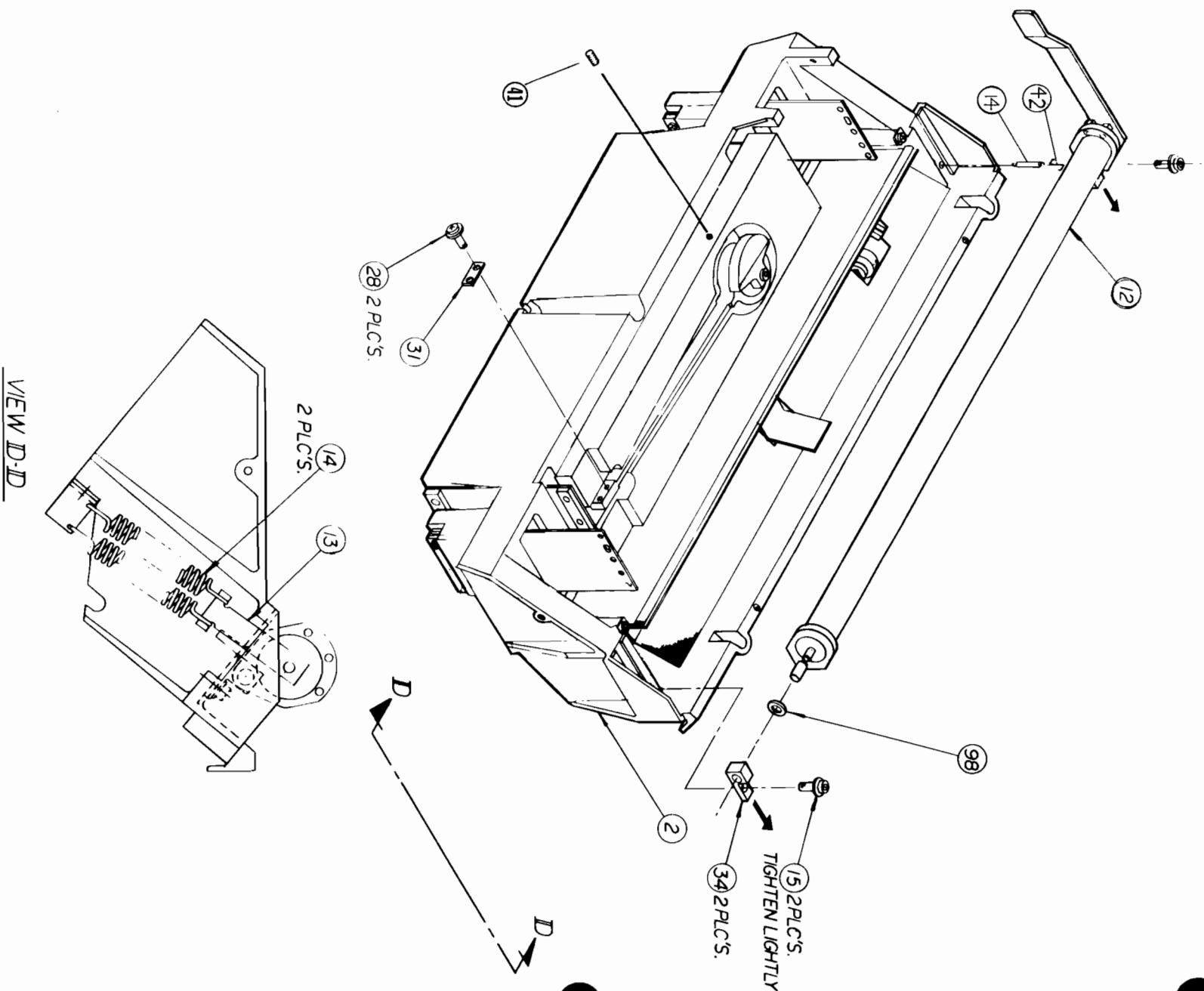


FIGURE 11. PRINT MECHANISM ASSEMBLY PARTS

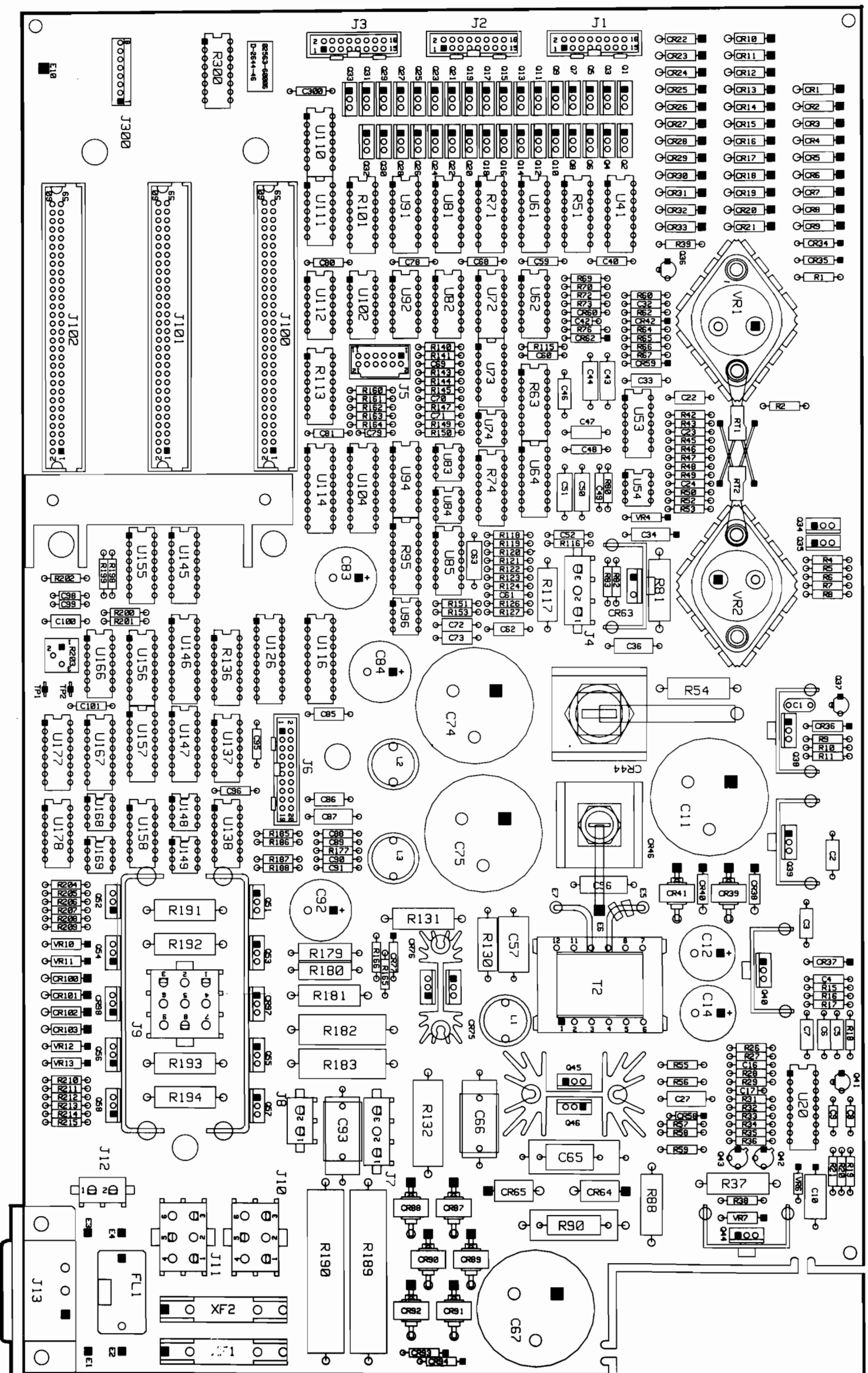


FIGURE 12. Analog/Backplane PCA (02563-60006)  
Parts Location



TABLE 12. ANALOG/BACKPLANE PCA (02563-60006) PARTS

REF. DES.	DESCRIPTION
1	PCE:ANALOG BD
2	MTG CLIP
3	INSUL:5POS T0220
4	HEATSINK:5-T0220
5	HT SK AL T0-3CS
6	NUT-HEX W/LKWR
7	SCR-MACH ASSY
8	HEAT SINK
9	HEAT SINK
10	HEAT SINK
11	SCR-MACH ASSY
12	HEATSINK:DO-4DIO
13	WSHR:M5 FLAT
14	WSHR:#10SPL LOCK
15	NUT:HX-DBCH10-32
17	GUIDE:CARD
18	SCR-THRD RLG
19	SNP-IN PLUNGER
20	SNP-IN GROMMET
21	PLATE:PMR INPUT
22	SWTICH-ROCKER
23	TERM:CRP LUG #8
24	WSHR:LK 8 INT
25	NUT:M4 HEX
28	POLARIZING KEY
29	CORE:FERRITE
30	LBL:IMPRINTABLE

TABLE 12. ANALOG/BACKPLANE PCA (02563-60006) PARTS Cont.

REF. DES.	DESCRIPTION
31	TAPE-ELECTRICAL
34	LBL: WARNING FUSE
A/R	PNT-VARN ALK RED
C6,21,22,35,38	CAP:.047U10%100V
C7	CAP:4700P 50VWF
C8,16,17,18,20,	CAP:.1U 10% 50V
24,30,34,38,50	
58,70,72	
C9,10,13,14,15,	CAP:.01UF10%100V
40,46,51,52,54	
C11A	
C12	CAP:220P 1KV CER
C19,36	CAP:22UF 10%
C23	CAP:75P 5% 100V
C27,28,44,77	CAP:470P 5% 100V
	CAP:1000P10%100V
C29	CAP .022UF 10%
C32,33	CAP:.012F 63V20%
C39A	CAP:.01F 16V 20%
C56A	CAP:.022UF 400V
C60,61,62	C:F 2200UF 16V
C63	C:F 4700PF 10%
C65,66	CAP:1U 250V FILM
C73,74	CAP:1000U 50V AL
C75A	CAP:022U10%400V
C76B	CAP:3300U 100V
CR1-8,134,136,	DIO:PMR MR752
144,146	
CR10-26,30-45,	DIO-PMR REC 400V
98,100,102,104	
122,124	
CR46,48,50,60,	DIO-GEN PRP 180V
66,72,74,76,	
132,138	
CR52	DIO:VHE1403
CR84	DIO:PMR 30A 45V
CR86	DIO:SW60V400MA
CR90	THYR-TRIAC 15A
CR92	THYR-TRC Q4003L3
CR94,96	DIO:VHE2402A

TABLE 12 ANALOG/BACKPLANE PCA (02563-60006) PARTS Cont.

REF. DES.	DESCRIPTION
CR126,128,140, 142, CR130 F1 FL1 J1,2,3	DIO:250V 5A200NS DIO:PWR REC400V FUSE 5A 250V NTD LNE MDL-FLTRD CONN:HDR 2X8 HAMMERS
J4	CONN:3 POS (M) CB MOTOR
J5	CONN:HDR 2X6 SENSOR
J6	CONN:HDR 2X10 ENCODER
J7	CONN:3 POS (F) XFMR
J8	CONN:2 PIN (M) RIB:MTR
J9	CONN:9 POS (F) STEP MTR CONN:6 POS (M)
J10	220/240
J11	110/120
J12	CONN:2 POS (F) FAN
J13	CONN-AC PWR MALE
J100,102,104 J500 L1A L2,3	CONN:HDR 2X30 CONNECTOR TEST IDCTR:15UH10A INDUCTOR 10 UH
Q1-33,42,52,53, Q42,52,53,56,57	XSTR:H1-REL DAR TRANS:TIP 102
Q34,35,36,37 Q38 Q39,40,51,54,55 58 Q41 Q44,45	XSTR PNP 2N5401 XSTR NPN D44H11 XSTR:PNP TIP 126 XSTR:NPN 2N3904 XSTR:PNP 2N2907A
Q46,47 Q73 Q74	PWFET:10A 250V IC:MC7812CT V-RG IC:MC7912CT V-RG

TABLE 12. ANALOG/BACKPLANE PCA (02563-60006) PARTS Cont.

REF. DES.	DESCRIPTION
R1-5	R:F 1 5% 3W PW
R6,17,18,19,23, 27,59,68,104,105 127,130,115,32	R:F 100 1% .125W
R7	RES:147K 1%.125W
R8	R:F90.9K 1% .125
R13,14,15,16	N:R 8X2K2% .218W
R20,21,26,30,37 37,65,99,134, 136	R:F 10.K1% .125W
R22,86	R:F 1M1% .125W
R24	R:F 4.7K 5% 2W
R25,132,133,160 161	RES:1.8K 5% 2W
R29,41,49,73, 138	R:F 100K1% .125W
R33,51	R:F 17.8K1%.125W
R35,60,117,28 66,102	R:F 4.64K 1%.125
R36	N:R 8X1K2%.218W
R40	R:F 215K 1% .125
R42,46	R:F2.61K 1% .125
R43,69	R:F196K 1% .125W
R47,48	R:F 19.6K 1%.125
R50,85,137	R:F 3.48K1%.125W
R54	R:F 56.2 1%.125W
R55	N:R8X100K2%.125W
R61,90,122	R:F 51.1K1%.125W
R64	R:F 3.83K 1%.125
R67,98,114,116, 131,141,143, 144,148,162, 163,166,167	R:F 1K1% .125W
R70	R:F 261K 1% .125W
R71	R:F 21.5K 1%.125
R72	R:F 5.11K1%.125W
R74,113	R:F 23.7K1%.125W
R76,93	N:R 8X10K 2%.22W



TABLE 12. ANALOG/BACKPLANE PCA (02563-60006) PARTS Cont.

REF. DES.	DESCRIPTION
R81	RES:.10HM 1% 5W
R82,83	R:F 681 1% .125W
R84,150,151	R:F 21.5 1% .125W
R95,96	N:R 4X10K2%.125W
R101	R:F 61.9K1%.125W
R107,108	N:R 15 X 2.2K
R109	R:V TRMR 10K 10%
R110	R:F 619 1% .125W
R111,R119	R:F 46.4K1%.125W
R112,120,156	R:F 1K 2W 5% MO
R125,126,128, 129	R:F 21.5K 1% .125W
R135	R:F 6.19K 1%.125
R140,142,164, 165	R:F 215 1% .125W
R145	R:F3.9 5% 3W PW
R146,147	RES:.10HM 1% 3W
R154,155	RES:3.3K 5% 2W
R158,159	RES:1.20HM 1% 5W
R170	R:F .005 OHM
R172	RES:20 5% 10W
RT2A, RT4A	THRM:NTC 20K@80C
T2	XFMR:PWR 100KHZ
TP1	TERM:TST PT-BRAS
U23,24,25,26,33	IC:SN74LS599N
U34,119,129	IC:SN74ALS74N
U35	IC:SN74LS14N
U44,56,83,92, 137	IC:339 CMPTR-GP
U45	IC:SN74ALS08N
U46,139	IC:SN74ALS00N
U54,65,66	IC:358
U55,128,138	IC:SN75477P
U68,69,79	IC:SN74LS138N
U77	IC:MC1408L 8-BIT
U78,87	IC:SN74LS273N
U82	IC:SN75468N
U88,97	IC: SN74LS240N

TABLE 12. ANALOG/BACKPLANE PCA (02563-60006), Parts Cont.

REF. DES.	DESCRIPTION
U89	IC: SN74LS367AN
U98	IC:SN74LS374N
U99	IC:74LS628N
U112	IC:3524BN
U117	IC: SN74LS368AN
U118	IC:SN74LS21N
U127	IC:SN74LS175 F-F
U130,140	IC:SN75451 DRIVR
U136	IC:SN74LS191
VR2,4	DIO:ZNR IN2805
VR68	DIO:ZNR 13V 5%
VR70	DIO:ZNR 20V 5%
VR82	DIO:ZNR 2.7V 5%
VR93	DIO:ZNR 6V 5%
VR106,108,110, 112	DIO:ZNR 5.1V 1W
W1,2	ASSY: WIRE
W10	WR:18AWG 5
W3,4	WIRE 18 BLUE
W5	WR:18AWG GRN/YEL
W6	WIRE 16-V
W9	ASSY: WIRE
XF1,2	FUSHLDR:.25X1.4

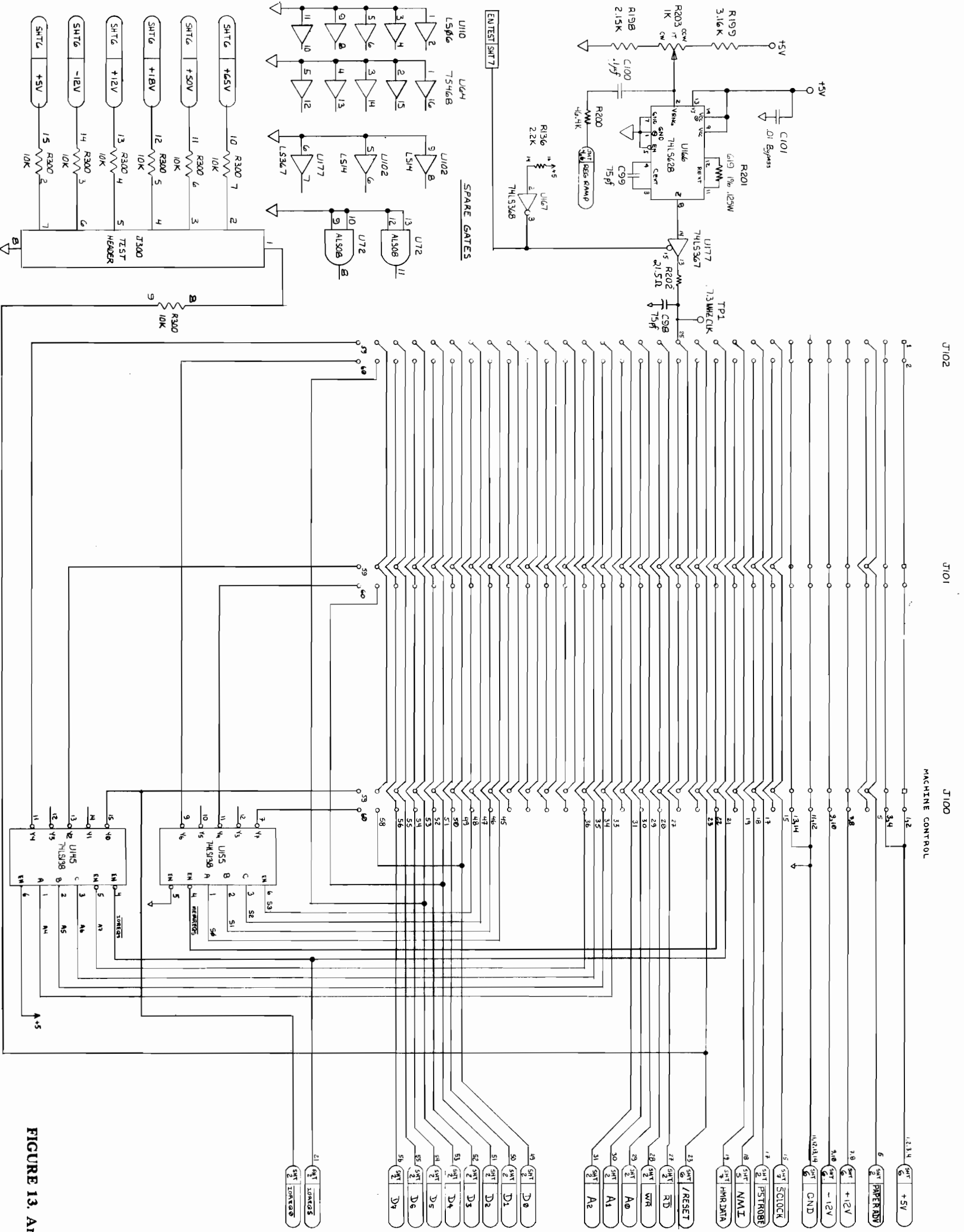


FIGURE 13. Analog/Backplane PCA (02563-60006), Schematic Sheet 1 of 7 (Backplane)

PIN	SIGNAL NAME	PIN	SIGNAL NAME
1	+5	2	+5
3	+5	4	+5
5	PAPER ADV	6	NOT USED
7	+12	8	+12
9	-12	10	-12
11	GND	12	GND
13	GND	14	GND
15	STROBE	16	NOT USED
17	STROBE	18	INTR
19	INTRDATA	20	NOT USED
21	MEMRQS	22	MEMRQS
23	RESET	24	INTRM5
25	CLOCK (73MHz)	26	INTR
27	RD	28	WR
29	A0	30	A1
31	A2	32	A3
33	A4	34	A5
35	A6	36	A7
37	A8	38	A9
39	A10	40	A11
41	A12	42	A13
43	A14	44	A15
45	S0	46	S1
47	S2	48	S3
49	D0	50	D1
51	D2	52	D3
53	D4	54	D5
55	D6	56	D7
57	INTRACK	58	D7
59	MEMRQX	60	MEMRQX

\* INDICATES SLOT DEPENDENT SIGNALS.

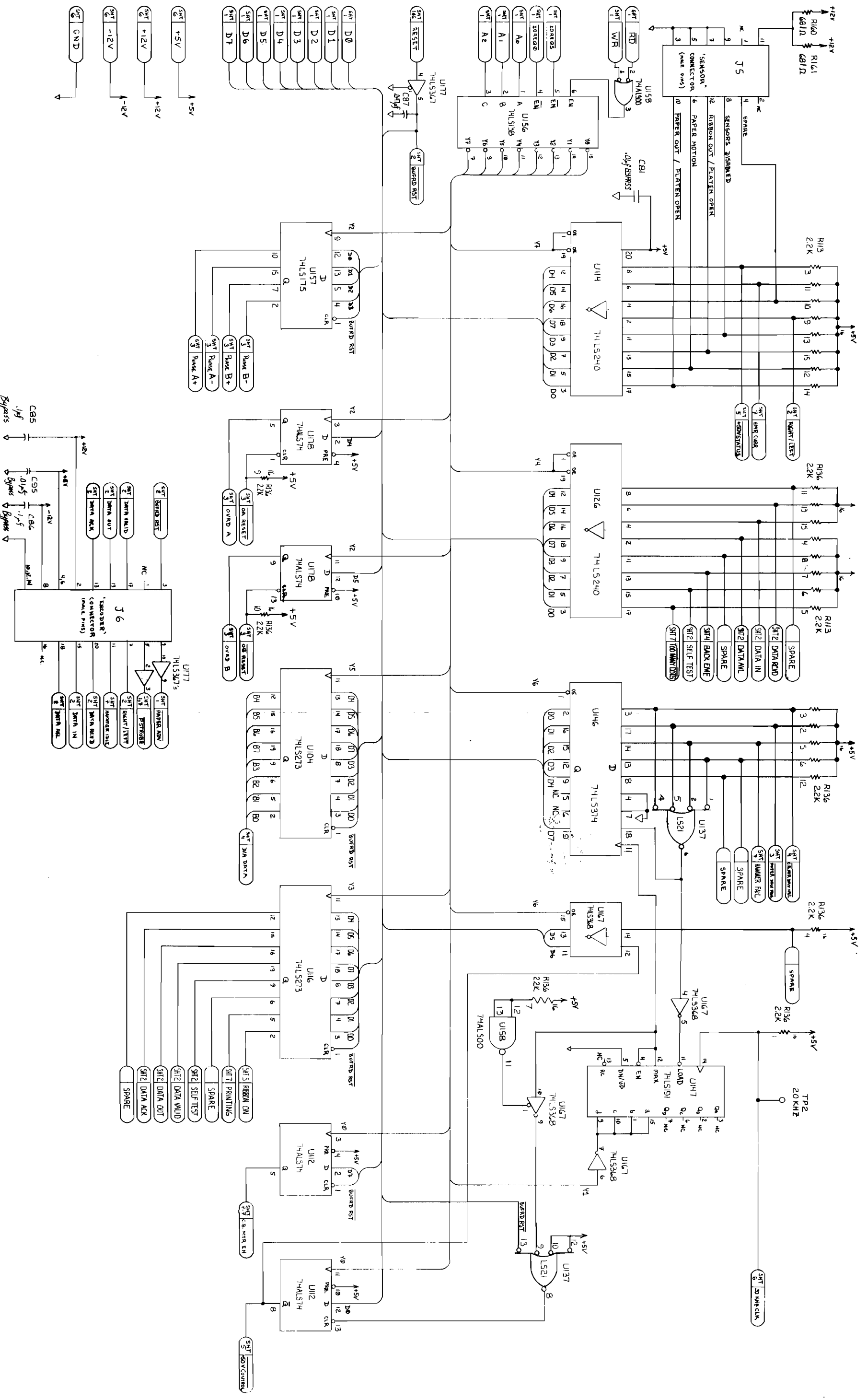


FIGURE 13. Analog/Backplane PCA (02563-60006), Schematic Sheet 2 of 7 (Control Interface)

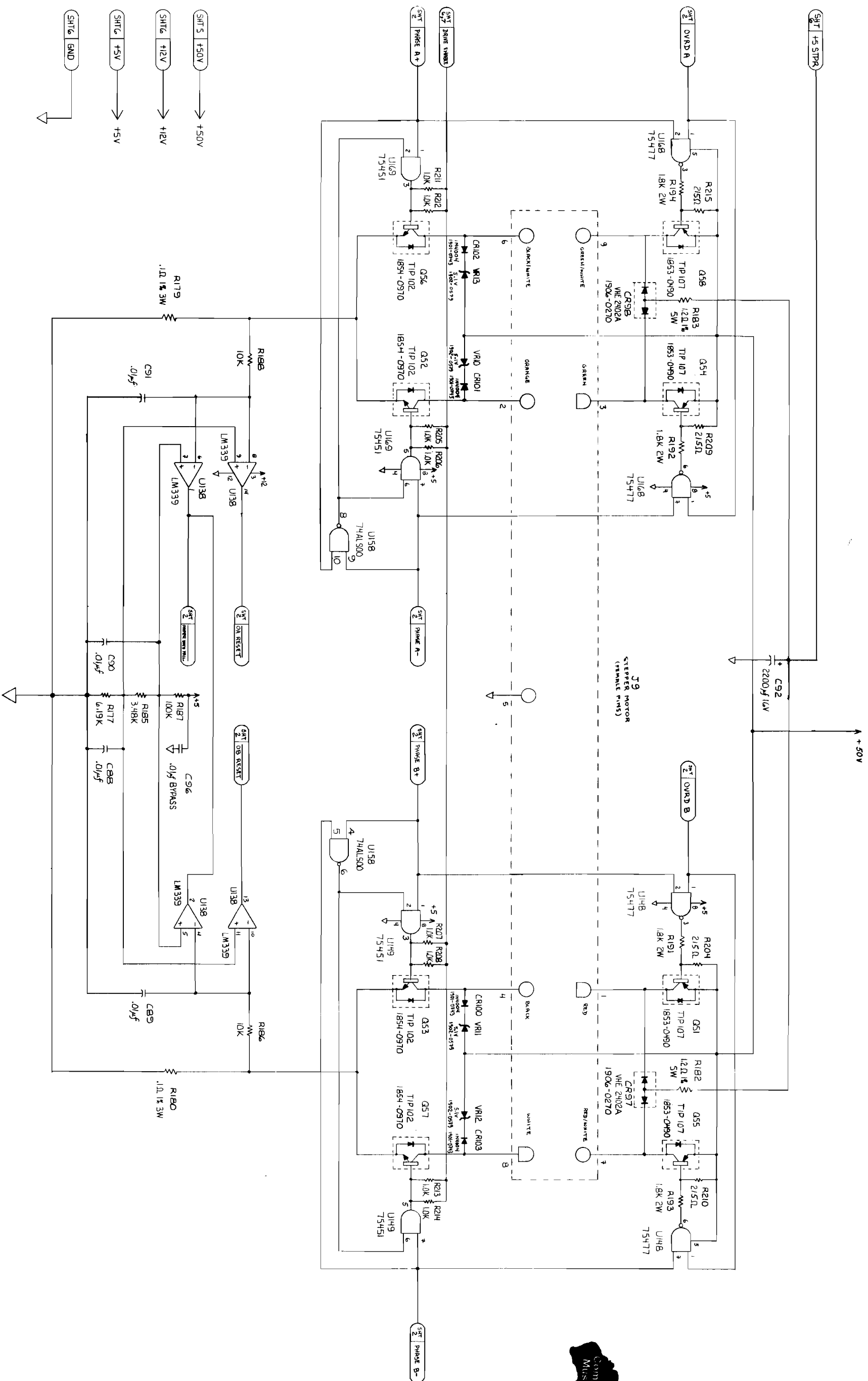


FIGURE 13. Analog/Backplane PCA (02563-60006), Schematic Sheet 3 of 7 (Stepper Motor Drive)

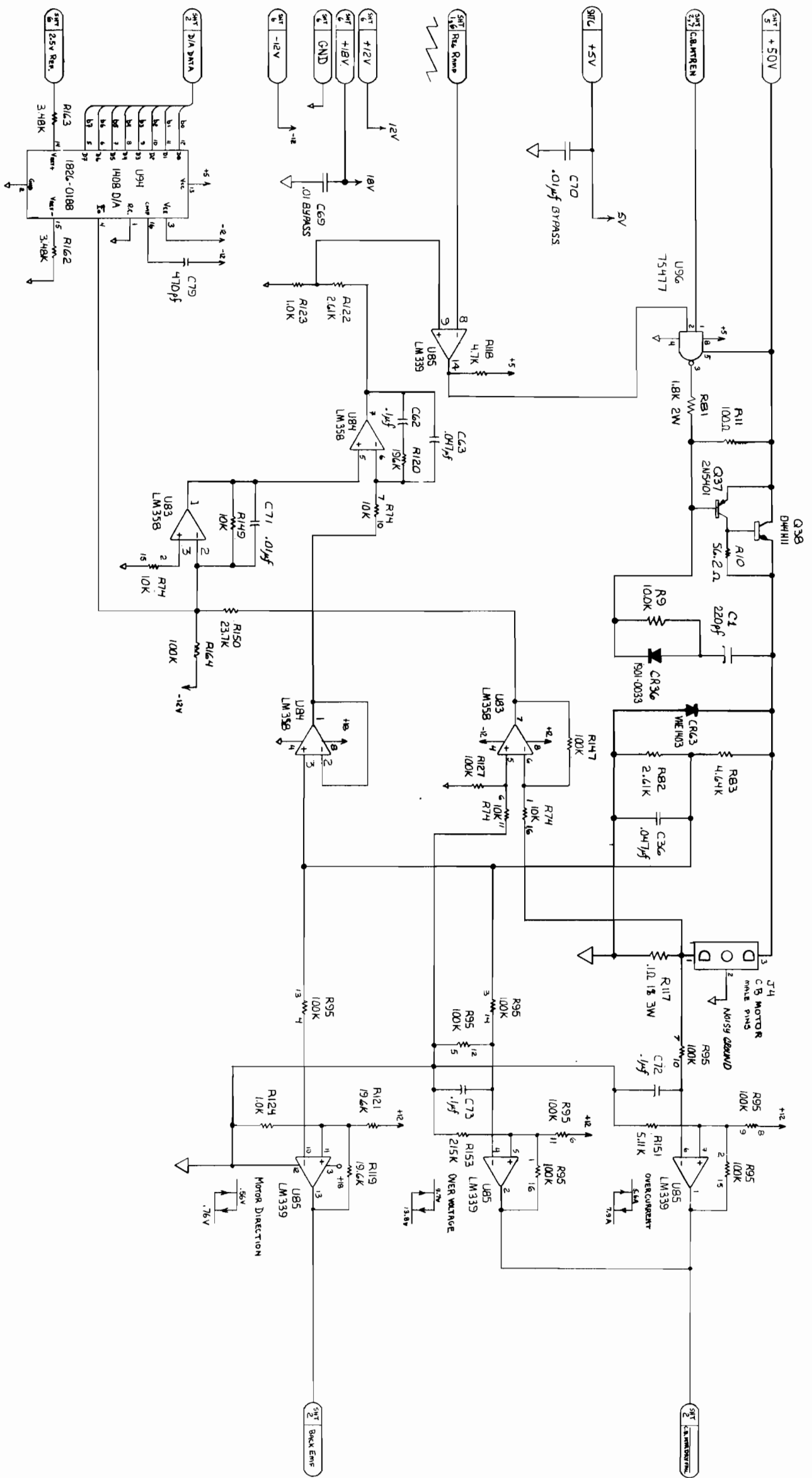


FIGURE 13. Analog/Backplane PCA (02563-60006), Schematic  
Sheet 4 of 7 (Corebar Motor Drive)

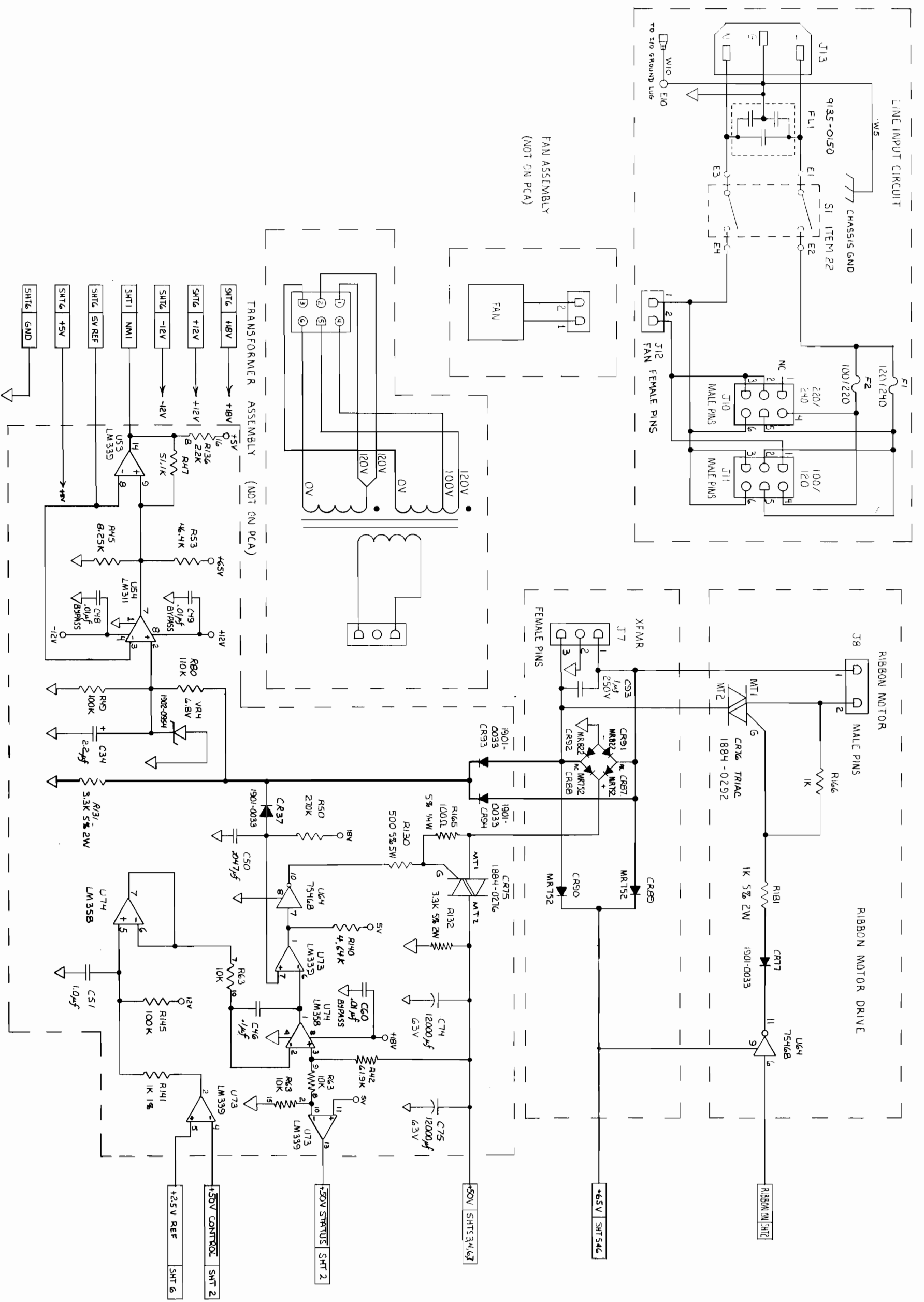


FIGURE 13. Analog/Backplane PCA (02563-60006), Schematic Sheet 5 of 7 (Power Supply)

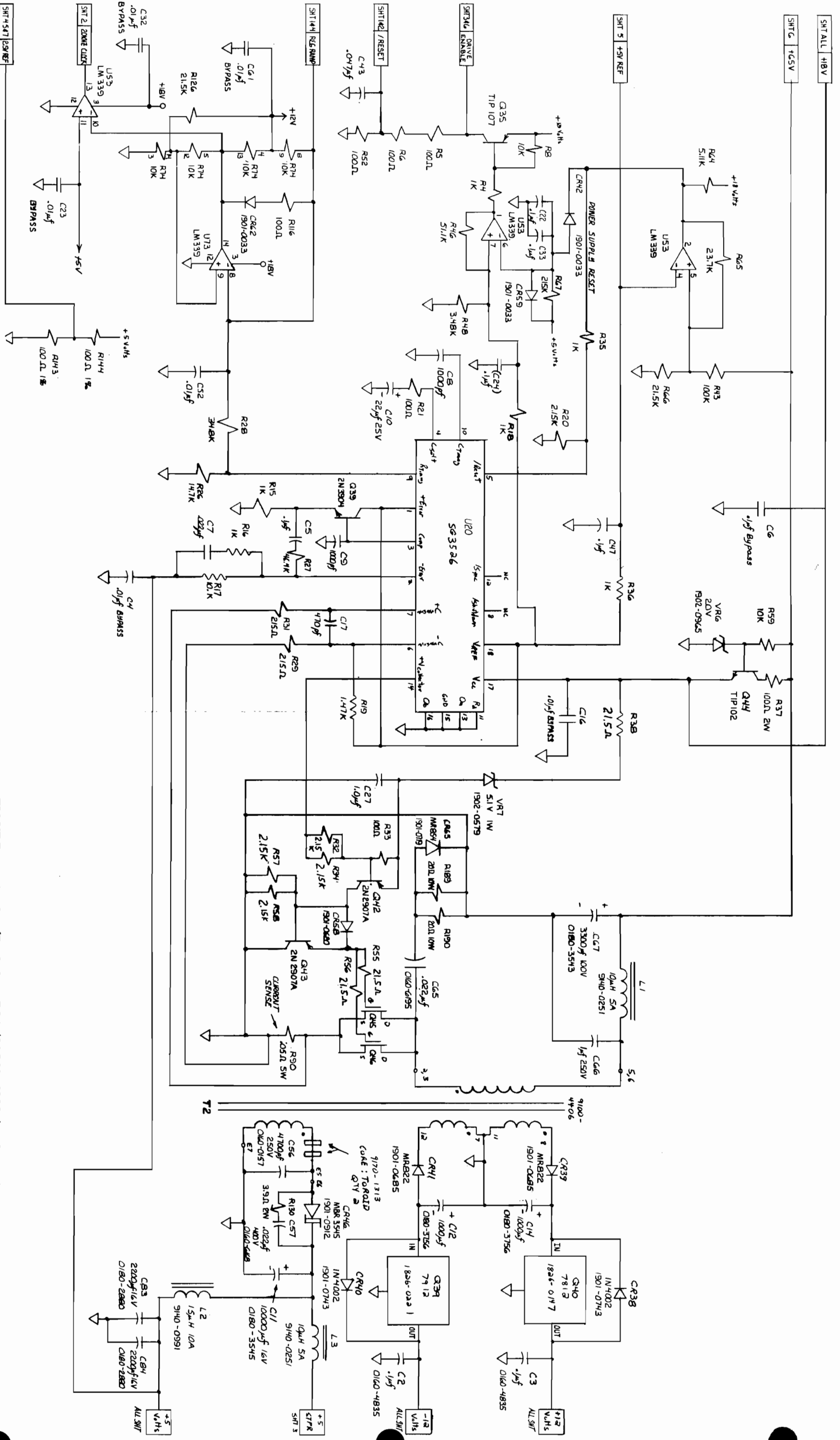


FIGURE 13. Analog/Backplane PCA (02563-60006), Schematic Sheet 6 of 7 (Voltage Regulators)



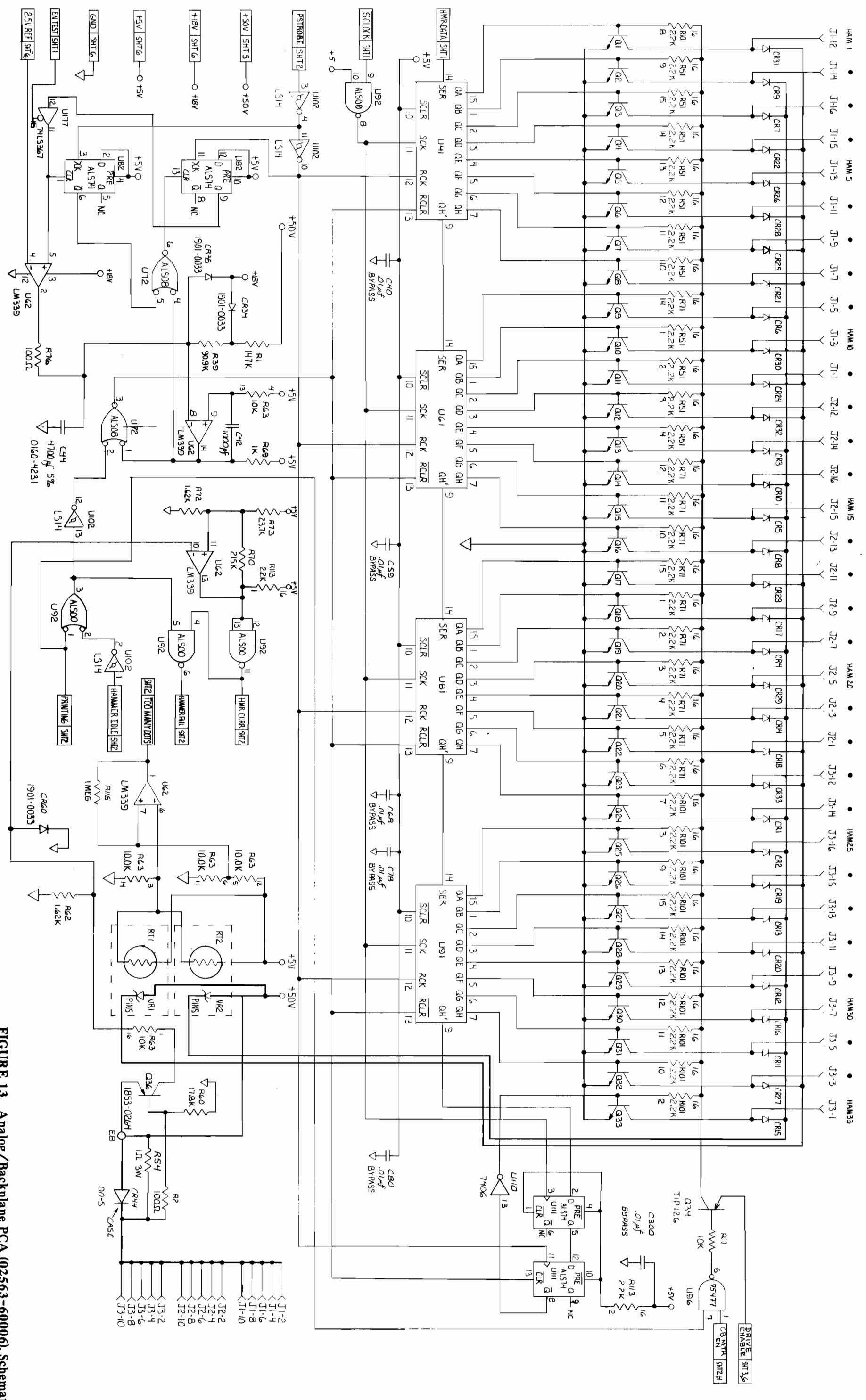


FIGURE 13. Analog/Backplane PCA (02563-60006), Schematic  
Sheet 7 of 7 (Hammer Drivers)

TABLE 13. FORMATTER PCA (02563-60012) PARTS

REF. DES.	DESCRIPTION
1	PCB:MACH CONT II
2	TIE:CBL LRG
3	POLARIZING KEY
4	LBL:IMPRINTABLE
BT1	BATTERY:MEMORY
C1,3,6,7,8	CAP:.01UF10%100V
C2	C:F20UF+75-10%
C4	C:F 33PF 5% 100V
CR1	DIO:SW 1N4150
J70	CONN:HDR 2X13
P1	CONN:SKT 2X30
Q1,3	XSTR:NPN 2N3904
Q2	XSTR:PNP 2N3906
R1,5	NET-RES:4.7KX15
R2,4	R:F 32.4K 1%
R3,7	R:F 38.3 1%
R6	NET-RES:470.0X8
TP1,2,3	TERM:TST PT-BRAS
U13	IC:SN74LS14N
U14	IC: SN74LS241N
U15,25,54	IC:SN74LS244N
U22	IC:SN74LS283N
U23,112	IC:SN74ALS32N
U24	IC:MASKED HAL
U32	IC:SN74LS174N
U33	IC:SN74LS175 F-F
U34	IC:SN74S08N GATE
U42	IC:SN74LS273N
U43	IC:SN74LS139N
U52	IC:ASPEN LSI
U53	IC:SN74S112N
U55,U81	IC:TMM 2016P-1
U62	IC:GATE ARRAY
U65	IC:TC5517 APL
U71	ROM: CS#0 OND
U73,83	IC:SN74LS669N

TABLE 13. FORMATTER PCA (02563-60012) PARTS Cont.

REF. DES.	DESCRIPTION
U74	IC:SN74LS138N
U75	ROM: FW4
U84,94	IC:SN74ALS109N
U92	IC:SN74LS157N
U93,72,82	IC:SN74LS158N
U95	ROM: FW3
U103	IC:SN74ALS04N
U104	IC:SN74S139N DCR
U105	ROM: FW2
U111,131,45	IC:SN74LS645N
U115	ROM: FW1
U121	IC:SN74ALS138N
U123	IC:Z80A-CPU-PS
U125	ROM: FW0
U132	IC:SN75452BP
U135	IC:Z80A-CTC-PS
VR1	DIO:ZNR 2.7V 5%
VR2	DIO:ZNR 5.6V 5%
XU62	SOCKET:40 PIN IC
XU11,21,41,51,61,71,95,105,115,125,	SOCKET:28PIN IC

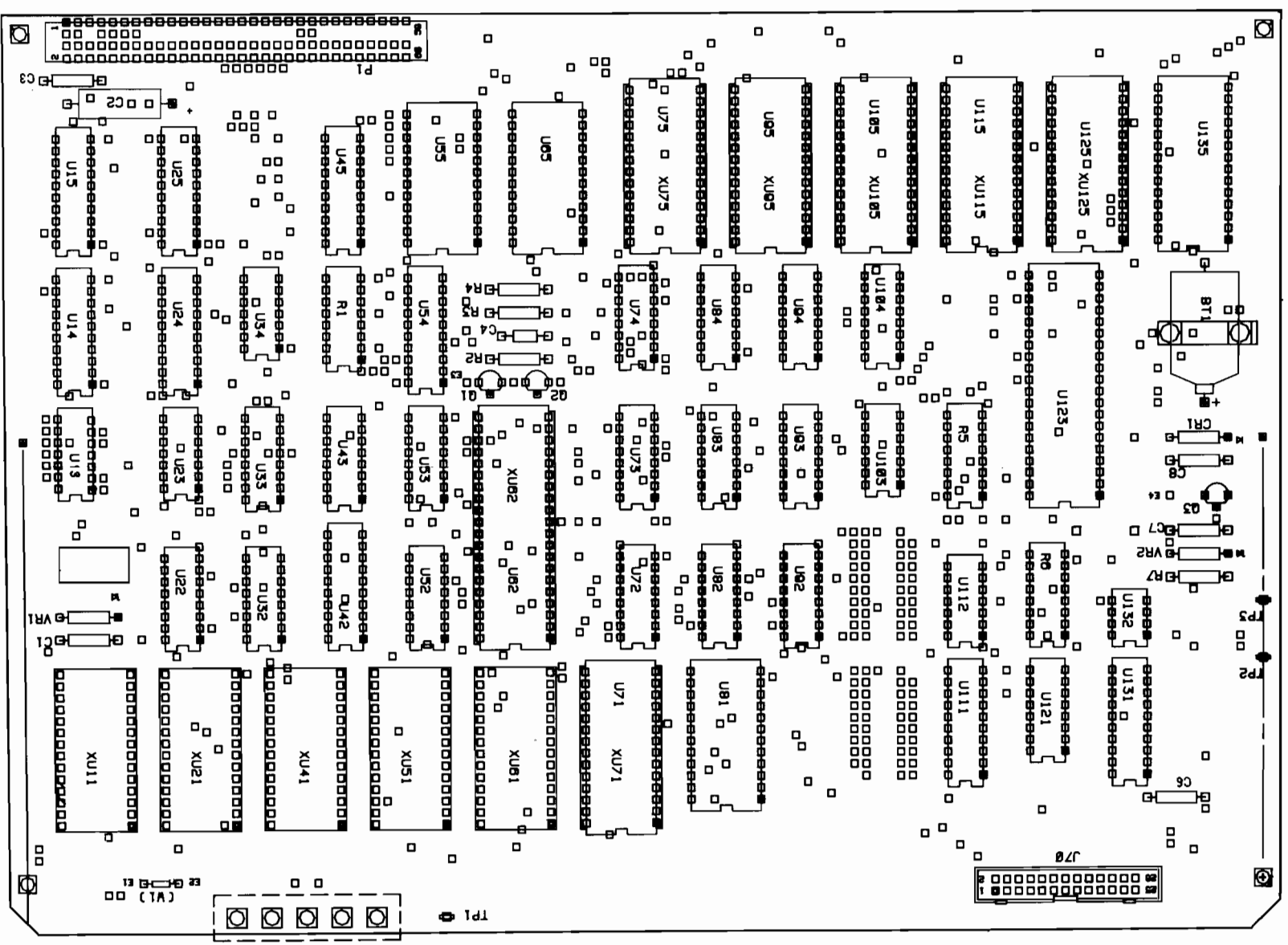


FIGURE 14. Formatter PCA (02563-60012), Parts Location

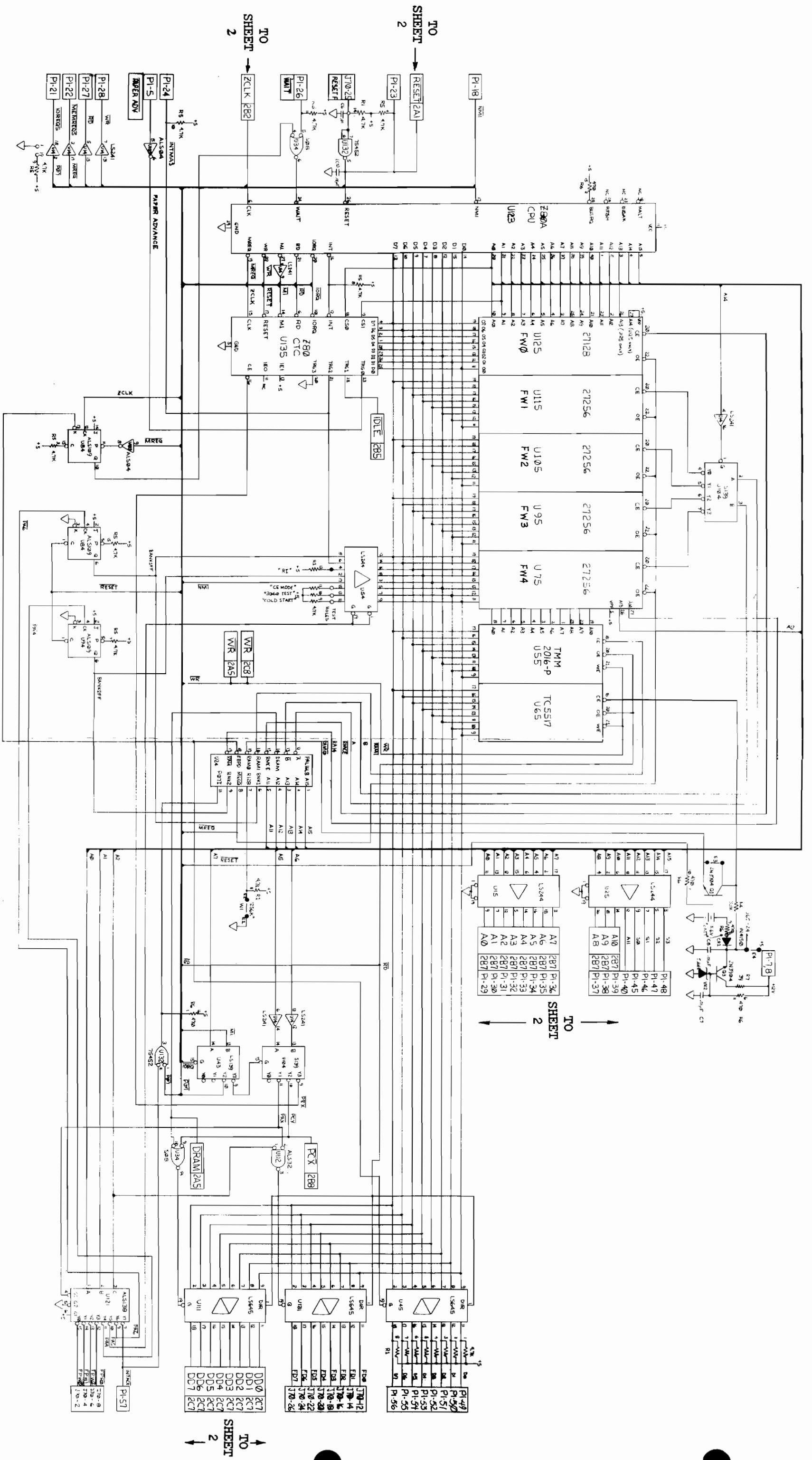


FIGURE 15. Formatter PCA  
(02563-60012), Schematic  
Sheet 1 of 2

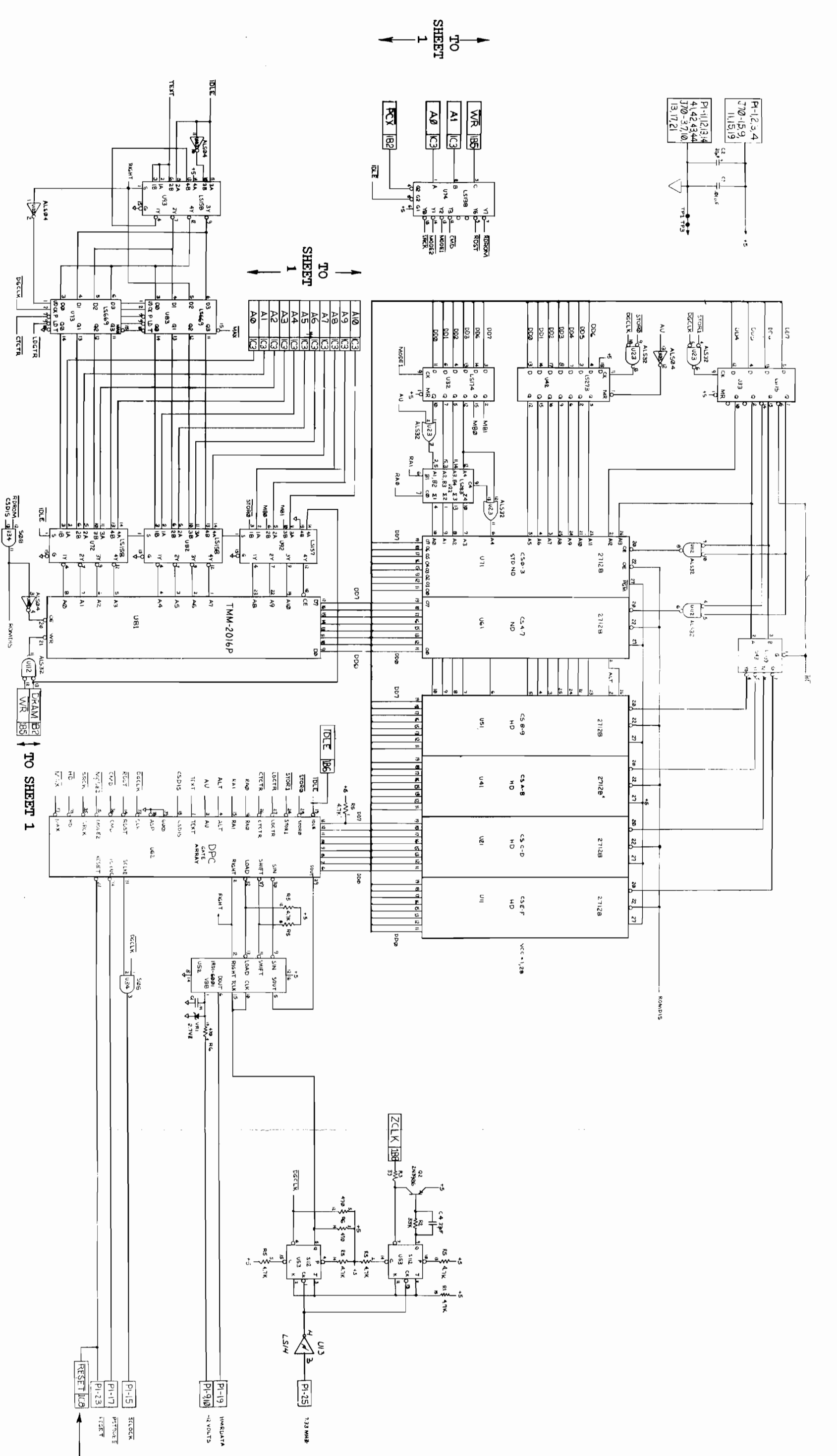
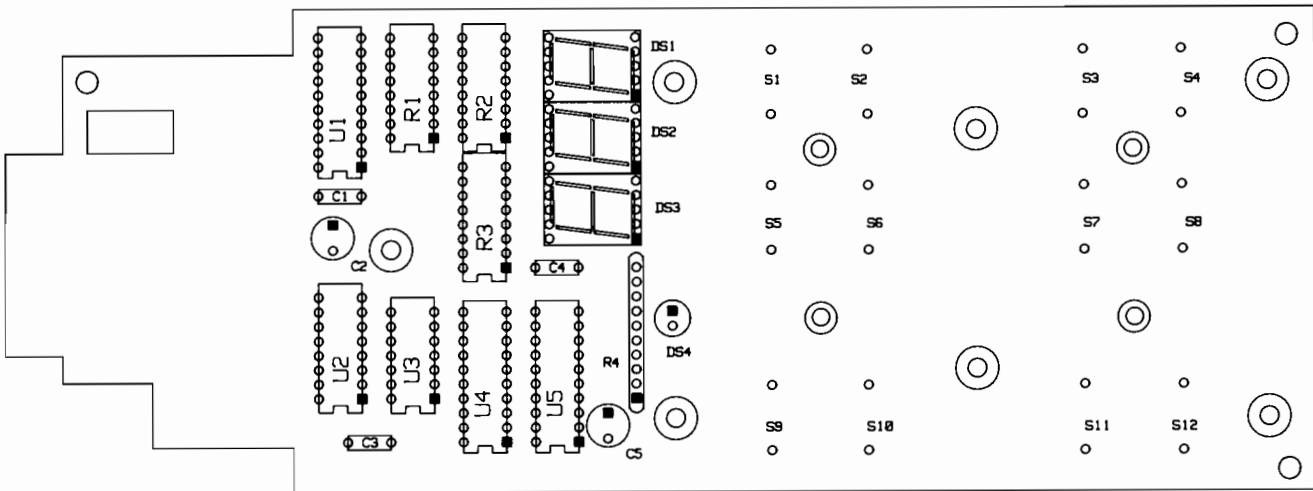


FIGURE 15. Formatter PCA  
(02563-60012), Schematic Cont.  
Sheet 2 of 2.

**TABLE 14. FRONT PANEL PCA (5061-1709) PARTS**

REF. DES.	DESCRIPTION
C1,3,4 C2,5 DS1,2,3	PCB:FRONT PANEL C:F.01UF20% DIP C:F15UF TANT 20V LED DISPLAY:YLV
DS4 R1,2,3,6,7,8 R5 U11,31	LED:LMP-YEL NET-RES:150X4 N:R9X10K 2%.125W IC:SN74LS273N
U12,21,33,34 U32 U35	IC:SN7406N INVTR IC: SN74LS240N IC:SN74LS175 F-F



**FIGURE 16. Front Panel PCA (5061-1709), Parts Location**

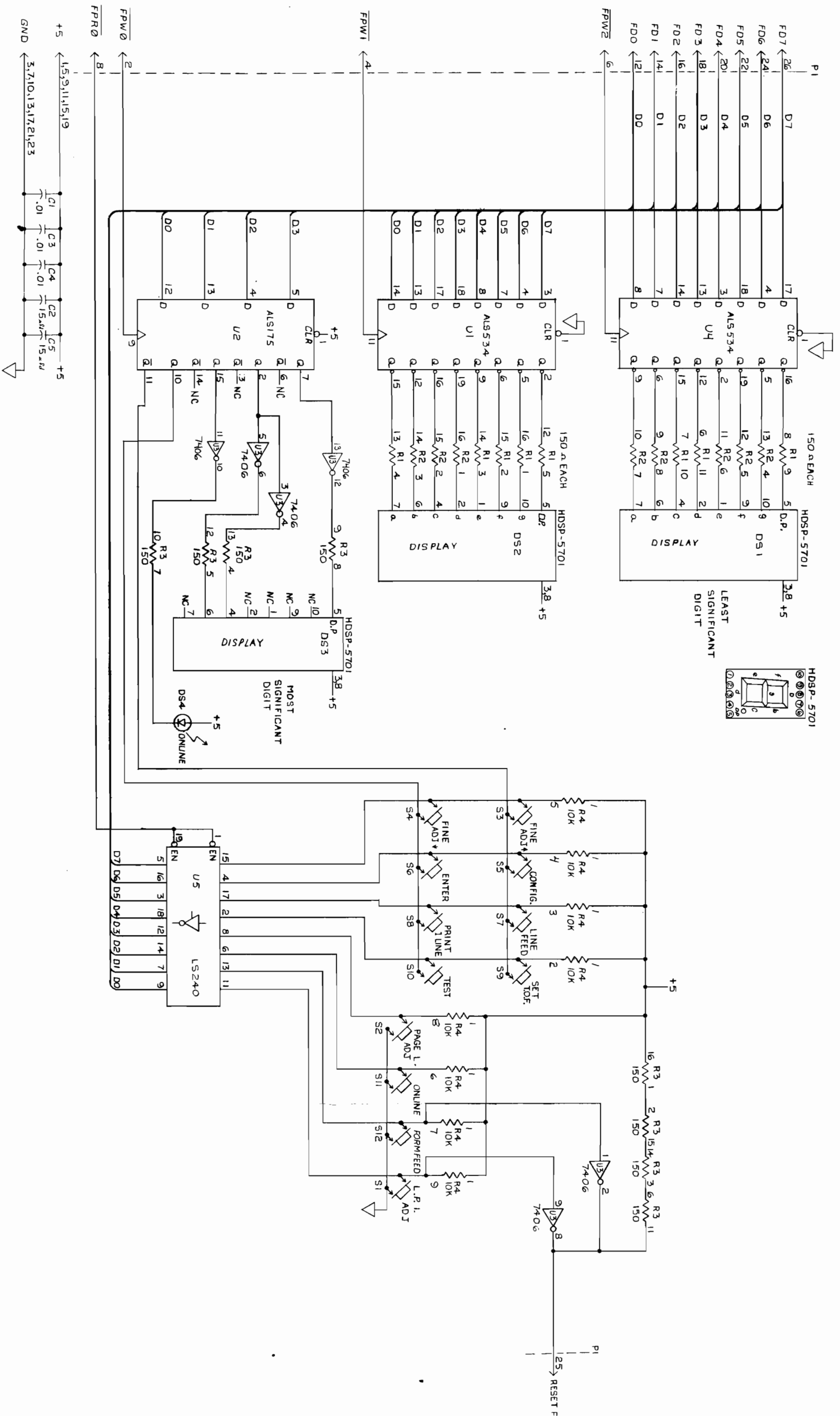


FIGURE 17. Front Panel PCA (5061-1709), Schematic

TABLE 15. ENCODER PCA (02563-60002) PARTS

REF. DES.	DESCRIPTION
2	PCB:ENCODER XMTR POLARIZING KEY
4	SPCR-PRS-IN
C1,4	CAP:15P5%200VDIP
C2,7,12,18,22	CAP:1UF 20% 50V
C3,19,20,21,	C:F.01UF20% DIP
C5,8,10	CAP 1000 PF 5%
C6	C:F 470PF 5% DIP
C9,11	C:F15UF TANT 20V
C13	CAP:.01U 20% CER
C14	C:F1UF 10%35VDC
C15,17	C:F 22UF 25V AL
C16	CAP:47PF 5% 200V
J1	CONN:HDR 2X10
L1	IND:1000UH
Q1	IC:MCT8L05ACP
R1,2,3,5	R:F 316K 1% .125
R4	R:F 383 1% .125W
R6	R:F 237K 1% .125
R7	R:F 10.K1% .125W
R8	R:F 2.15K 1%.125
R9,12	R:F47 5% .25W
R10	R:F 7.5K1% .125W
R11	R:F 3.83K 1%.125
R13	R:V TRMR 10K 10%
R14,15,18,21,23	R:F 4.7K5% .25W
R16	R:F 68 5% .25W
R17	R:F 100 1% .125W
R19	R:F 619 1% .125W
R20	R:F 33K 5% .25
R22,24,27,31,32	R:F 470 5% .25W
R30	R:F 1K5% .25W
TP1-10	TERM:TST PT-BRAS
U12	IC:MC140 15B
U14	IC:DM74LS173N
U15	PROM:STATE MACH
U16	IC:SN74LS174N F-F

TABLE 15. ENCODER PCA (02563-60017) PARTS Cont.

REF. DES.	DESCRIPTION
U22	IC: 74LS628N
U24	IC:SN74ALS74N
U25,26	IC:SN74LS191
U35	IC:SN7406N INVTR
U36	IC:SN74LS86N
U41	IC:LF353N AMP-LB
U42	IC:4046B
U44	IC:SN74LS374N
U45	IC:SN74LS373N
U46	PROM:ENC FW2516
U55	IC:8049 MICPROC
U55	IC:8049 MASK M P
XU22	SOCKET-IC:14 PIN
XU46	SOCKET:24 PIN IC

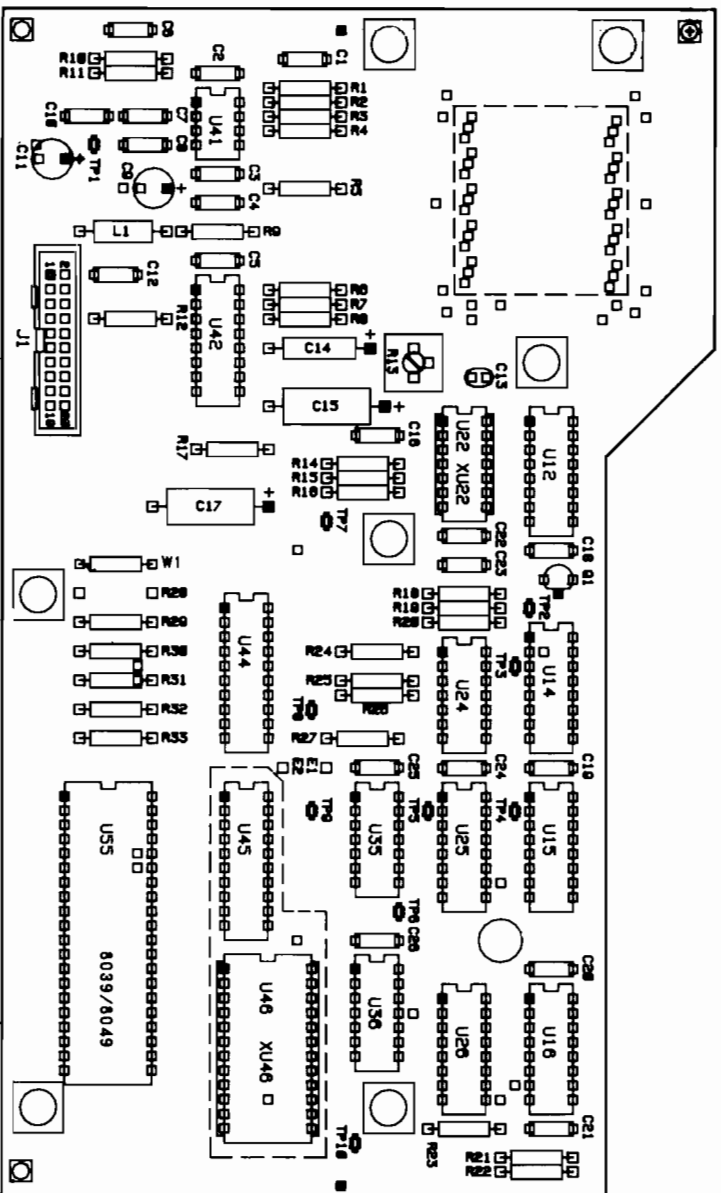
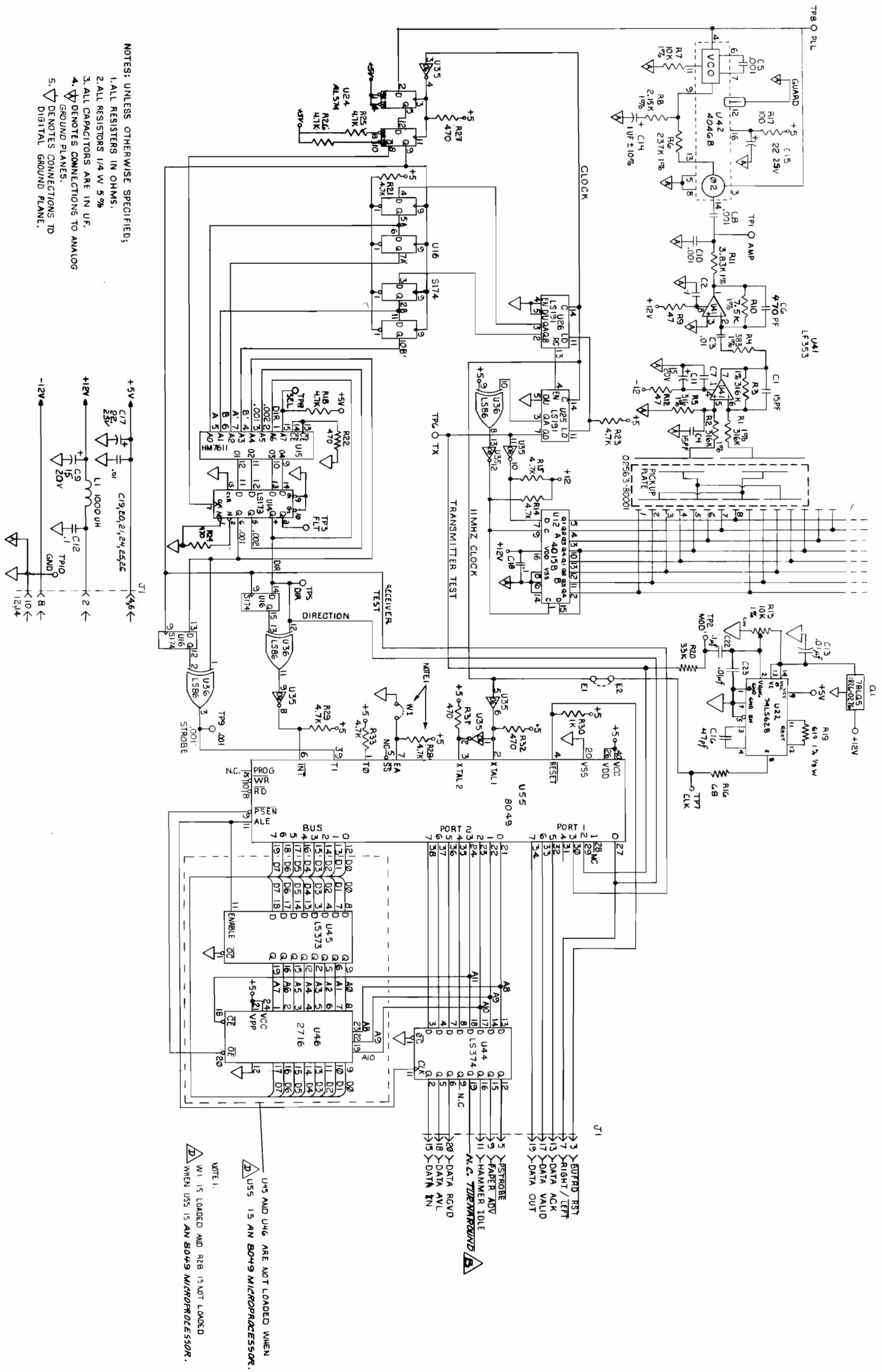


FIGURE 18. ENCODER PCA (02563-60017), Parts Location





- NOTES: UNLESS OTHERWISE SPECIFIED;
1. ALL RESISTORS IN OHMS.
  2. ALL RESISTORS 1/4 W 5%
  3. ALL CAPACITORS ARE IN UF.
  4.  $\nabla$  DENOTES CONNECTIONS TO ANALOG GROUND PLANES.
  5.  $\nabla$  DENOTES CONNECTIONS TO DIGITAL GROUND PLANE.

NOTE 1.

$\nabla$  U46 AND U49 ARE NOT LOADED WHEN U55 IS LOADED AND R28 IS NOT LOADED.

$\nabla$  U55 IS AN 8049 MICROPROCESSOR.

WHEN U55 IS AN 8049 MICROPROCESSOR.

FIGURE 19. ENCODER PCA (02563-60017), Schematic

TABLE 16. BACKPLANE SIGNAL DESCRIPTIONS

Signal Name	Pin(s)	Description
+5	1,2,3,4	+5 Volt Supply (+-3%) Max. Current drain for entire Backplane: 7 Amps
/PAPERADV	5	This signal goes low 7mS before the last Position Strobe. (PSTROBE)
SPARE	6	This pin used by Hickory
+12	7,8	+12 Volt Supply (+-3%) Max. Current drain for entire Backplane: 1 Amp.
-12	9,10	-12 Volt Supply (+-10%) Max. Current drain for entire Backplane: .5 Amp
GND	11,12,13,14	Logic and Analog Ground
/SCLOCK	15	The falling edge of this signal shifts the level of the HMRDATA signal into the hammer driver shift registers.
SPARE	16	
/PSTROBE	17	This signal goes low for each possible print position. The signal is preconditioned for print hammer flight time delay
/NMI	18	This signal goes low any time the unregulated supply voltage drops below 41 volts. This is usually indicative of a power failure, or power down condition.
HMRDATA	19	This is the serial input to the hammer driver shift registers.

TABLE 17. BACKPLANE CONNECTOR SIGNALS

PIN	SIGNAL NAME	PIN	SIGNAL NAME
1	+5	2	+5
3	+5	4	+5
5	/PAPERADV (1)	6	SPARE
7	+12	8	+12
9	-12	10	-12
11	GND	12	GND
13	GND	14	GND
15	/SCLOCK	16	SPARE
17	/PSTROBE	18	/NMI
19	HMRDATA	20	SPARE
21	/IOREQS	22	/MEMREQS
23	/RESET	24	/INTMAS
25	CLOCK	26	/WAIT
27	/RD	28	/WR
29	A0	30	A1
31	A2	32	A3
33	A4	34	A5
35	A6	36	A7
37	A8	38	A9
39	A10	40	A11
41	A12	42	A13
43	A14	44	A15
45	S0	46	S1
47	S2	48	S3
49	D0	50	D1
51	D2	52	D3
53	D4	54	D5
55	D6	56	D7
57	/INTACK	58	/POLACK (2)
59	/IOREQX (2)	60	/MEMREQX (2)

(1) A "/" sign prefix indicates an active LOW logic signal.

(2) Pins 58,59, and 60 are the only slot dependent signals.

TABLE 17. BACKPLANE SIGNAL DESCRIPTIONS Cont.

Signal Name	Pin(s)	Description
A0-A15	29-44	These are the least significant 16 bits of the printer control card address bus.
S0-S3	45-48	These are the four most significant bits of the printer control card address bus. These four bits are used to decode the address blocks for the backplane slots.
D0-D7	49-56	These signals comprise the bi-directional data bus from the printer control card.
/INTACK	57	This signal is a request from the printer control card commanding all other cards in the backplane to drive their /POLACK signal low if they require service.
/POLACK	58	<p>This is a slot dependent pole acknowledge signal. When driven low by the inserted card one bit of the data bus is driven low.</p> <p>Slot 0 [J100] bit 0            Slot 1 [J101] bit 1            Slot 2 [J102] bit 2            Slot 3 [J103] bit 3            Slot 4 [J104] bit 4</p>

TABLE 17. BACKPLANE SIGNAL DESCRIPTIONS Cont.

Signal Name	Pin(s)	Description
SPARE	20	
/IOREQS	21	This is the active low I/O request signal from the printer control card
/MEMREQS	22	This is the active low memory request signal from the printer control card.
/RESET	23	This master reset signal remains low for 150 mS after the +5 Volt supply exceeds 4.8 Volts. This signal drops low just as the +5 Volt supply drops below 4.8 Volts.
/INTMAS	24	This is the interrupt request line exclusively for the use of the cards in the backplane.
CLOCK	25	This (7.3 Mhz) signal is the main clock signal for the printer.
/WAIT	26	When this signal is held low, the printer control processor enters a wait mode.
/RD	27	This signal drops low whenever the control processor expects to read data off of the DATA BUS.
/WR	28	This signal drops low whenever the control processor expects to write data to the data bus.

**TABLE 17. BACKPLANE SIGNAL DESCRIPTIONS Cont.**

Signal Name	Pin(s)	Description
/IOREQX	59	<p>This is a slot decoded I/O request signal. The I/O address space is delegated as follows:</p> <p>Slot 0 [J100] 0X hex            Slot 1 [J101] 1X hex            Slot 2 [J102] 2X hex            Slot 3 [J103] 3X hex            Slot 4 [J104] 4X hex</p>
/MEMREQX	60	<p>This is a slot decoded memory request signal. The memory space is delegated as follows:</p> <p>Slot 0 [J100] FXXX hex            Slot 1 [J101] BXXX hex            Slot 2 [J102] CXXX hex            Slot 3 [J103] DXXX hex            Slot 4 [J104] EXXX hex</p>

TABLE 18. PRINTER ASSEMBLIES

REF. DES.	DESCRIPTION	HP PART NO.
1	LEVELER FOOT	0403-0492
2	CASTOR	0492-0108
4	PAPER TRAY	02564-00052
	PAPER TRAY (55 dba)	02564-00131
5	OUTPUT PAPER BAIL	02563-00055
6	GROUNDING TINSEL	02564-60147
7	SEAL SOUND SHROUD	02564-00140
8	SOUND SHROUD	02564-60134
9	STACKER FRAME	02564-60138
10	STACKER ASSEMBLY	02564-60149

NOTE: Paper bail (5) and Sound Shroud (8) are mutually exclusive.

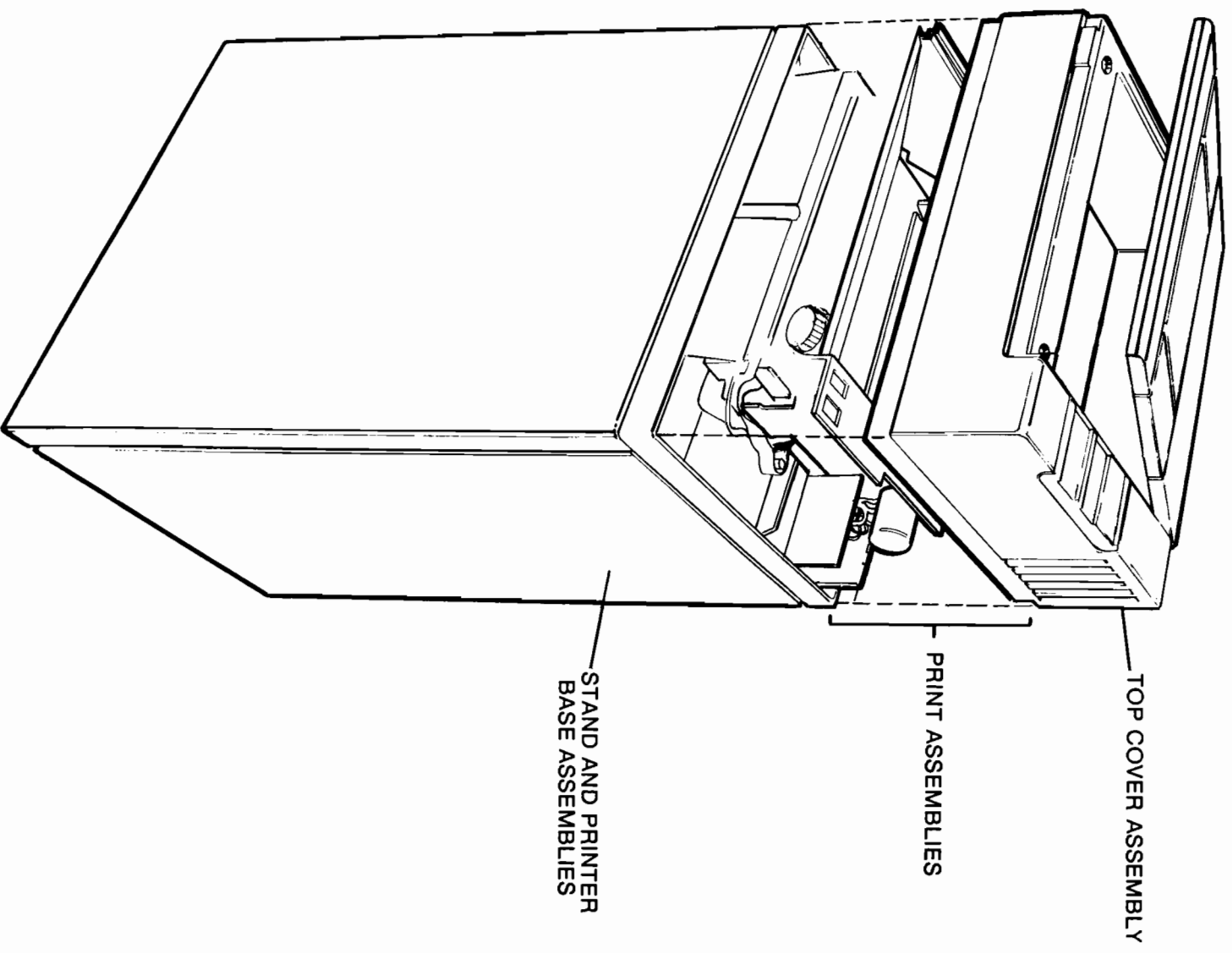
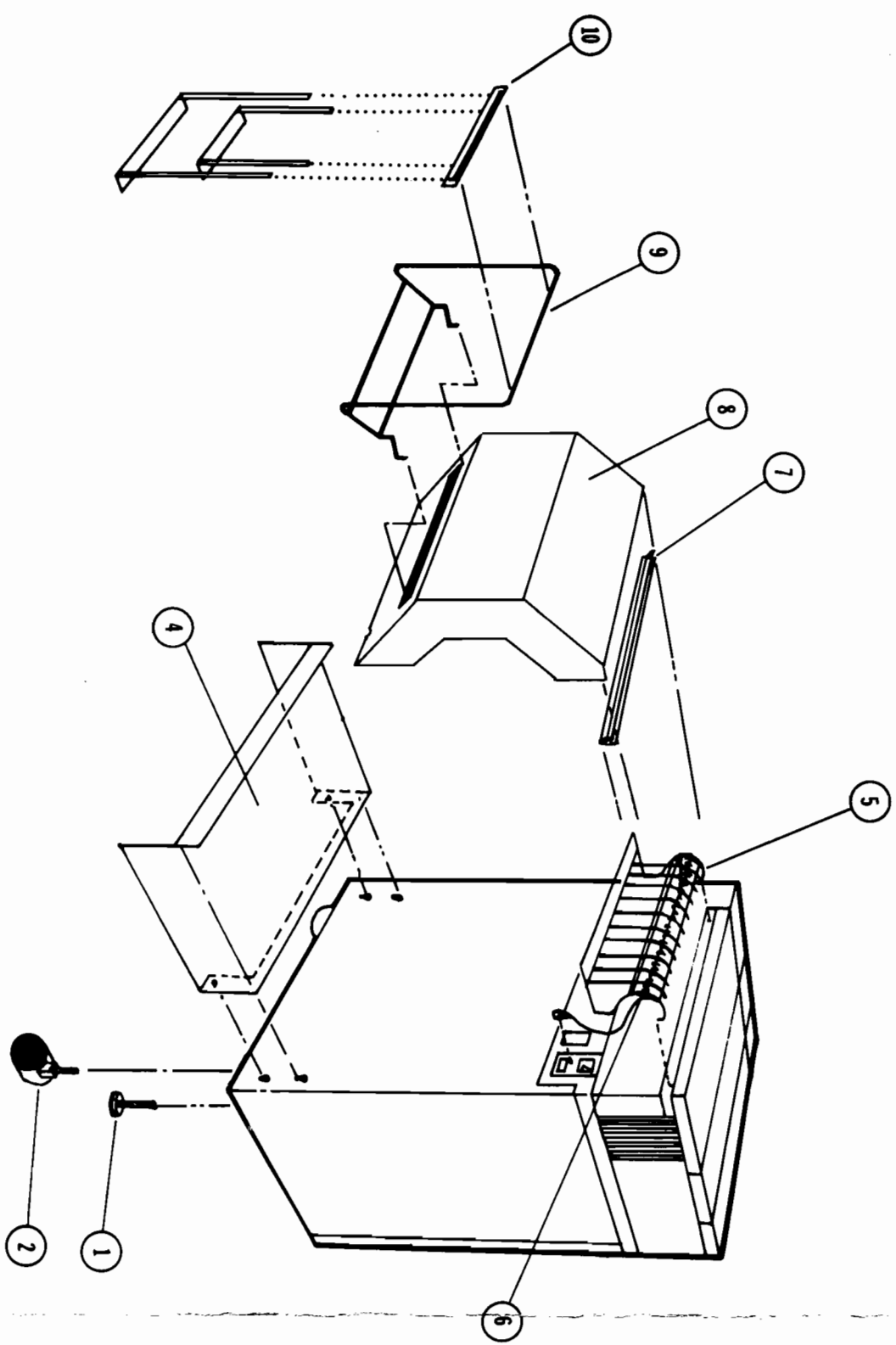


FIGURE 20. PRINTER ASSEMBLIES

