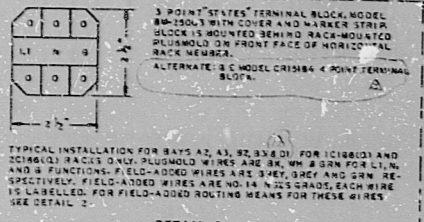
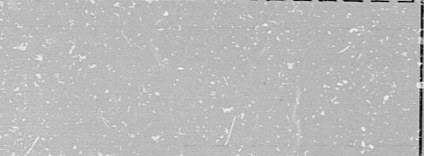
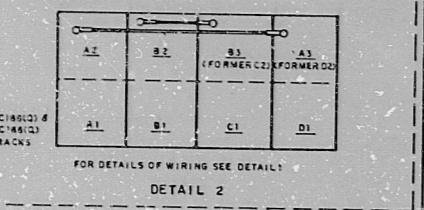


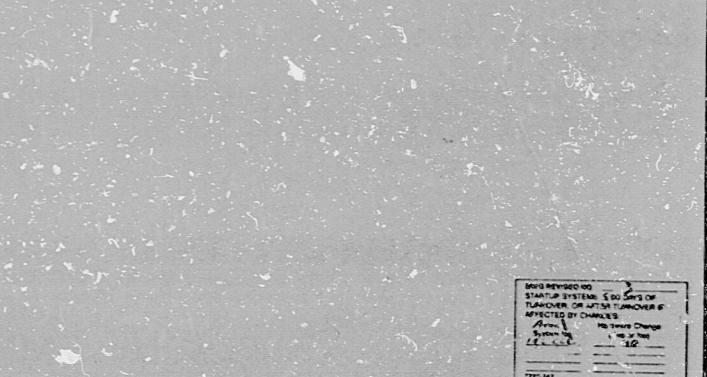
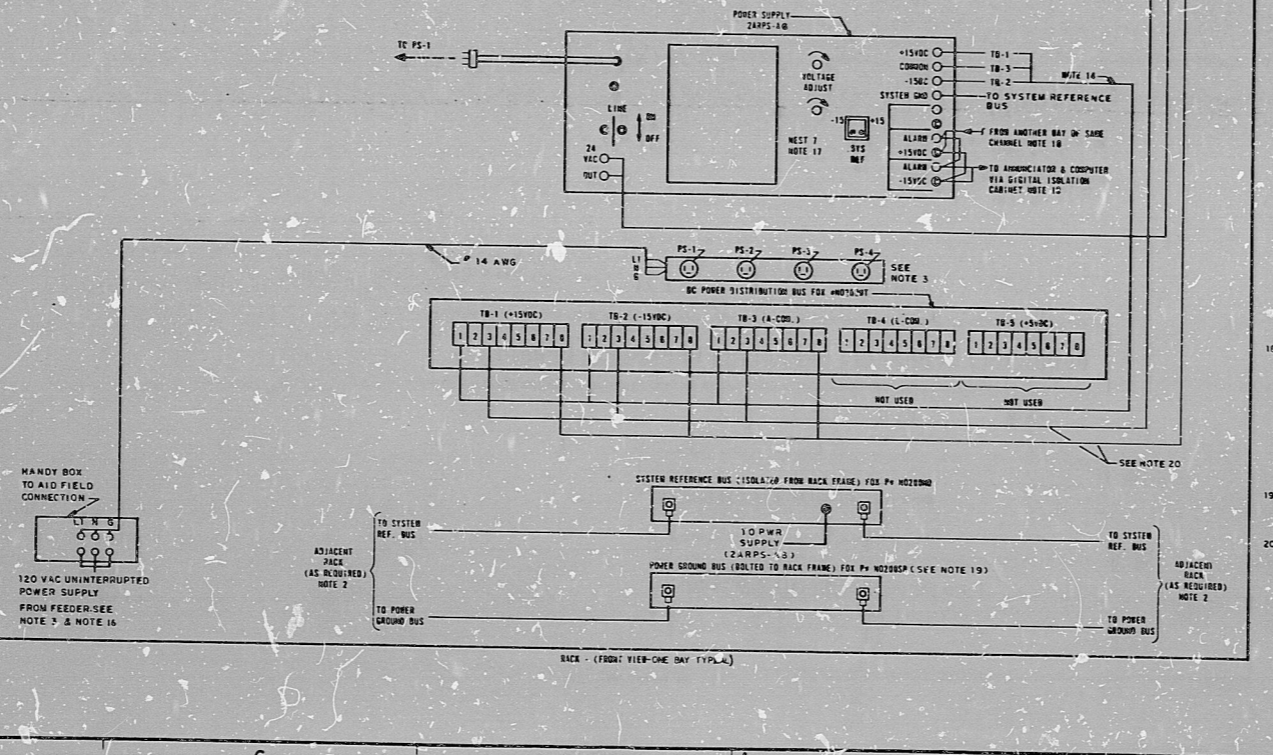
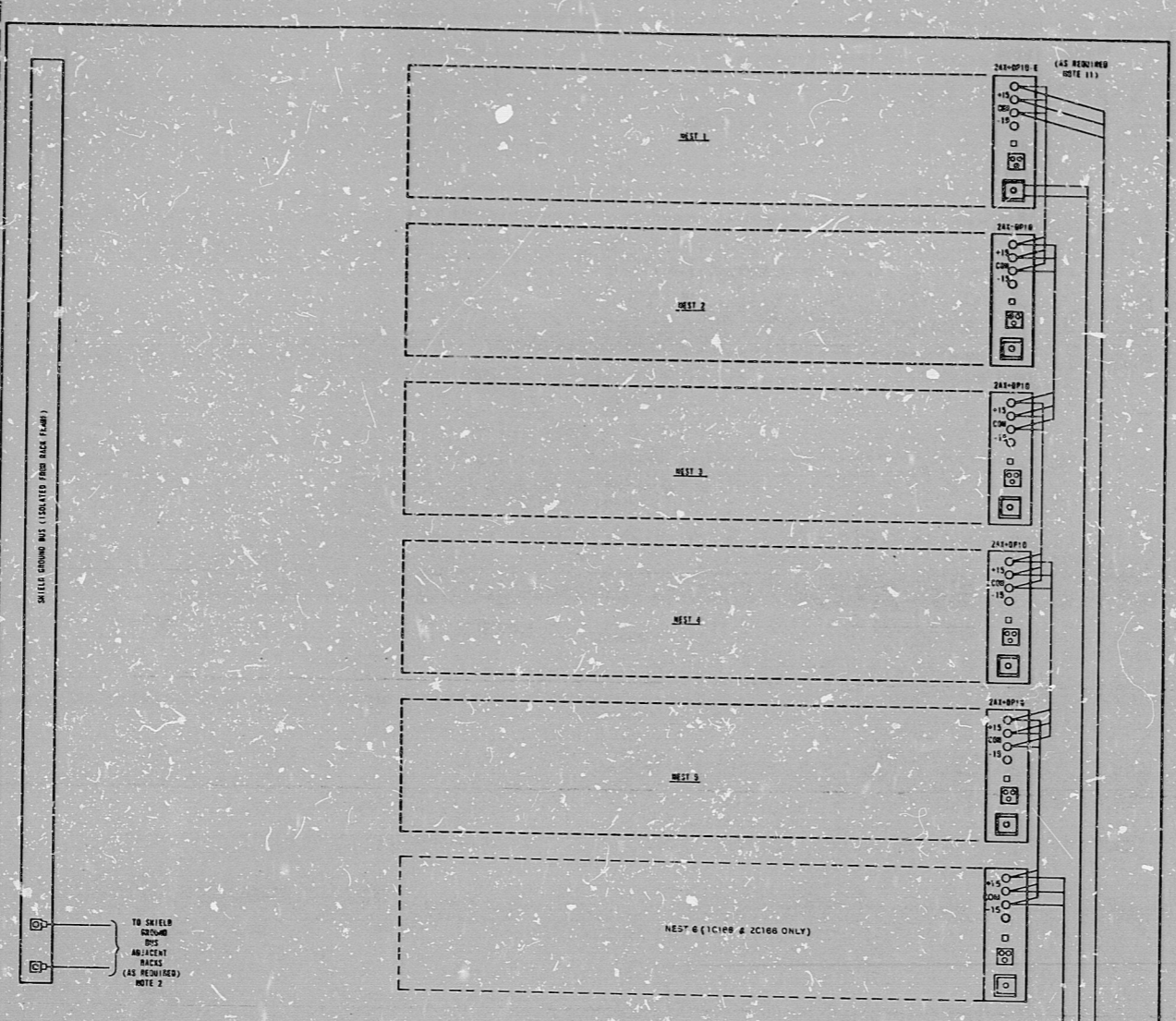
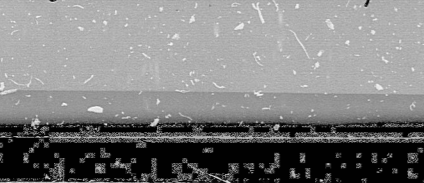
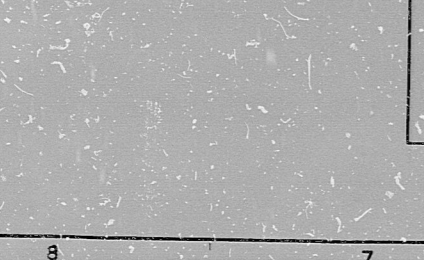
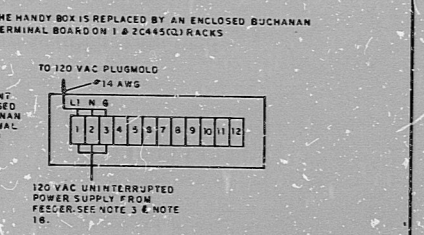
10165C-1



TYPICAL INSTALLATION FOR BAYS A2, A3, B2, B3 & D1 FOR IC186Q1 AND
 ZC186Q1 RACKS 3 AND PLUGMOLD WIRES ARE AWG #16 FOR L1, L2,
 AND B FUNCTIONS. FIELD-ADDED WIRES ARE AWG #16 AND AWG #18
 RESPECTIVELY. FIELD-ADDED WIRES ARE NO. 14 IN 25 GAUGE. EACH WIRE
 IS LABELLED. FOR FIELD-ADDED ROUTING MEANS FOR THESE WIRES
 SEE DETAIL 2.



TO SHIELD
 BUS
 RACKS
 (AS REQUIRED)
 NOTE 2



NOTES:
 1. 200A 3 AMP FULL LOAD IS AVAILABLE FROM EACH 240V-0 POWER SUPPLY.
 DO NOT PARALLEL 240V SUPPLIES.
 2. EACH BAY IS FITTED WITH THREE BUSES:
 A) SYSTEM REFERENCE BUS
 B) POWER GROUND BUS
 C) SHIELD GROUND BUS
 IN EACH CHANNEL, BUSES OF THE SAME TYPE ARE SAID TOGETHER
 WITH THE INSULATED CABLE CHANNELS (SEE DETAIL 1) AND EACH CHANNEL IS
 ISOLATED IN THE LAST BAY AT ONE POINT ONLY.
 3. 120VAC POWER SUPPLY IS CONNECTED TO THE FIRST BAY OF EACH CHANNEL.
 120VAC POWER SUPPLY TO THE OTHER BAYS IS CARRIED PARALLEL FROM THE
 FIRST BAY.
 ALL WIRES IS TO BE STRANDED COPPER, INSULATED CONDUCTORS
 PER THE INSULATED, FLAME RETARDANT.
 4. WIRE GAUGE
 A. AC BAY (NOT) - BLACK
 B. AC BAY (TEST) - WHITE
 C. 150VDC - YELLOW
 D. 150VDC - GREEN
 E. 150VDC - RED
 F. SYSTEM REF - GREEN
 G. 240VAC (NOT) - BLACK
 H. 240VAC (TEST) - WHITE
 I. AC POWER GND - GREEN
 J. ALARM - BLACK
 K. SHIELD GND - GREEN
 5. ALL POWER FEEDERS MUST BE SEPARATED FROM B-PROOF SIGNAL CABLES.
 6. ALL 120VAC POWER FEEDERS USE 18 AWG. 120VAC OUTPUT
 CABLES MUST BE SEPARATED FROM SIGNAL CABLES. ALL 120VAC
 CABLES MUST BE SEPARATED FROM SIGNAL CABLES. ALL 120VAC
 CABLES MUST BE SEPARATED FROM SIGNAL CABLES.
 7. CABLE ENTRY FOR CHANNEL A & B IS FROM THE BOTTOM & FOR CHANNEL C
 & D CABLE ENTRY IS FROM THE TOP.
 8. IN EACH CHANNEL, THE POWER FEEDLINE AND ALARM IN THE OTHER
 BAYS ARE WIRING IN PARALLEL TO SAME BUS IN THE FIRST BAY. THE
 POWER FEEDLINE AND ALARM IN THE OTHER BAYS ARE WIRING IN
 PARALLEL TO SAME BUS IN THE FIRST BAY. THE POWER FEEDLINE AND
 ALARM IN THE OTHER BAYS ARE WIRING IN PARALLEL TO SAME BUS
 IN THE FIRST BAY. THE POWER FEEDLINE AND ALARM IN THE OTHER
 BAYS ARE WIRING IN PARALLEL TO SAME BUS IN THE FIRST BAY.

UNIT NO.	CHANNEL NO.	WIRE NO.	WIRE COLOR	TERMINAL	WIRE GAUGE
1C445	A	1	BLACK	1	18
		2	WHITE	2	18
2C445	A	1	BLACK	1	18
		2	WHITE	2	18
1C31	A	1	BLACK	1	18
		2	WHITE	2	18
2C31	A	1	BLACK	1	18
		2	WHITE	2	18

UNIT NO.	CHANNEL NO.	WIRE NO.	WIRE COLOR	TERMINAL	WIRE GAUGE
1C445	A	1	BLACK	1	18
		2	WHITE	2	18
2C445	A	1	BLACK	1	18
		2	WHITE	2	18
1C31	A	1	BLACK	1	18
		2	WHITE	2	18
2C31	A	1	BLACK	1	18
		2	WHITE	2	18

NOTE 17 CONTINUED
 C. 120VAC MODEL TYPE 28X-17-RAP IS USED WITHOUT A
 HOLDER BASE ONLY TO PRESS CABLE BUNDLE BE-
 TWEEN POINT OF SUPPORT AND INSTALLATION
 AND HORIZONTAL PANOUTS WHERE INDIVIDUAL
 CABLES ARE FOR TERMINATION ON MODULES.
 18. ON RACKS IC186Q1 AND ZC186Q1 ONLY FIELD TO
 CONNECT SHIELD GROUND BUS TO SYSTEM REFER-
 ENCE BUS IN EACH BAY USING NO. 10 SHIELDED
 WIRE. FIELD TO CONNECT INCOMING 120V SHIELDED
 INSTRUMENT GROUND CABLE TO SYSTEM REFERENCE
 BUS IN END BAY OF RACK. FIELD TO 240V-0 CHAIN
 SYSTEM REFERENCE BUS IN ALL FRONT BAYS TO
 BETTER USING 1/2" CABLE ROUTED THROUGH FLOOR
 PENETRATIONS. USE 9/16" DIA. 1/2" LB SIZE 1/2
 LUGS FOR THESE CONNECTIONS.
 19. THE 1C445Q1 AND 2C445Q1 RACKS DO NOT HAVE A
 POWER & GROUND BUS. A GROUND STUD NEEDS TO
 BE INSTALLED TO THE BOTTOM OF THE RACK PERFORMS THE SAME
 FUNCTION AS THE POWER GROUND BUS.
 20. 120VAC PRE-FABRICATED DC DISTRIBUTION CABLE
 ASSEMBLIES SHOWN ON BECHTEL VENDOR DRAWING
 64-7220-100-001 ARE USED FOR TAPPING BETWEEN
 THE DC POWER DISTRIBUTION BUS AND THE POWER
 DISTRIBUTION MODULES IN THE A3 AND B3 RACKS
 OF IC186Q1 AND ZC186Q1.

UNIT NO.	CHANNEL NO.	WIRE NO.	WIRE COLOR	TERMINAL	WIRE GAUGE
1C445	A	1	BLACK	1	18
		2	WHITE	2	18
2C445	A	1	BLACK	1	18
		2	WHITE	2	18
1C31	A	1	BLACK	1	18
		2	WHITE	2	18
2C31	A	1	BLACK	1	18
		2	WHITE	2	18

BECHTEL
 MIDLAND PLANT UNITS 1 & 2
 CONSUMERS POWER COMPANY
 INSTRUMENT RACK
 POWER DIAGRAM
 (SHEET 1)

7220 J-357101 3

8.5"
 11"
 17"

8.5"
 11"
 17"

PRO APERTURE CARD

Back to both units

RIDS

8302040310

