CHANGE SHEET

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Unit Number 1993 4876

1 SCOPE

This document presents information needed to configure and install the unit listed below. This document also contains information on the unit not otherwise available within the documentation package.

APPLICABLE UNIT

T/U 1993 4876 Off-load Reader Sorter DLP

2 RELATED DOCUMENTS

1972 8823 B2900 Installation Manual
1982 9514 B3900 M2 Installation Manual
1989 9533 B3900 M3 Installation Manual
1987 1219 B4900 Installation Manual

The above manuals contain information on installation procedures for UIO base modules into which the unit in subject document is inserted.

1990 3921 T & F User's Guide

Contains general information on the documentation package plus information on UIO card and cables.

3 INSTALLATION INSTRUCTIONS

This section lists the steps required to configure and install the unit.

3.1 UNPACK UNIT

Unpack the unit and check to be sure that all top units and documents are present. Refer to Table 1.

The Off-load Reader Sorter requires the backplane provided in the DLP Base Module 6 (1997 5374) or the UIO Backplane Kit (1997 5382).

For early B4900 systems upgraded to V300 performance levels, the Off-load Reader Sorter DLP requires the current IOP Module 2 (1996 3727) and the Interface Panel Power Kit 2 (1994 2242) which are factory installed on later B4900 systems.

3.2 CHECK UNIT

Examine various parts to be certain no obvious damage occurred during shipment.

Check to be certain that no power short exists. Measure between backplane pins 101 (Gnd) and 001 (+5VDC), and pins 103 (-12VDC) and 003)+12VDC).

TABLE 1

LIST OF TOP UNITS

QTY	NO	T/U NAME	DESCRIPTION
1	19934876	ORS DLP 1	One-card data communication processor with EPROMs in sockets. Includes self test display.
1	19934884	CD,RS449 INTF1	RFI RS449 Interface Card for B3900 Model 3 and later V300 series.
1	19934892	CD,RS449 INTF2	RS449 Interface Card for B3900 Model 2 and for B4900. Includes a card-edge to D-connector cable adapter.
1	19934900	CA,SIGNAL,RIBBON	3-connector cable, 50 pins, connecting one frontplane connector of the DC DLP to two interface cards.
1	19935030	KIT,MAINT.	An RS449 board assembly loopback connector and special instructions.
1	19934991	KIT,DATACOM SERVICE	ORS DLP card, RS449 interface card 1 and RS449 card 2.

3.3 CONFIGURE ORS DLP CARD

3.3.1 JUMPER OPTIONS

DLP address should be 5. Range is 5-6.

The DLP card has three (3) groups of jumper pins. They are as follows (see Figure 1-1, 1-2 and 1-3):

(1) Jumper pins together per Table 2 for the DLP address/request number assigned to this unit.

(2) Configure maint./local address jumpers to the same address as DLP address. See Table 3.

(3) a. Verify that jumper D858-D758 is installed.

b. Verify that jumper J318-J317 is installed.

c. Verify that the following jumpers are open:

D758 - D658
J217 - J218
H417 - H416
K608 - K708
K419 - K418
M317 - M316
L215 - L214

H380 - H379 - Used to initiate SELF TEST with Selective Clear. Recommend this jumper be left open.

D081 - D181
D083 - D183
D085 - D185
D087 - D187
D088 - D188
D086 - D186
D084 - D184
D082 - D182

DLP ID jumpers are not used by MCP. However, see TABLE 4 for strapping if desired.

TABLE 2

ORS DLP ADDRESS/REQUEST JUMPERS

DLP#	JUMPER FROM	JUMPER TO	DLP#	JUMPER FROM	JUMPER TO
7	H891 J491	H890 J490	3	I291 J891	I290 J890
6	H991 J591	H990 J590	2	I391 J991	I390 J990
5	I091 J691	I090 J690	1	I491 K091	I490 K090
4	I191 J791	I190 J790	0	I591 K191	I590 K190

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TABLE 3

ORS DLP LOCAL ADDRESS JUMPERS

LOCAL ADDRESS DEC	HEX	L991-L990	L891-L890	L571-L572	L573-L574	L575-L576
000	00					
001	01					x
002	02				x	
003	03				x	x
004	04			x		
005	05			x		x
006	06			x	x	
007	07			x	x	x
008	08		x			
009	09		x			x
010	0A		x		x	
011	0B		x		x	x
012	0C		x	x		
013	0D		x	x		x
014	0E		x	x	x	
015	0F		x	x	x	x
016	10	x				
017	11	x				x
018	12	x			x	
019	13	x			x	x
020	14	x		x		
021	15	x		x		x
022	16	x		x	x	
023	17	x		x	x	x
024	18	x	x			
025	19	x	x			x
026	1A	x	x		x	
027	1B	x	x		x	x
028	1C	x	x	x		
029	1D	x	x	x		x
030	1E	x	x	x	x	
031	1F	x	x	x	x	x

NOTE: Jumper between each pair of pins for which an "x" appears opposite the pair in the column corresponding to the desired address.

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TABLE 4 - DLP ID JUMPERS

dec / hex	000 00	001 01	002 02	003 03	004 04	005 05	006 06	007 07	008 08	009 09	010 0A	011 0B	012 0C	013 0D	014 0E	015 0F
D081-D181																
D083-D183																
D085-D185																
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	016 10	017 11	018 12	019 13	020 14	021 15	022 16	023 17	024 18	025 19	026 1A	027 1B	028 1C	029 1D	030 1E	031 1F
D081-D181																
D083-D183																
D085-D185																
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

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TABLE 4 - DLP ID JUMPERS (Continued)

dec / hex	032 20	033 21	034 22	035 23	036 24	037 25	038 26	039 27	040 28	041 29	042 2A	043 2B	044 2C	045 2D	046 2E	047 2F
D081-D181																
D083-D183																
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	048 30	049 31	050 32	051 33	052 34	053 35	054 36	055 37	056 38	057 39	058 3A	059 3B	060 3C	061 3D	062 3E	063 3F
D081-D181																
D083-D183																
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

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TABLE 4 - DLP ID JUMPERS (Continued)

dec / hex	064 40	065 41	066 42	067 43	068 44	069 45	070 46	071 47	072 48	073 49	074 4A	075 4B	076 4C	077 4D	078 4E	079 4F
D081-D181																
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185																
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	080 50	081 51	082 52	083 53	084 54	085 55	086 56	087 57	088 58	089 59	090 5A	091 5B	092 5C	093 5D	094 5E	095 5F
D081-D181																
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185																
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

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TABLE 4 - DLP ID JUMPERS (Continued)

dec / hex	096 60	097 61	098 62	099 63	100 64	101 65	102 66	103 67	104 68	105 69	106 6A	107 6B	108 6C	109 6D	110 6E	111 6F
D081-D181																
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	112 70	113 71	114 72	115 73	116 74	117 75	118 76	119 77	120 78	121 79	122 7A	123 7B	124 7C	125 7D	126 7E	127 7F
D081-D181																
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

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TABLE 4 - DLP ID JUMPERS (Continued)

dec / hex	128 80	129 81	130 82	131 83	132 84	133 85	134 86	135 87	136 88	137 89	138 8A	139 8B	140 8C	141 8D	142 8E	143 8F
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183																
D085-D185																
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	144 90	145 91	146 92	147 93	148 94	149 95	150 96	151 97	152 98	153 99	154 9A	155 9B	156 9C	157 9D	158 9E	159 9F
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183																
D085-D185																
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

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TABLE 4 - DLP ID JUMPERS (Continued)

dec / hex	160 A0	161 A1	162 A2	163 A3	164 A4	165 A5	166 A6	167 A7	168 A8	169 A9	170 AA	171 AB	172 AC	173 AD	174 AE	175 AF
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183																
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	176 B0	177 B1	178 B2	179 B3	180 B4	181 B5	182 B6	183 B7	184 B8	185 B9	186 BA	187 BB	188 BC	189 BD	190 BE	191 BF
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183																
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

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TABLE 4 - DLP ID JUMPERS (Continued)

dec / hex	192 C0	193 C1	194 C2	195 C3	196 C4	197 C5	198 C6	199 C7	200 C8	201 C9	202 CA	203 CB	204 CC	205 CD	206 CE	207 CF
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185																
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	208 D0	209 D1	210 D2	211 D3	212 D4	213 D5	214 D6	215 D7	216 D8	217 D9	218 DA	219 DB	220 DC	221 DD	222 DE	223 DF
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185																
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

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TABLE 4 - DLP ID JUMPERS (Continued)

dec / hex	224 E0	225 E1	226 E2	227 E3	228 E4	229 E5	230 E6	231 E7	232 E8	233 E9	234 EA	235 EB	236 EC	237 ED	238 EE	239 EF
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187																
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

dec / hex	240 F0	241 F1	242 F2	243 F3	244 F4	245 F5	246 F6	247 F7	248 F8	249 F9	250 FA	251 FB	252 FC	253 FD	254 FE	255 FF
D081-D181	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D083-D183	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D085-D185	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D087-D187	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
D088-D188									X	X	X	X	X	X	X	X
D086-D186					X	X	X	X					X	X	X	X
D084-D184			X	X			X	X			X	X			X	X
D082-D182		X		X		X		X		X		X		X		X

Jumper between each pair of pins for which the "X" appears opposite the pair in the column that corresponds to the desired ID.

FIGURE 1-1

ORS DLP JUMPER LOCATIONS

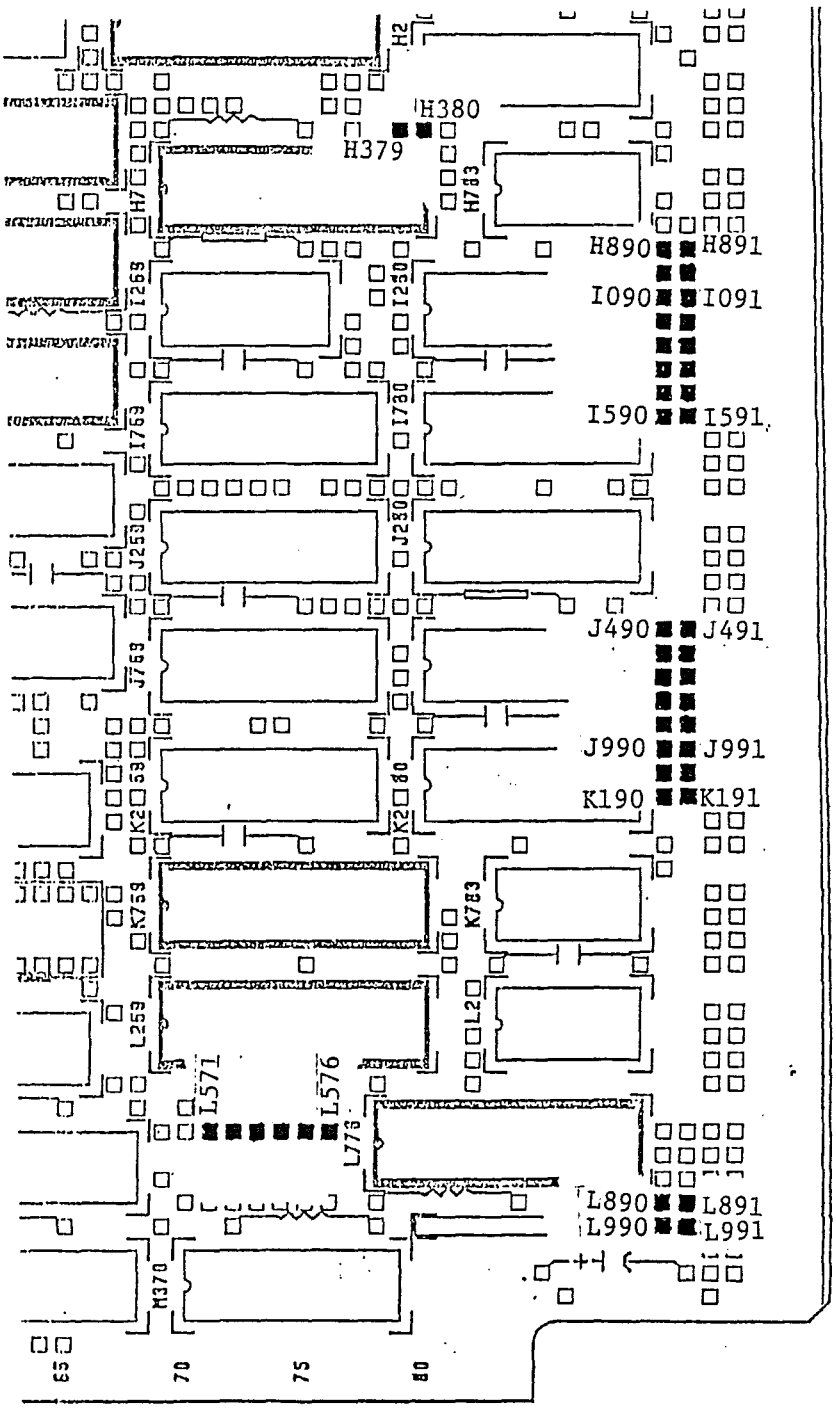

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FIGURE 1-2

ORS DLP JUMPER LOCATIONS

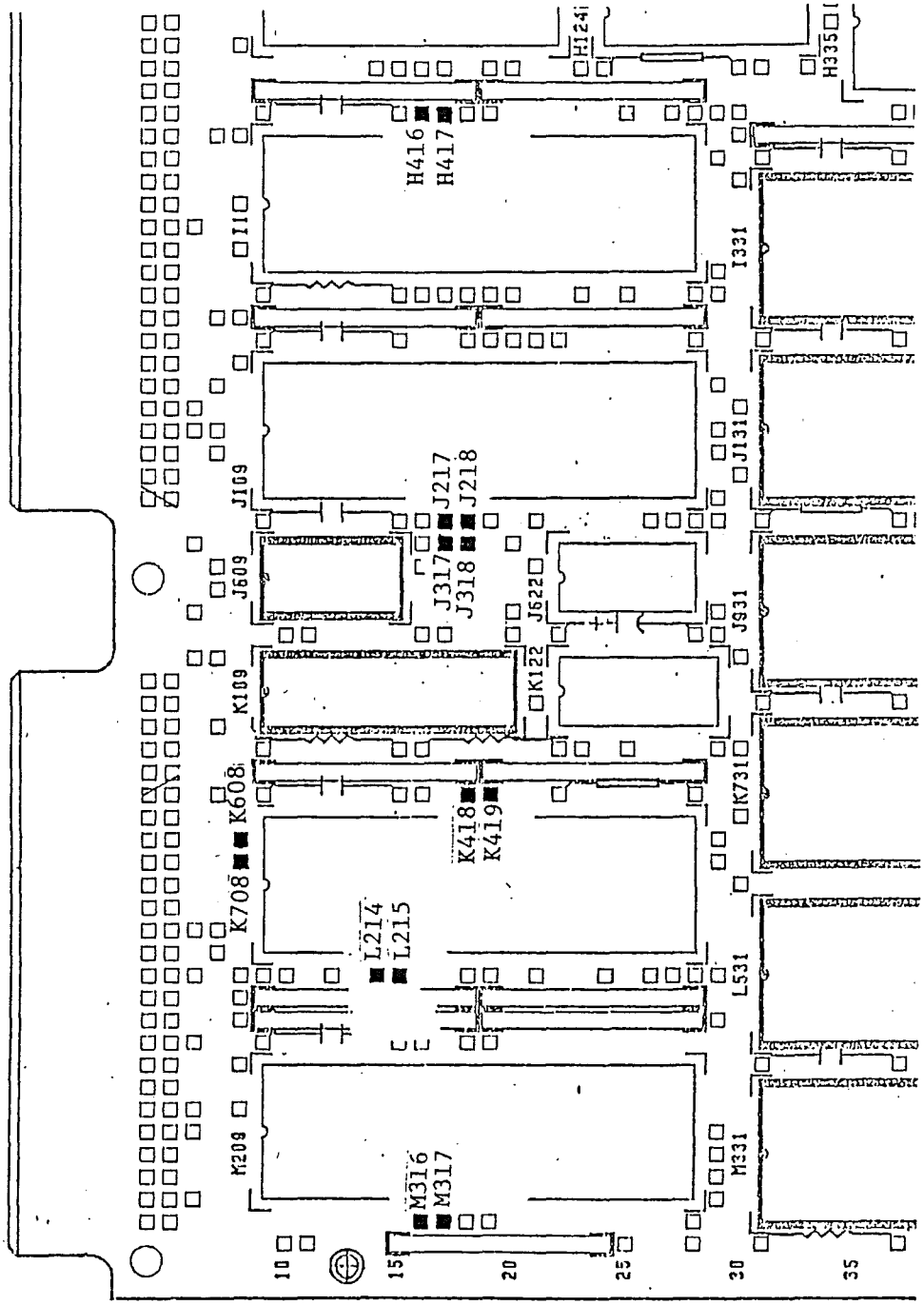
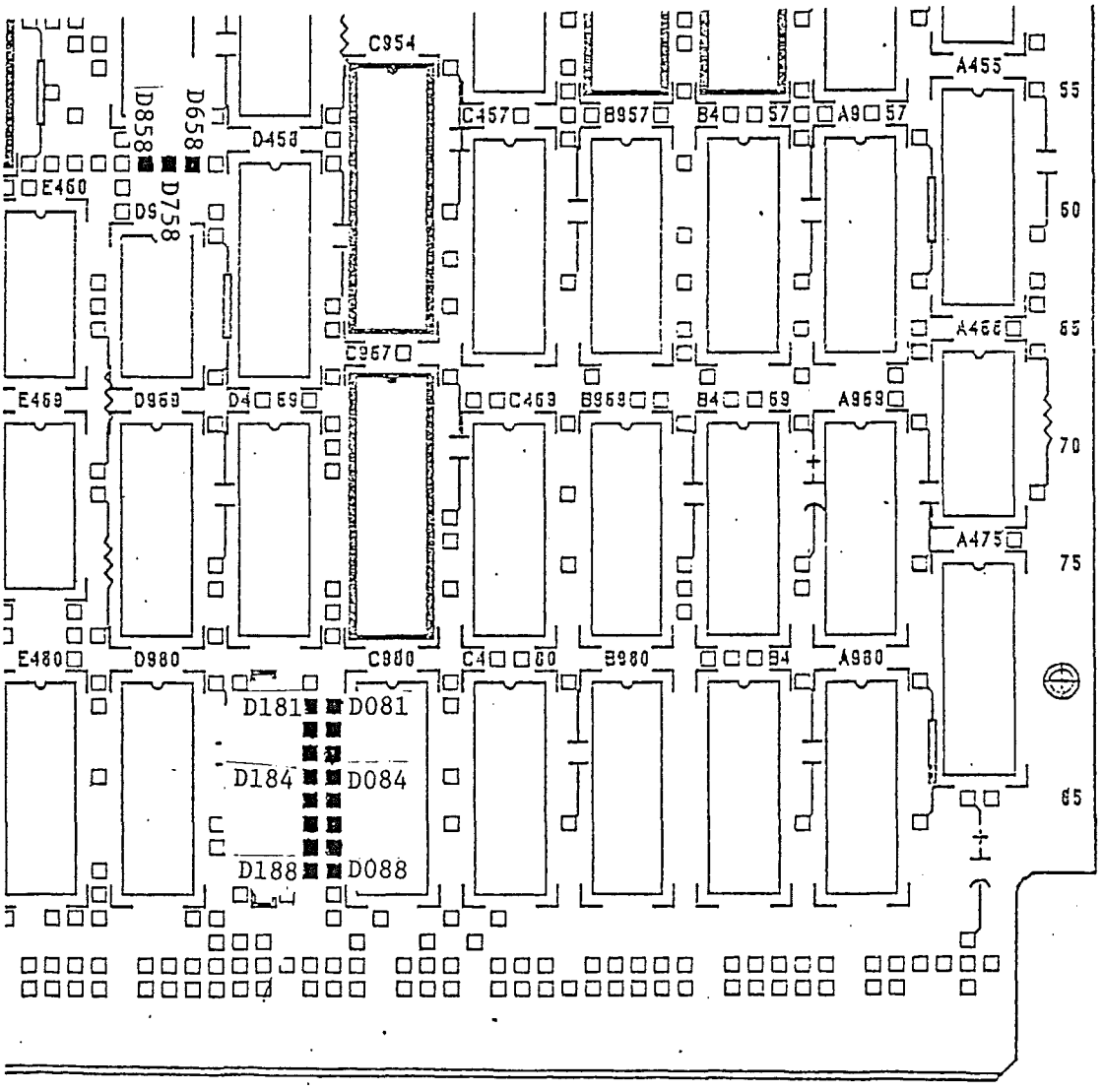


FIGURE 1-3

ORS DLP JUMPER LOCATIONS



3.4 STOP MCP AND TURN OFF POWER

3.5 INSERT CARDS INTO BASE MODULE

Insert the cards into the UIO base module per the following rules:

(1) A DLP must reside between the UIO maintenance card and the UIO connection module for the base.

(2) Suggestion: begin inserting DLP's into the base module from the slot adjacent to the maintenance card which is on the right side of the DLP base and work toward the distribution card.

3.6 SET SWITCH OPTIONS

Switches on the interface card must be set before running tests. Refer to Figure 3.

(1) Put Section 1 of the switch S1N down toward Pin 1 of the DIP Switch. This is the normal setting, where SPCLOT is connected to terminal timing (TT).

(2) Put Section 2 down toward Pin 16 of the DIP Switch. This connects resistors to the ST and RT nets.

3.7 CONNECT CABLES

Connect cables and Interface Panel Card per instructions below. See Figure 2 on the following page.

(1) Install the datacomm interface paddle card in the Interface Panel.

(2) Install dual woven cable from DLP J3 (Port 3) to RS449 interface paddle card, using the cable on component side of DLP (Line 0). Line 1 is not used. Stripe on cable should be down and arrow on connectors will be at the top. See Figure 2.

(3) Install self-test display board on J1 (Port 1).

FIGURE 2

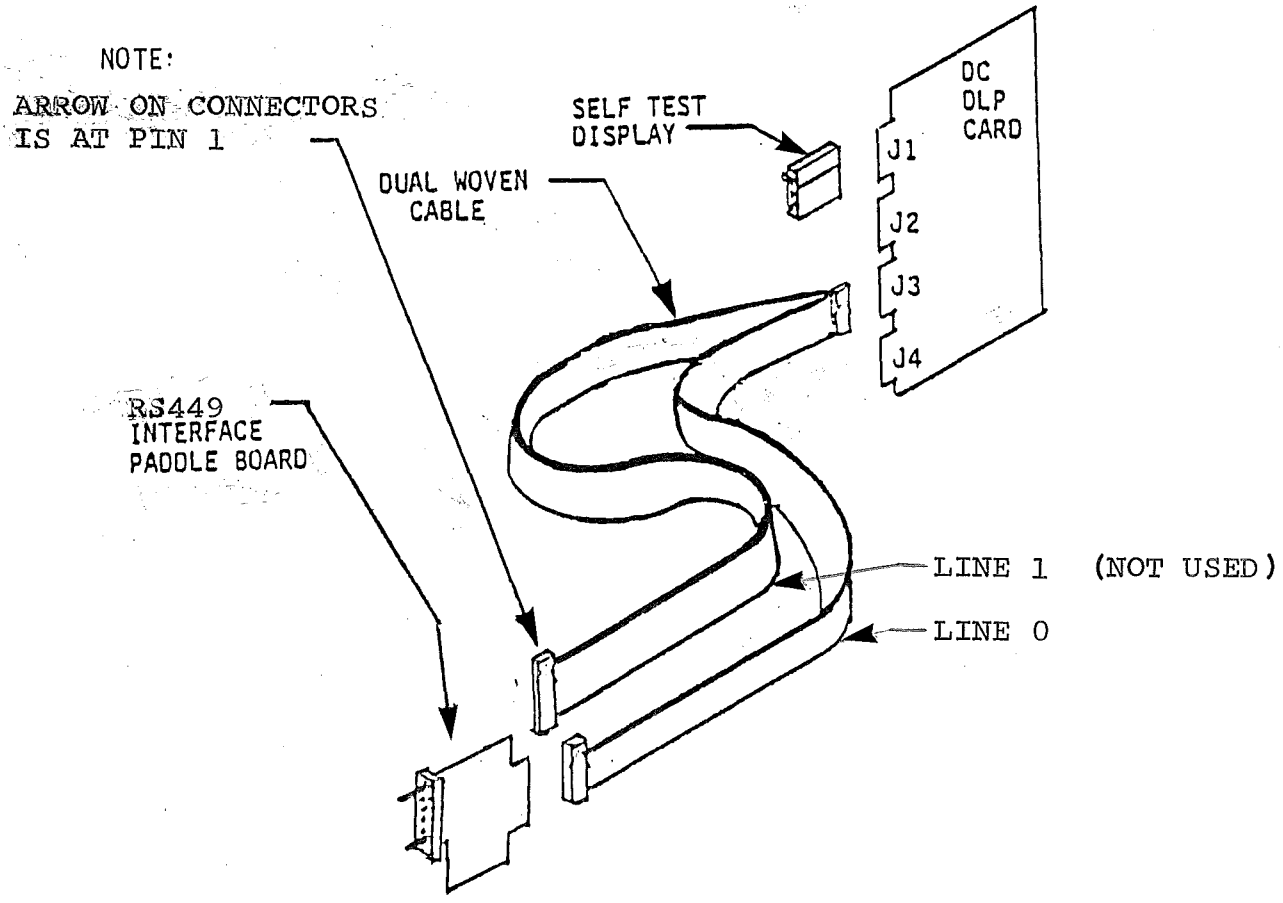


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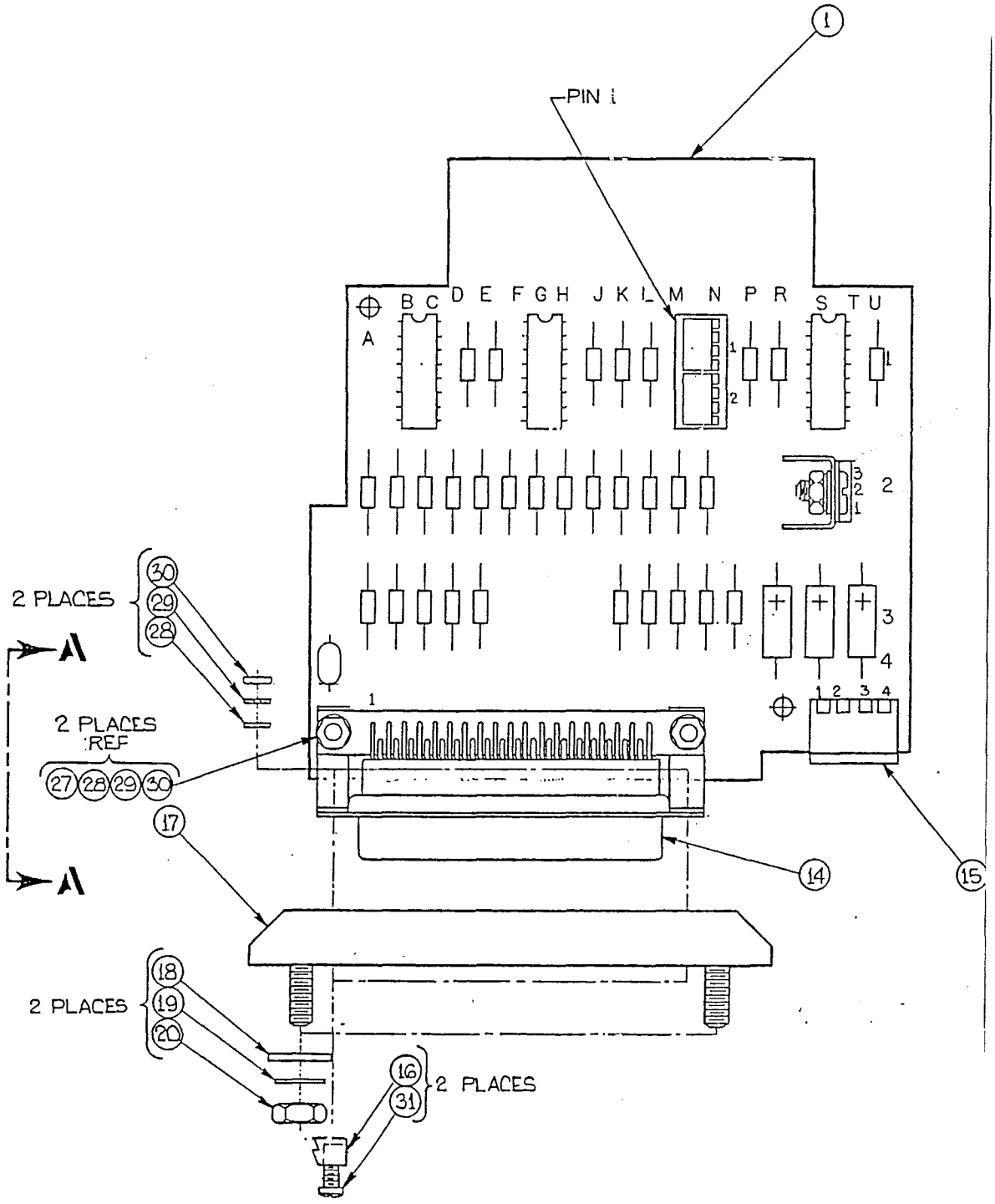
FIGURE 3 - RS449 INTERFACE CARD



4 FINAL CHECKOUT INSTRUCTIONS

Once the unit has been installed per instructions, perform the following tests before turning the unit over to the host for normal I/O operations.

4.1 SELF TEST

When the base is powered on, the DLP will perform a self-test. The self-test should complete in less than 5 seconds. If the top LED on the Self-Test Display board remains permanently on, replace the DLP. The constant blinking of the top LED indicates normal firmware operation. Self-Test could also be initiated by pushing the pushbutton on Self-Test Display board or by Master-Clear on the maintenance card.

4.2 CONFIDENCE TEST

Perform confidence test ORSMNO.

Reference Special Instruction for ORS DLP Maintenance Kit 1993 6459 and the Program Users Guide for ORS Test Routine 1994 2259.

Upon successful completion of this step, the unit is ready for testing using the peripheral device.