MACH TYPE	M C	SERIAL NUMBER	SYST TYPE	SYSTEM NUMBER	F/E B/O	W/T CTY	CUST NUMBER	MD CD	MICRO TPC-CD	BOX SHIP	MACHINE SHIP	PLT MFG	PLT CTL	MACHINE STATUS
3705		0015984	8802	0004XBW	064E		4606164			82/12/30		RAL.	RAL.	FACTORY

BASIC ECA.EC	FACTORY EC	SALES MOD	PLANT ORDER	HARD CARD
036.311285		E08	286SKQ	001

MACHINE DEVICE/RPQ CONFIGURATION

DEVICE/RPQ	QTY	STATUS
1302	1	FACTORY INST
1544	1	FACTORY INST
1642	1	FACTORY INST
4650	4	FACTORY INST
4701	2	FACTORY INST
4714	5	FACTORY INST
4726	1	FACTORY INST
9043	1	FACTORY INST
9081	1	FACTORY INST
9202	1	FACTORY INST
9311	1	FACTORY INST
9312	1	FACTORY INST
9566	1	FACTORY INST
9606	1	FACTORY INST
9608	1	FACTORY INST
9610	1	FACTORY INST
9612	1	FACTORY INST
9903	1	FACTORY INST

DOCUMENTATION

ECA	FIELD	FACTORY	FEATURE	FEATURE NAME	STATUS	MES-NO	STAT	DATE
091	318544	318898	1648305	LOGIC CA-4 N-TYP ROS	FACT INST			
094	344581	344409	1750039	MOD E-H BASIC ALD'S1	FACT INST			
000	317524	318589	1750043	LOGIC CA TYPE 4	FACT INST			
000	314403	314419	1750078	LOGIC E-H CS TYPE 2	FACT INST			
000	316677		1756432	2CA IN CONFIGURATION	FACT INST			
000	309530	318570	5993301	LYN TYP 1 LIB1 W/CS2	FACT INST			
000	309530	309540	5993302	LYN TYP 1 LIB POS 2	FACT INST			
071	316667	322670	5997507	LOGIC LIB TYPE 1	FACT INST			

STANDARD FEATURE SECTION

ECA	FIELD	FACTORY	FEATURE BM	FTR-ASN	FEATURE NAME	STATUS	MES-NO	STAT	DATE
070	316710	318862	1648398		LNE SET TYPE 1U	FACT INST			
066	315621	344266	1749600		FINAL ASSEMBLY E-L	FACT INST			
091	318544	322680	1749607		CENT CONTROLLER E-H	FACT INST			
000	318551	318581	1749608		E-H 32K MEMORY 60HZ	FACT INST			
000	314406	314419	1749609		BASIC POWER CARDS	FACT INST			
064	316677	318043	1749610		2ND 32K MEMORY UNIT	FACT INST			
078	318552	322680	1749611		TYPE 4 CA POS A4	FACT INST			
000	318029	313980	1749613		POWER 3.4V 60HZ	FACT INST			
059	315619	321763	1750064		TYPE 2 SCANNER	FACT INST			
000	316665	316665	1753401		MODEL E08	FACT INST			
000	316677		1757923		3RD 32K MEMORY UNIT	FACT INST			
000	316677	318043	1757924		4TH 32K MEMORY UNIT	FACT INST			
000	316677		1757925		5TH 32K MEMORY UNIT	FACT INST			
000	316677		1757926		6TH 32K MEMORY UNIT	FACT INST			
000	316677		1757927		7TH 32K MEMORY UNIT	FACT INST			
000	316677		1757928		8TH 32K MEMORY UNIT	FACT INST			
000	310284	318587	1785216		3705 SUPL TYPE 2 C/S	FACT INST			
000	344266		1856794		LABEL	FACT INST			
000	309506	322680	5182870		CHAN ADAPT SW-ENG	FACT INST			
000	309506	318897	5182880		ENG SPAN LANG MODA-H	FACT INST			
000	260824		5496528		GRAY DOM. END COVER	FACT INST			
000	309507	309731	5993293		DOM CE & OP PNL CVR	FACT INST			

MACH TYPE	M C	SERIAL NUMBER	SYST TYPE	SYSTEM NUMBER	F/E B/O	W/T CTY	CUST NUMBER	MD CD	MICRO TPC-CD	BOX SHIP	MACHINE SHIP	PLT MFG RAL.	PLT CTL RAL.	MACHINE STATUS FACTORY
3705		0015984	8802	0004XBW	064E		4606164			82/12/30				

ECA HISTORY SECTION N/A = ECA NOT ASSIGNED EC PROD PRAC LEVEL = 0262 (MRS)

ECA	EC NO	ECA STATUS	FLD B/M	EIT	QTY	FCSI	DATE
093	344424	NOT REQUIRED					
094	344581	INSTALLED					
095	344860	NOT REQUIRED					
096	344425	NOT REQUIRED					
097	344445	TO BE ADDED					
098	344836	NOT REQUIRED					
099	344596	NOT REQUIRED					
100	344597	NOT REQUIRED					
N/A	344438	NOT REQUIRED					
N/A	344856	TO BE ADDED					
N/A	344970	NOT REQUIRED					
N/A	995880	OPTIONAL CHG NOT INST					
N/A	995883	OPTIONAL CHG NOT INST					

REQUESTED BY * LINE INDIVIDUAL TABLE OF CONTENTS 82/12/15 PAGE 1

VOLUME AAA MACHINE 3705- -0015984 MODEL E08 SYSTEM 0004XBW MODE BOX SHIP 82/12/30

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS		
AA000	A	LOGIC VOLUME LIST	0000000000	000000	.W.	0001750039	
AA000	B	TO SUPPORT THIS	0000000000	000000	.W.	0001750039	
AA000	C	MACHINE	0000000000	000000	.W.	0001750039	
AA000	D	XXXXXXXXXXXXXXXXXXX	0000000000	000000	.W.	0001750039	
AA000	E	VOL # NAME	0000000000	000000	.W.	0001750039	
AA001	B	001 BASIC ALD'S E-H	0001750093	000000	.W.	0001750039	
AA001	C	002 BASIC ALD'S E-H	0001750037	000000	.W.	0001750039	
AA001	D	003 BASIC ALD'S E-H	0001750038	000000	.W.	0001750039	
AA001	E	021 BASIC ALD'S E-H	0001750044	000000	.W.	0001750039	
AA001	H	02A BASIC ALD'S E-H	0001750092	000000	.W.	0001750039	✓
AA004	A	007 L.I.B. TYPE 1	0005997507	000000	.W.	0005997507	✓
AA004	B	008 L.I.B. TYPE 1	0005997507	000000	.W.	0005997507	✓
AA020	A	024 CS 2 MOD E-H	0001750078	000000	.W.	0001750078	✓
AA021	A	A04 CA 4	0001750043	000000	.W.	0001750043	✓
AA032	B	02A ADD CW500 PKG	0001750092	000000	.W.	0001750039	.W. 0001648305

TOTAL PART NUMBERS THIS VOLUME 15

VOLUME 001 MACHINE 3705- -0015984 MODEL E08 SYSTEM 0004XBW MODE BOX SHIP 82/12/30

LOGIC TYPE -0- SYSTEMS DIAGRAMS

VOLUME 001 MACHINE 3705- -0015984 MODEL E08 SYSTEM 0004XBW MODE BOX SHIP 82/12/30

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
YZ996		CONFIG CHART INST	0001750285	315621	.W. 0001750039
YZ997		CONFIG CHART INST	0001750286	314419	.W. 0001750039

TOTAL PART NUMBERS THIS VOLUME 44

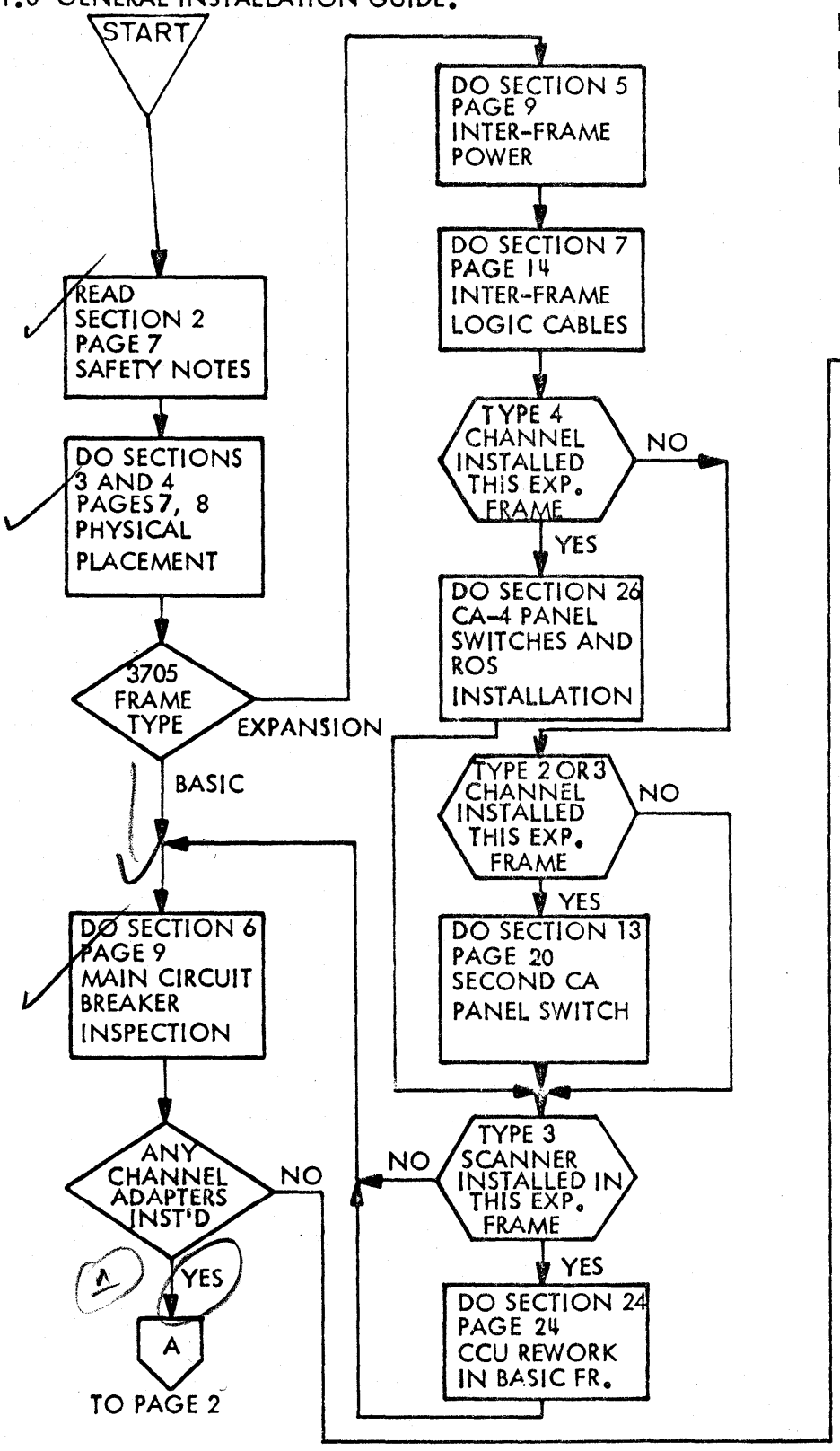
THE YZ000 PAGE PROVIDES INSTRUCTIONS FOR INSTALLING A 3705 SINGLE FRAME OR MULTI-FRAME SUBSYSTEM AND INCLUDES ONLY THOSE ITEMS WHICH ARE NOT PRE-INSTALLED BY THE FACTORY. PRIOR TO INSTALLATION OF THE 3705 THE SYSTEM/360 OR SYSTEM/370 SYSTEMS INSTALLATION INSTRUCTIONS ISSUED FOR THE PARTICULAR SYSTEM SHOULD BE CONSULTED. ALSO, THE CONFIGURATION DATA SET INFORMATION FROM THE IBM SYSTEM/370 OLT SYSTEMS DIAGNOSTIC ORDER PROCEDURE (ZZ25-0505) SHOULD BE REVIEWED IN PREPARATION FOR CONFIGURING THE 3705 DIAGNOSTIC PROGRAMS. THE 3705 MAINTENANCE DIAGNOSTIC PROGRAM MANUAL* ALSO PROVIDES INFORMATION FOR CONFIGURING AND OPERATING THE 3705 DIAGNOSTICS PROGRAMS. **THERE MAY BE SECTIONS LISTED ON THESE PAGES THAT DO NOT AFFECT YOUR PARTICULAR 3705. IF YOU ENCOUNTER ANY OF THESE SECTIONS, BYPASS THEM AND GO ON TO THE SECTIONS THAT DO AFFECT YOUR 3705.

* PID DOCUMENT D99-3705 C,D,E FOR 3705 IN LOCAL ENVIRONMENT

* DOCUMENTS FOR 3705'S IN THE REMOTE ENVIRONMENT ARE LISTED UNDER NOTE 1.

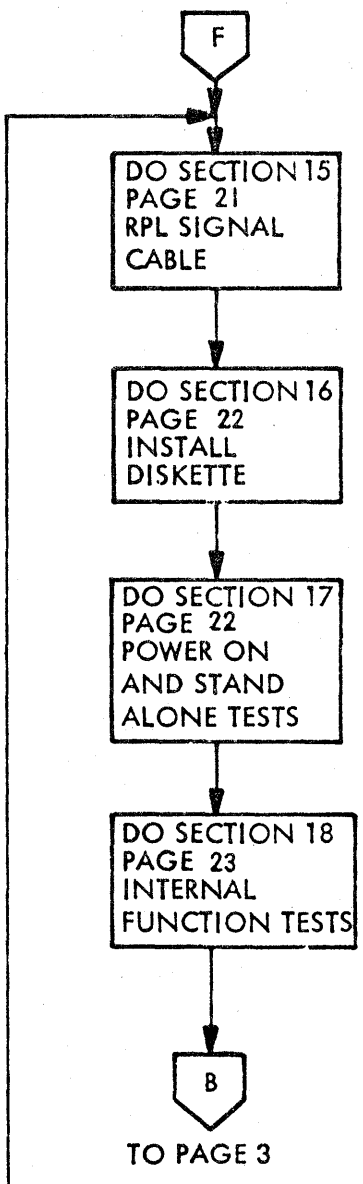
** A PREPUNCHED CDS IS INCLUDED IN THE SHIPPING GROUP FOR ALL 3705 ORDERS EXCEPT AN MES FOR A 3706. SOME ADDITIONAL INFORMATION HAS TO BE PUNCHED INTO THIS DECK BEFORE IT CAN BE USED. SEE SECTION 27.

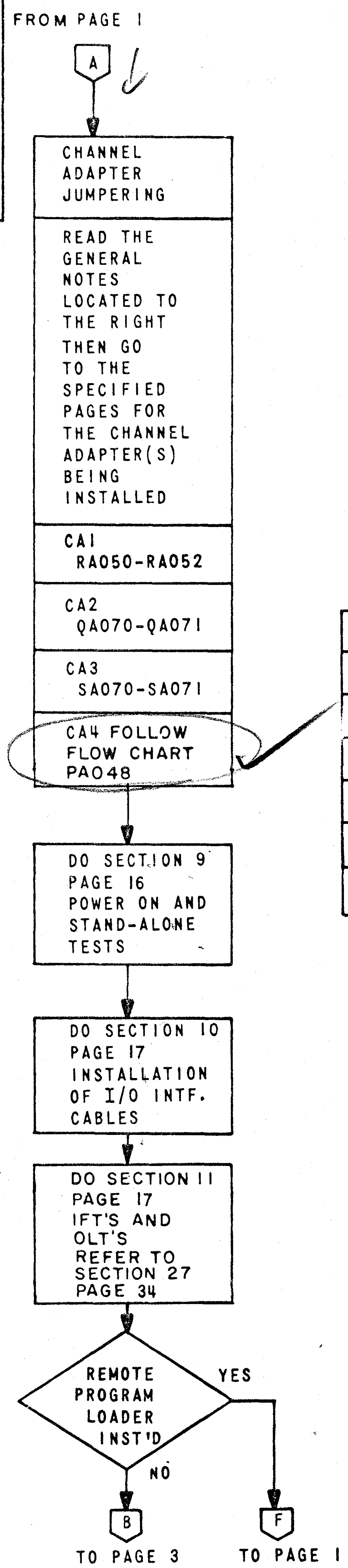
1.0 GENERAL INSTALLATION GUIDE.



NOTE 1

1757889 - LOADERS, INITIAL TEST, ROS
1757880 - CCU, STORAGE
1757881 - CHAN ADAPTERS 1,2,3,4
1757882 - TYPE 1 COMM SCANNER
1757883 - TYPE 2 COMM SCANNER
1757884 - TYPE 3 COMM SCANNER





CHANNEL ADAPTER GENERAL NOTES

1) ALL NSC ADDRESSES ARE FACTORY PLUGGED FOR HEX '20'.

2) NO SHARED SUBCHANNELS SHOULD BE USED IN THE ESC ADDRESS RANGE.

3) WHEN COMPUTING THE ESC ADDRESS RANGE, ALL LINE SETS DO NOT REQUIRE TWO ADDRESSES. SEE 3705 FETMM PAGE C-000 FOR DETAILS.

4) WHEN RUNNING IN NCP MODE ONLY ON A CA1 OR CA4, PLUG THE ESC ADDRESS RANGE AS FOLLOWS: LOW = HEX 'C0', HIGH = HEX '53'.

5) ON A CA3 INTERFACE 'A' AND 'B' ADDRESSES MUST BE JUMPERED FOR THE SAME ADDRESS IF BEING USED FOR ALTERNATE PATH CAPABILITY ON AN UNIPROCESSOR OR AS A SYMMETRIC DEVICE ON A TIGHTLY COUPLED MULTI-PROCESSOR.

FEATURE B/M

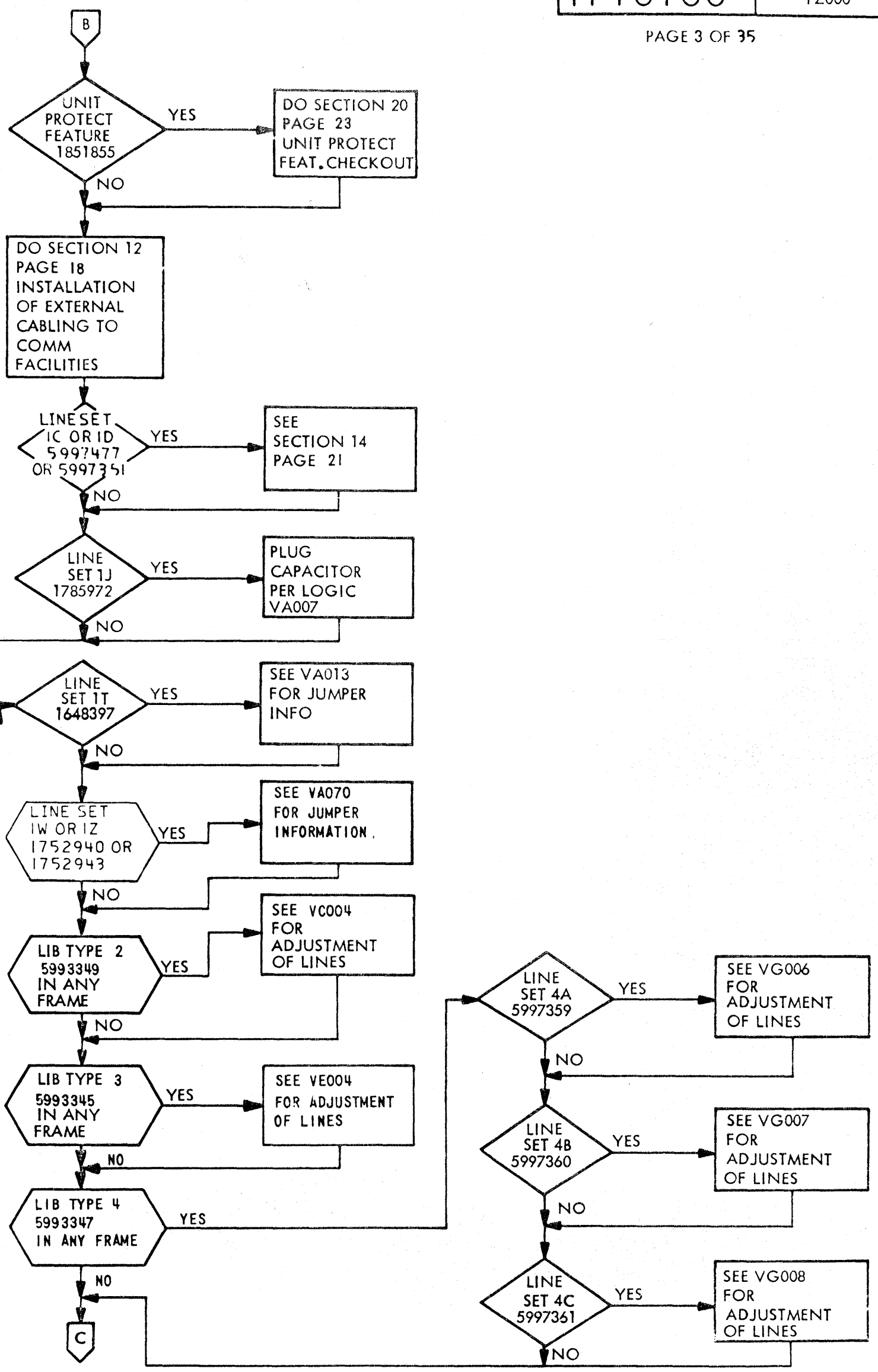
	BASIC FRAME		EXPANSION FRAME	
FEAT.	INTF. A	INTF. B	INTF. A	INTF. B
CA1	5993331	5993351	N/A	N/A
CA2	5993339	5993351	5997515	5993351
CA3	1785211	1785211	1785212	1785212
CA4	01A-A4 1749611	1648351	02A-A4 1749616	1648351
CA4	01A-B1 1648282	N/A	02A-B4 1648283	N/A

IBM

						DATE	CHANGE NO		DATE	CHANGE NO
NAME	INSTALLATION INSTRS					SEE E/C	HISTORY		SEP80	322670
3705 MODELS A-H						MAY79	318587		NOV80	344409
DESIGN			SHT 2 OF 35			SEP79	318544		JAN 81	344581
DETAIL	TS	OCT76				JAN80	321388		AUG81	344872
CHECK			CLASSIFICATION			MUST CONFORM TO ENG SPEC	DEVELOPMENT NO		LOGIC PG NO	
APPRO									YZ000	

1770700 B

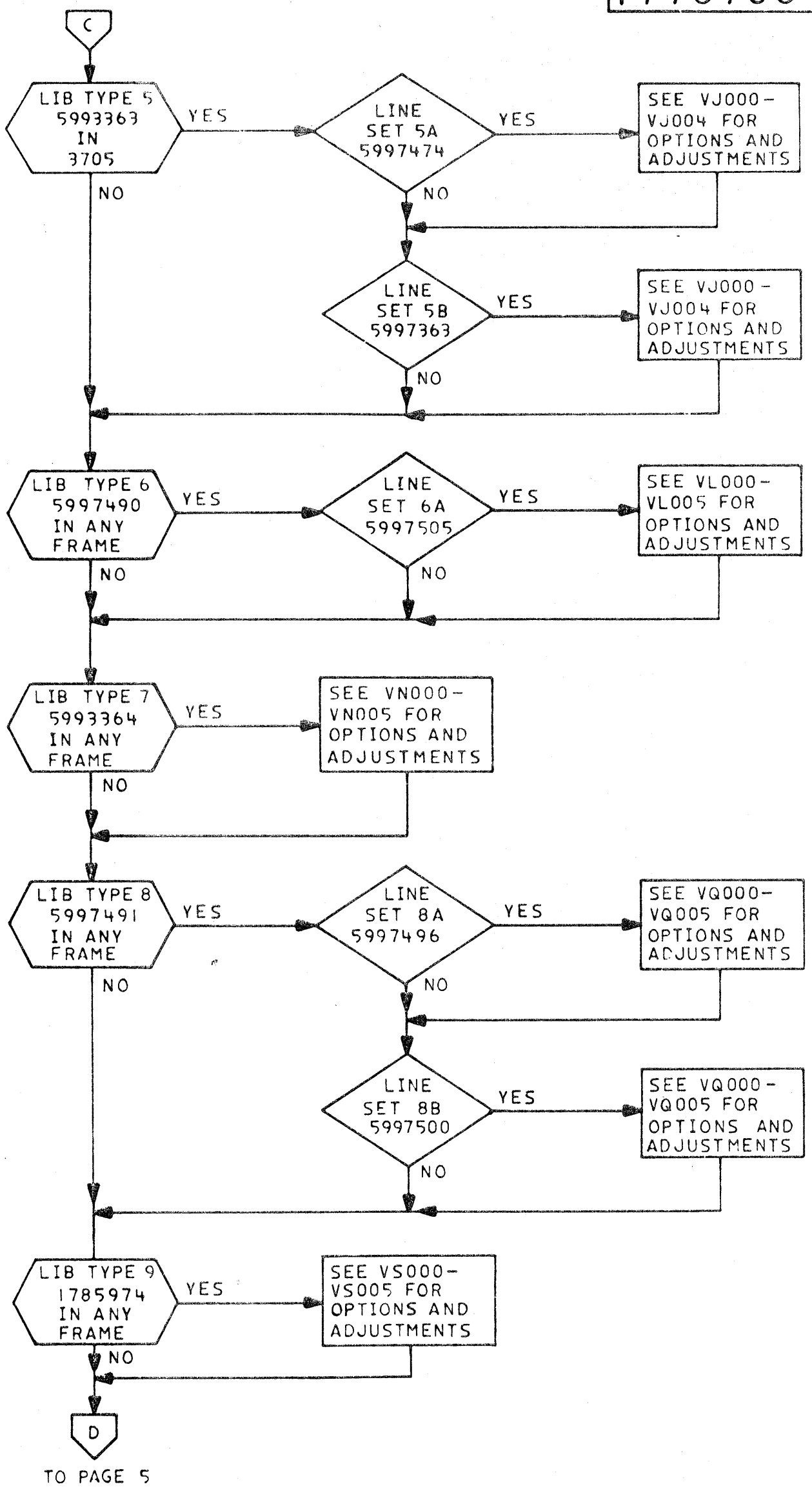
FROM PAGE 1,2



TO PAGE 4

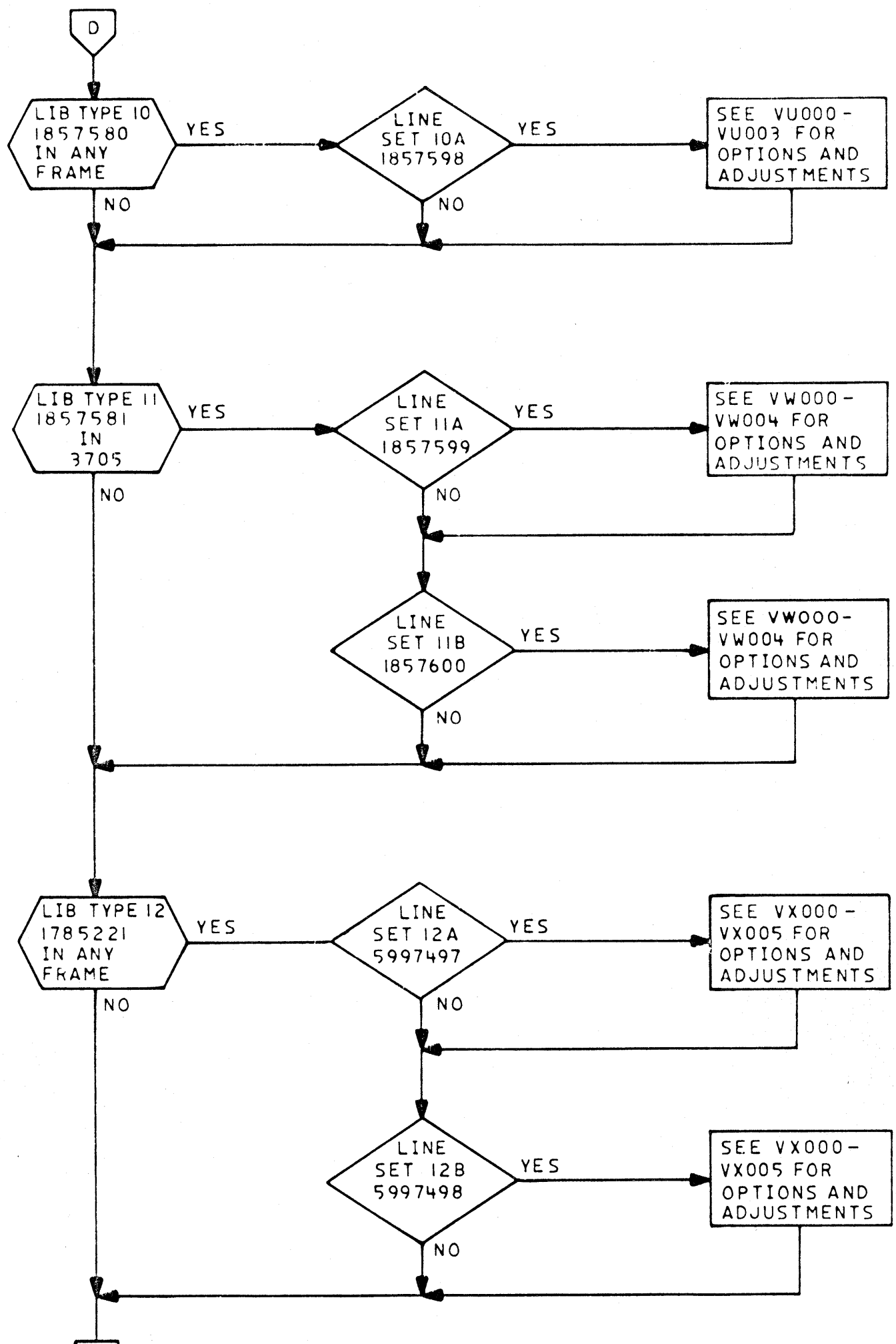
IBM								
NAME	INSTALLATION INSTRS				DATE	CHANGE NO	DATE	CHANGE NO
3705 MODELS A-H					SEE EC HISTORY		SEP80	322670
DESIGN			SHT 3 OF 35		MAY79	318587	NOV80	344409
DETAIL	RTS	NOV76			SEP79	318544	JAN81	344581
CHECK			CLASSIFICATION		JAN80	321388	AUG81	344872
APPRO					MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO	
							YZ000	

1770700 B



IBM					DATE	CHANGE NO	DATE	CHANGE NO
NAME	INSTALLATION INSTRS				SEE E/C HISTORY		SEP80	322670
3705 MODELS A-H					MAY79	318587	NOV80	344409
DESIGN			SHT 4 OF 35		SEP79	318544	JAN81	344581
DETAIL	TS	OCT 76			JAN80	321388	AUG81	344872
CHECK			CLASSIFICATION		MUST CONFORM TO ENGINEER	DEVELOPMENT NO	LOGIC PG NO	
APPRO							Y2000	

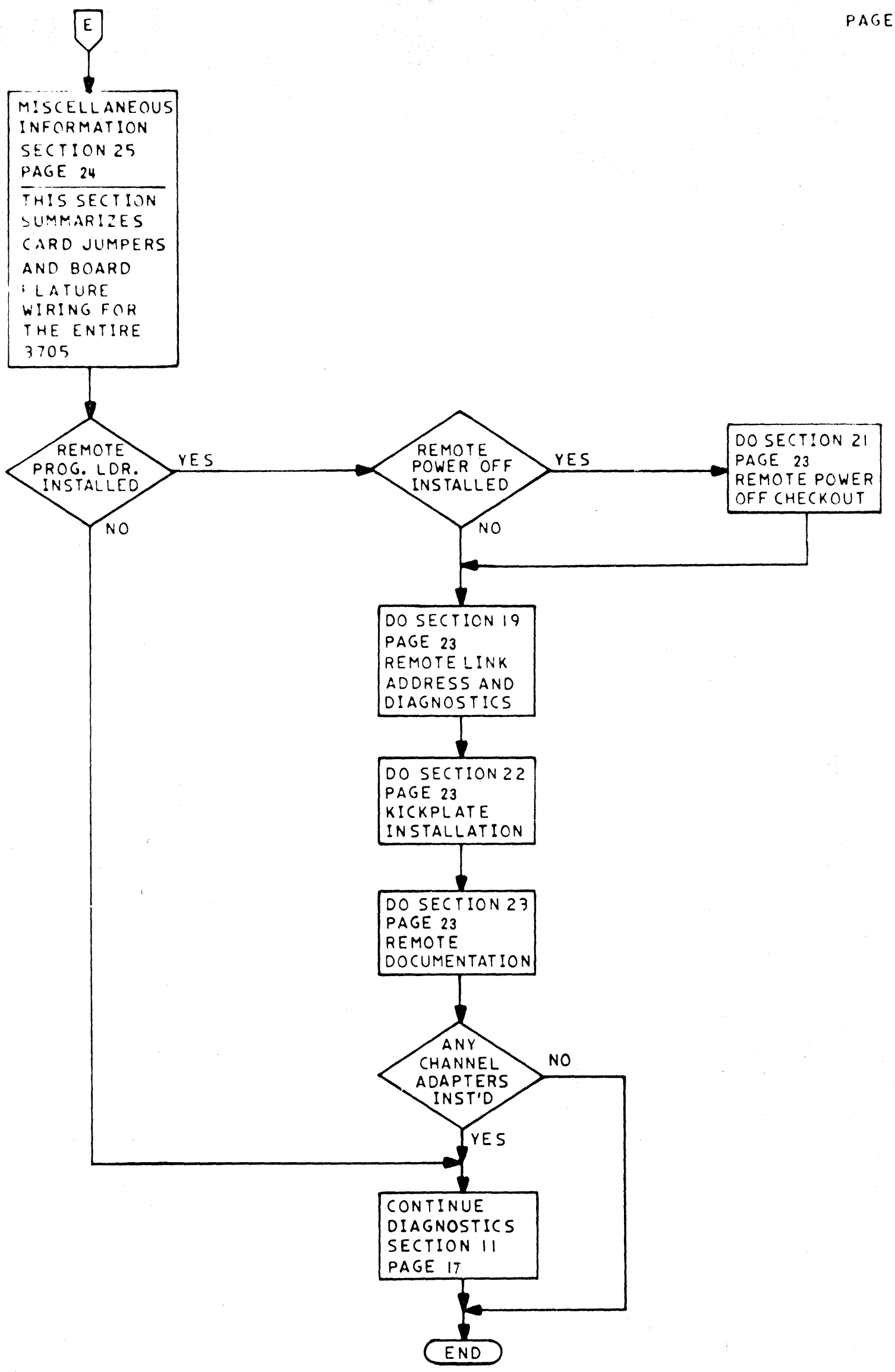
FROM PAGE 4



TO PAGE 6

NAME	INSTALLATION INSTRS				DATE	CHANGE NO		DATE	CHANGE NO
3705 MODELS A-H					SEE E/B MISTORY			SEP80	322670
DESIGN			SHT 5 OF 35		MAY79	318587		NOV80	344409
DETAIL	TS	OCT76			SEP79	318544		JAN 81	344581
CHECK			CLASSIFICATION		JAN80	321388		AUG81	344872
APPRO					MOST SIGNIFICANT CHANGE	DEVELOPMENT NO		LOGIC PG NO	
								YZ000	

1770700 B



			DATE	CHANGE NO		DATE	CHANGE NO
NAME INSTALLATION INSTRS			SEE E/C HISTORY			SEP80	322670
3705 MODELS A-H			MAY79	318587		NOV80	344409
DESIGN		SHT 6 OF 35	SEP79	318544		JAN81	344581
DETAIL TS	OCT76		JAN80	321388		AUG81	344872
CHECK		CLASSIFICATION	MACHINE INFORMATION	DEVELOPMENT NO		LOGIC PG NO	
APPROV						YZ000	

1770700 B

2.0 SAFETY NOTES

ALL FE'S SHOULD BE THOROUGHLY FAMILIAR WITH THE SAFETY PRACTICES OUTLINED IN IBM FORMS 124-0002 AND 229-1264. THIS CHAPTER IS NOT INTENDED TO SUPERSEDE OR REPLACE PRACTICES OUTLINED IN THESE FORMS. IT IS INTENDED TO SERVE AS A REMINDER OF SOME OF THE GENERAL SAFETY PRACTICES AND ALSO TO POINT OUT SPECIFIC CONDITIONS ON THE 3705 MACHINE WHICH MAY CONSTITUTE A HAZARD TO MAINTENANCE PERSONNEL. A COPY OF 229-1264 IS SHOWN ON PAGE 1 OF FETMM.

2.1 GENERALLY, THE FOLLOWING SHOULD BE PRACTICED:

2.1.1 NO F.E. SHOULD WORK ALONE WHEN PERFORMING MAINTENANCE OR REPAIR WORK. AT LEAST TWO MEN SHOULD BE IN THE ROOM WHENEVER ANY WORK IS BEING DONE ON THE MACHINE.

2.1.2 SAFETY GLASSES SHOULD BE WORN DURING ALL MAINTENANCE AND REPAIR WORK.

2.1.3 A CO_2 FIRE EXTINGUISHER SHOULD BE IMMEDIATELY AVAILABLE.

2.1.4 EXTREME CAUTION MUST BE EXERCISED IF IT IS NECESSARY TO WORK IN ANY AREA WHERE EXPOSED VOLTAGES ARE PRESENT.

2.1.5 ALWAYS USE A RELIABLE VOLTMETER TO VERIFY THAT POWER IS ACTUALLY OFF AFTER USING THE POWER-OFF SWITCH.

2.1.6 ALWAYS DISCHARGE CAPACITORS BEFORE WORKING ON EQUIPMENT.

2.1.7 ALWAYS WATCH FOR SUCH SAFETY HAZARDS SUCH AS NAILS ON CRATES, WOOD SPLINTERS, FLOOR HOLES, JACK UP EQUIPMENT, SLIPPERY FLOORS, ETC.

2.2 SPECIFICALLY FOR THE 3705, THE FOLLOWING SHOULD BE WATCHED.

2.2.1 MAKE SURE ALL EXTERNAL CABLES AND ALL POWER CABLES ARE NOT CONNECTED BEFORE STARTING THE INSTALLATION.

2.2.2 WHEN CONNECTING TELEGRAPH CABLES CAUTION SHOULD BE EXERCISED AS THEY MAY CONTAIN UP TO 130 VOLTS DC IF CONNECTED TO AN ACTIVE TELEGRAPH LINE.

2.2.3 WITH TELEGRAPH CABLES CONNECTED, UP TO 130 VOLTS DC MAY BE PRESENT IN THE 3705 EVEN WITH THE POWER PLUG DISCONNECTED.

3.0 UNLOADING AND MOVEMENT

THE SIZE OF THE 3705 COMMUNICATION CONTROLLER IS SUCH THAT THE UNIT WILL EASILY PASS THROUGH AN AVERAGE DOORWAY. EACH 3705 EXPANSION MODULE, IF REQUIRED, IS THE SAME SIZE AS ITS BASIC 3705 COMMUNICATION CONTROLLER AND IS SHIPPED AS A SEPARATE PACKAGE. THE BASIC UNIT AND EACH EXPANSION MODULE IS SHIPPED WITH CASTERS MOUNTED FOR EASE OF MOVEMENT AFTER UNPACKING AT THE INSTALLATION. DURING REMOVAL OF THE UNIT FROM THE CARRIER OR PLACEMENT AT THE CUSTOMER'S OFFICE, A CERTAIN AMOUNT OF TIPPING OR TILTING IS PERMISSABLE. THE UNIT MUST NOT BE LAID ON ITS END OR SIDE, HOWEVER, AND ANY SUDDEN SHIFTS, STOPS, OR DROPPING OF THE UNIT SHOULD BE AVOIDED.

4.0 PHYSICAL PLACEMENT

CASTERS ARE INSTALLED ON THE UNITS AT SHIPMENT TO FACILITATE MOVING IT AFTER IT HAS BEEN UNPACKED. ONCE UNPACKED, THE UNITS CAN BE WHEELED TO THE INSTALLATION AREA IN THE CUSTOMER'S OFFICE.

IDENTIFY THE EXACT POSITION OF EACH EXPANSION FRAME USING UNIT BILL OF MATERIAL LIST, THE TABLE ON THE NEXT SHEET, AND FIGURES A AND B ON PAGE 10. THE REAR COVER SHOULD BE ATTACHED TO THE REAR OF THE LAST 3705 EXPANSION FRAME.

CONTINUED ON PAGE 8

NAME	INSTALLATION INSTRS				DATE	CHANGE NO	DATE	CHANGE NO
3705 MODELS A-H					SEE E/C HISTORY		SEP80	322670
DESIGN			SHT 7 OF 35		MAY79	318587	NOV80	344409
DETAIL	TS	OCT76			SEP79	318544	JAN81	344581
CHECK			CLASSIFICATION		JAN80	321388	AUG81	344872
APPRO					MACHINE ORDER NO	DEVELOPMENT NO	LOGIC PG NO	
							Y2000	

1770700 B

3705 MODEL I POSITION FEATURE B/M'S

MODELS	NO. UNIT FRAMES	1ST EXPANSION	2ND EXPANSION	3RD EXPANSION	STORAGES SIZES (KILO-BYTES)
A1,A2	1	N/A	N/A	N/A	16,48
B1,B2,B3,B4	2	5997801	N/A	N/A	16,48,80,112
C1,C2,C3,C4,C5 C6	3	5997801	5997802	N/A	16,48,80,112,144,176
D1,D2,D3,D4,D5,D6,D7,D8	4	5997801	5997802	5997803	16,48,80,112,144,176,208,240

3705 MODEL II POSITION FEATURE B/M'S

MODELS	NO. UNIT FRAMES	1ST EXPANSION	2ND EXPANSION	3RD EXPANSION	STORAGE SIZES (KILO-BYTES)
E1,E2,E3,E4,E5,E6,E7,E8	1	N/A	N/A	N/A	32,64,96,128,160,192,224,256
F1,F2,F3,F4,F5,F6,F7,F8	2	1648363	N/A	N/A	32,64,96,128,160,192,224,256
J1,J2,J3,J4					320,384,448,512
G1,G2,G3,G4,G5,G6,G7,G8	3	1648363	1648364	N/A	32,64,96,128,160,192,224,256
K1,K2,K3,K4					320,384,448,512
H1,H2,H3,H4,H5,H6,H7,H8	4	1648363	1648364	1648365	32,64,96,128,160,192,224,256
L1,L2,L3,L4					320,384,448,512

PLACE THE EMC SHIELD (5998396) AND LOOSELY COUPLE THE FRAMES TOGETHER VIA FRAME SPACERS (5993125) AS SHOWN IN FIGURE A ON PAGE 10 BEFORE PROCEEDING WITH LEVELING.

WHEN ALL UNITS ARE IN POSITION, LEVELING FOOT ASSEMBLIES (PN 587875) AND WASHERS ARE INSTALLED AT EACH CORNER OF EACH UNIT. THESE ADJUSTABLE ASSEMBLIES ARE POSITIONED USING A WRENCH UNTIL THE CASTERS CLEAR THE FLOOR AND THE UNIT IS APPROXIMATELY LEVEL. FIGURE 4.1. ILLUSTRATES THE APPROXIMATE POSITIONING OF THE CASTERS AND THE LEVELING FOOT.

THIS PART OF THE INSTALLATION PROCEDURE IS PERFORMED AT MOST CUSTOMER LOCATIONS. HOWEVER, WHEN THE CUSTOMER HAS A CARPETED ROOM OR WILL REQUIRE FREQUENT REARRANGEMENT OF THE 3705 USE OF THE LEVELING FEET IS LEFT TO THE DISCRETION OF THE BRANCH OFFICE AND THE CUSTOMER.

WITH THE UNIT PROPERLY LEVELED THE DOORS SHOULD BE ALIGNED TO CLOSE PROPERLY AND THE CATCHES RETAIN THE DOOR IN A CLOSED POSITION. PROCEED TO TIGHTEN THE CONNECTING BOLTS COUPLING EACH FRAME. NOW AGAIN CHECK ALL DOORS TO INSURE THAT ELECTRO STATIC FINGER STOCK IS MAKING GOOD CONTACT WITH FRAME. FOR MAIN FRAME POWER CORD CONNECTION. (CORD SHIPPED INSIDE FRAME UNCONNECTED) THE PRIME POWER BOX (PPB-SEE FIG.C, PAGE 12) MUST BE OPENED AND WIRES CONNECTED TO MAIN LINE FILTER AS FOLLOWS:

208/230V 60HZ DOM/JAPAN
OR
200V 60HZ JAPAN
OR
200V/220V 50HZ JAPAN

BK	(C2-LI)
WHITE	(C3-LI)
RED	(C4-LI)
GN/YEL	(G -II)
SHIELD	(GND)

220/235V DELTA OR 380/408V 'Y'

3 Ø 50 HZ

BLUE	(380/408V SYSTEMS ONLY)	C5-LI
BROWN		C2-LI
BROWN	(UNITED KINGDOM ONLY)	C3-LI
BLACK	(W.T. EXCEPT U.K.)	C3-LI
BROWN	(UNITED KINGDOM ONLY)	C4-LI
BLACK	(W.T. EXCEPT U.K.)	C4-LI
GN/YEL		G -II
SHIELD		GND

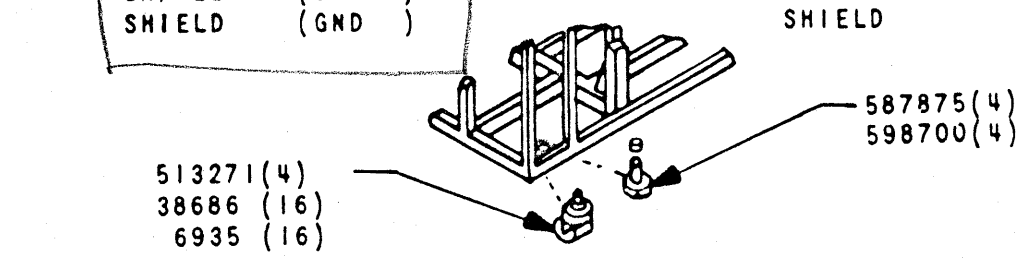


FIGURE 4.1

INSTALLATION OF LEVELING FOOT ASSEMBLIES

5.0 INTER FRAME POWER CONNECTIONS - APPLICABLE ONLY IF OPTIONAL EXPANSION MODULES (FRAMES) ARE BEING INSTALLED.

5.1 INTER FRAME AC POWER CABLES

EACH EXPANSION FRAME WILL HAVE AN AC POWER CABLE WHICH MUST BE INSTALLED BETWEEN THE PRIME POWER BOX IN THE EXPANSION FRAME AND THE PRIME POWER BOX IN THE BASIC FRAME AS SHOWN IN FIGURE A ON PAGE 10. USING CHART A ON PAGE 11 AND FEATURE BILL OF MATERIAL LIST WITHIN THE BASIC FRAME, DETERMINE WHICH VOLTAGE GROUP IS APPLICABLE. REMOVE PRIME POWER BOX COVER IN THE BASIC MACHINE AND EXPANSION FRAMES (SEE FIGURE C PAGE 12) AND ROUTE ALL INTERCONNECTION CABLES UP THRU BOTTOM OF MACHINE (SEE CABLE ROUTING DIAGRAM 5182873 OR FOR A 3706 MODEL J, K OR L 1ST EXP FRAME, SEE DRAWING 1754347) THRU HOLES PROVIDED UNDER PRIME POWER BOX. CONNECT THE NUMBERED WIRE LUGS TO THE APPROPRIATE PRIME POWER (PPB) TERMINATION PANEL (TB3, CB1, ETC.) SCREW NUMBER AS DESIGNATED BY THE APPROPRIATE SECTION OF CHART A. TIGHTLY SECURE EACH CONNECTION.

5.2 POWER SEQUENCE INTERCONNECTIONS

THE 3705 BASIC MACHINE PROVIDES CENTRALIZED POWER ON-OFF SEQUENCE CONTROL SIGNALS WHICH ARE DISTRIBUTED TO THE EXPANSION FRAMES. THIS IS PROVIDED BY A RIBBON CABLE WHICH IS PRE-FOLDED AND TAPED FOR EACH EXPANSION FRAME TO BASIC FRAME CONNECTION AND IS PRE-INSTALLED AND 'FOLDED-BACK' IN THE RACEWAY OF EACH EXPANSION FRAME. FIGURE B ON PAGE 10 AND FIGURE C PAGE 12 SHOW THE GENERAL ROUTING OF THE CABLES; CHART C ON PAGE 13 SHOWS CONNECTION DATA FOR INSTALLATION AT THE BASIC FRAME. EACH CABLE CONSISTS OF A RIBBON BULK WHICH SPLITS AT THE BASIC FRAME END INTO AN SMS CARD PADDLE (TO BE INSTALLED IN AN SMS SOCKET) AND DISCRETE WIRES WITH "SLIP-ON" CONNECTORS (TO BE INSTALLED ONTO SMS SOCKET PINS) CABLE ROUTING DIAGRAM (5182873 OR 1754347) IS SHIPPED WITH THE EXPANSION FRAME SHIPPING GROUP TO PROVIDE DETAILED ROUTING FOR EACH CABLE PART NUMBER IN CHART C

5.3 BUS TO BUS GROUND CABLES.

THE DC GROUND BUSES OF EACH FRAME MUST BE CONNECTED TO EACH OTHER VIA A SINGLE LAYER ALUMINUM FLAT CABLE. ONE END OF THIS CABLE IS PRE-INSTALLED ON THE COMMON DC GROUND PLATE (0XA-W1) IN EACH EXPANSION FRAME AND IS PRE-ROUTED IN THE CABLE RACEWAY ACROSS TO THE OPPOSITE SIDE OF THE FRAME (SEE FIG. B, P.10). AT THIS SIDE OF THE FRAME THE LOOSE END OF THIS FLAT CABLE MUST BE CONNECTED TO THE COMMON DC GROUND PLATE (0XA-W1) OF THE ADJACENT FRAME. THIS CABLE SHOULD BE CONNECTED AT THE SAME TERMINAL ON EACH OF THE GROUND PLATES. SEE CHART B ON PAGE 13 FOR INSTALLATION DATA AND, IF NECESSARY, CONSULT CABLE ROUTING DIAGRAMS (5182873 OR 1754347) IN SHIPPING GROUP. TIGHTLY SECURE EACH CONNECTION

5.4 FRAME POWER SYSTEM INTERMIX (3705 WITH UN-MODIFIED POWER ATTACHED TO A 3706 WITH MODIFIED POWER) SEE PAGE 35.

6.0 MAIN CIRCUIT BREAKER INSPECTION AND POWER JUMPER ADJUSTMENTS

THE BASIC FRAME MAIN CIRCUIT BREAKER (CB1) IS PROVIDED IN FOUR SIZES ACCORDING TO THE FOUR POSSIBLE FRAME COMBINATIONS. INSPECT THE MAIN CIRCUIT BREAKER AMPERAGE RATING AS FOLLOWS:

SUBSYSTEM SIZE	AMPERAGE RATING	
	200-235V	380-408V
BASIC FRAME ONLY	15	15
BASIC FRAME + 1 EXPANSION FRAME	30	15
BASIC FRAME + 2 EXPANSION FRAMES	40	30
BASIC FRAME + 3 EXPANSION FRAMES	50	30

SEE USAGE METER SECTION OF FETMM (PAGE D-240) OR YZ073 FOR METER JUMPER ADJUSTMENT. SEE YZ075 FOR 3.4 VOLT JUMPER ADJUSTMENT FOR 3705-II BASE FRAME.

IBM

NAME	INSTALLATION INSTRS		
3705 MODELS A-H			
DESIGN			SHT 9 OF 35
DETAIL	TS	OCT76	
CHECK			CLASSIFICATION
APPRO			

	DATE	CHANGE NO
	SEE E/C HISTORY	
	MAY79	318587
	SEP79	318544
	JAN80	321388

	DATE	CHANGE NO
	SEP80	322670
	NOV80	344409
	JAN81	344581
	AUG81	344872

MUST CONFORM TO ENG SPEC | DEVELOPMENT NO | LOGIC PG NO: YZ000

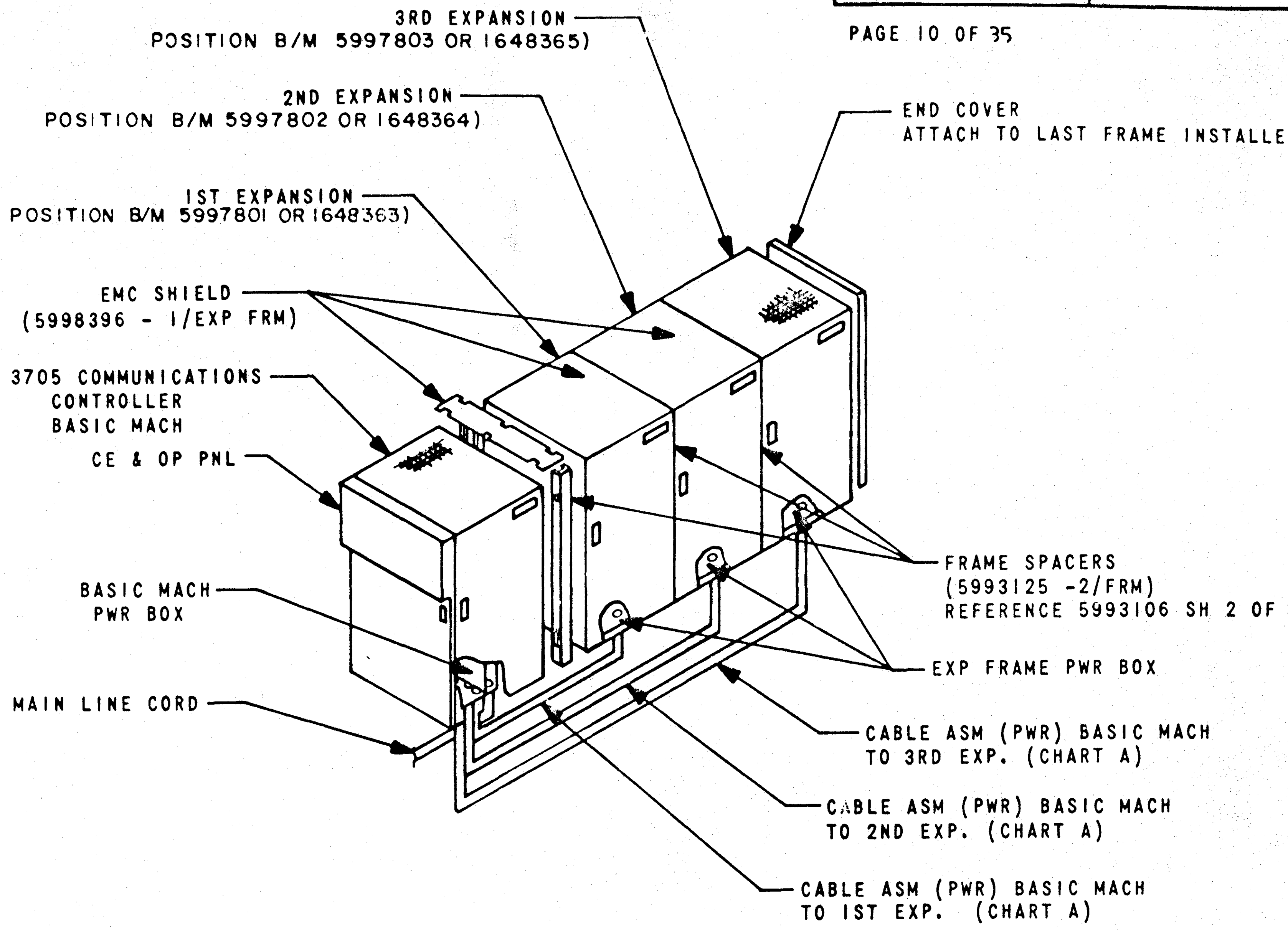


FIGURE A. 3705 COMMUNICATION CONTROLLER AND EXPANSION MODULE INTERCONNECTIONS.

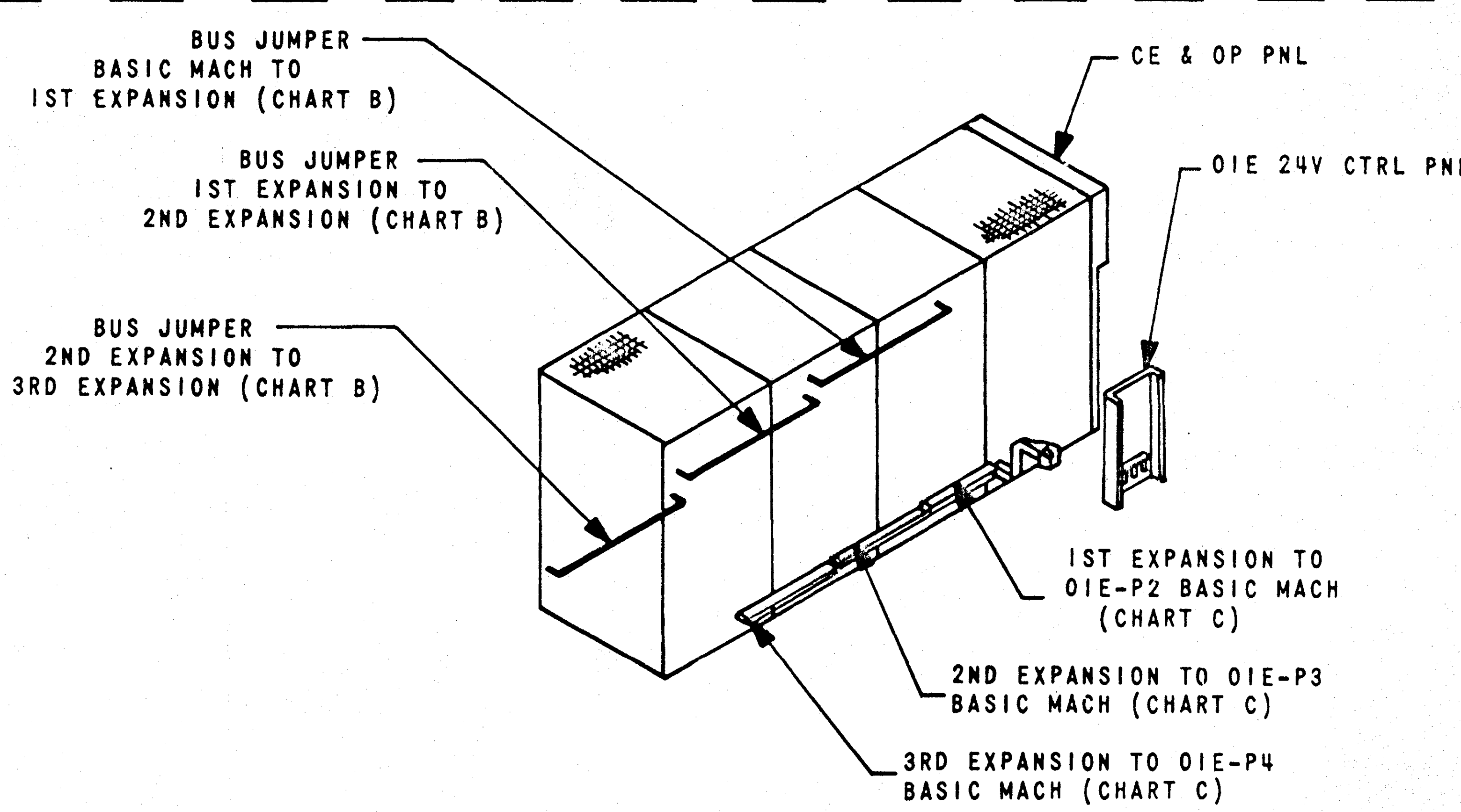


FIGURE B. 3705 COMMUNICATION CONTROLLER AND EXPANSION MODULE INTERCONNECTIONS.

IBM				
NAME	INSTALLATTON INSTRS			
3705 MODELS A-H				
DESIGN			SHT 10 OF 35	
DETAIL	TS	OCT76		
CHECK			CLASSIFICATION	
APPRO				

	DATE	CHANGE NO		DATE	CHANGE NO
	SEE E/C HISTORY			SEP80	322670
	MAY79	318587		NOV80	344409
	SEP79	318544		JAN81	344581
	JAN80	321388		AUG81	344872

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ000

CHART A - PART 1 OF 2 DOMESTIC, CANADA AND JAPAN

	VOLTAGE	CABLE P/N	TERMINATION BASIC MACH.	TERMINATION EXPANSION FRM.	WIRE NO.
BASIC 3705 TO 1ST EXPANSION	208/230V. 60 HZ	5993276	PPB-TB3-3	PPB-CB1-L3	3(BLACK)
			PPB-TB3-6	PPB-CB1-L2	2(WHITE)
			PPB-TB3-9	PPB-CB1-L1	1(RED)
	200V. 60/50 HZ JAPAN OR 220V/50HZ JAPAN		GND 7 SCREW	GND 5 SCREW	4(GREEN)
			GND 8 (SHIELD) SCREW		
BASIC 3705 TO 2ND EXPANSION	208/230V. 60 HZ	5993277	PPB-TB3-2	PPP-CB1-L3	1(BLACK)
			PPB-TB3-5	PPB-CB1-L2	2(WHITE)
			PPB-TB3-8	PPB-CB1-L1	3(RED)
	200V. 60/50 HZ JAPAN OR 220V/50HZ JAPAN		GND 6 SCREW	GND 5 SCREW	4(GREEN)
			GND 9 (SHIELD) SCREW		
BASIC 3705 TO 3RD EXPANSION	208/230V. 60 HZ	5993275	PPB-TB3-3	PPB-CB1-L3	1(BLACK)
			PPB-TB3-6	PPB-CB1-L2	2(WHITE)
			PPB-TB3-9	PPB-CB1-L1	3(RED)
	200V, 60/50 HZ JAPAN OR 220V/50HZ JAPAN		GND 5 SCREW	GND 5 SCREW	4(GREEN)
			GND 10 (SHIELD) SCREW		

CHART A - PART 2 OF 2 WORLD TRADE (EXCEPT JAPAN AND CANADA)

	VOLTAGE	CABLE P/N	TERMINATION BASIC MACH.	TERMINATION EXPANSION FRM.	WIRE NO.
BASIC 3705 TO 1ST EXPANSION	220/235V, 50 HZ WORLD TRADE	5993223	PPB-TB3-3	PPB-CB1-L3	3(BN)
			PPB-TB3-6	PPB-CB1-L2	2(BK)
	380/407V, 50 HZ WORLD TRADE		PPB-TB3-9	PPB-CB1-L1	1(BK)
			PPB-TB3-10	SEE NOTE A	4(BLUE)
	380/408V, 50 HZ FRANCE ONLY		GND 7 SCREW	GND 5 SCREW	5(GN/YEL)
			GND 8 (SHIELD) SCREW		
BASIC 3705 TO 2ND EXPANSION	220/235V, 50 HZ WORLD TRADE	5993229	PPB-TB3-2	PPB-CB1-L3	3(BN)
			PPB-TB3-5	PPB-CB1-L2	2(BK)
	380/407V, 50 HZ WORLD TRADE		PPB-TB3-8	PPB-CB1-L1	1(BK)
			PPB-TB3-10	SEE NOTE A	4(BLUE)
	380/408V, 50 HZ WORLD TRADE FRANCE ONLY		GND 6 SCREW	GND 5 SCREW	5(GN/YEL)
			GND 9 (SHIELD) SCREW		

CONTINUED ON PAGE 12

(CONTINUED FROM PAGE 11)

CHART A - PART 2 OF 2 WORLD TRADE (EXCEPT JAPAN AND CANADA)(CON'T)

BASIC 3705 TO 3RD EXPANSION

VOLTAGE	CABLE P/N	TERMINATION BASIC MACH.	TERMINATION EXPANSION FRM.	WIRE NO.
220/235V, 50 HZ WORLD TRADE	5993232	PPB-TB3-3	PPB-CBI-L3	3(BN)
		PPB-TB3-6	PPB-CBI-L2	2(BK)
380/408V, 50 HZ WORLD TRADE		PPB-TB3-9	PPB-CBI-LI	I(BK)
		PPB-TB3-II	SEE NOTE A	4(BLUE)
380/408V, 50 HZ FRANCE ONLY		GND 5 SCREW	GND 5 SCREW	5(GN/YEL)
		GND IO (SHIELD) SCREW		

NOTE A:

SEE CHART TO THE RIGHT FOR CONNECTION OF WIRE NO. 4.

SYSTEM	CONNECT WIRE 4 TO
220/235V	GND 6 SCREW
380/408V FRANCE	PPB-CBI-L4
380/407V OTHER	PPB-KI-2B

CHART A. WIRING CHART FOR CONNECTION OF FRAME A.C. POWER CABLE

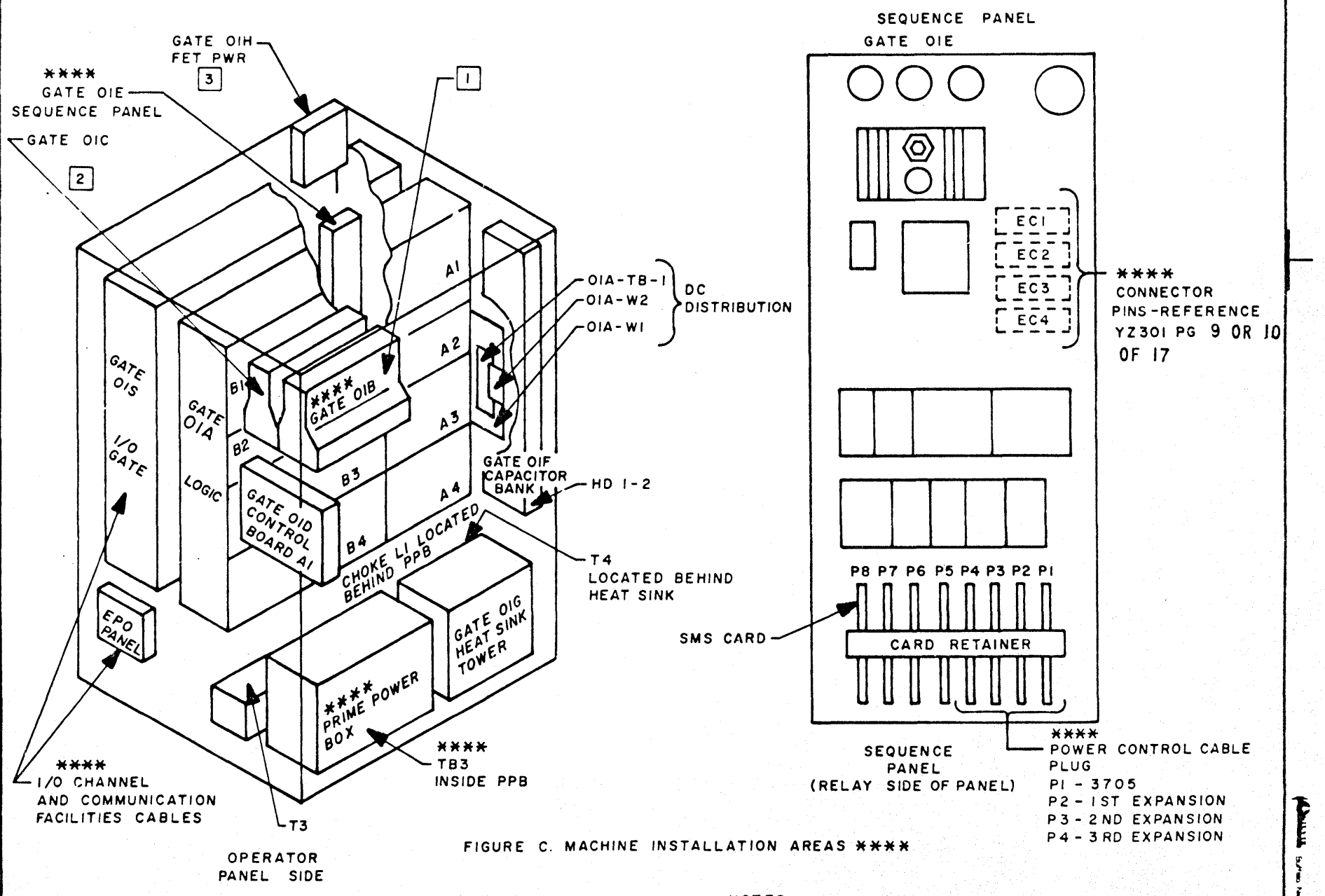


FIGURE C. MACHINE INSTALLATION AREAS ****

NOTES

1. 3705 MODEL I, OIB-=BSM; MODEL II, OIB-=FET
2. 3705 MODEL I, OIC-=BSM 2; MODEL III, OIC-=33FD FILE
3. NOT USED ON 3705 MODEL I

VERTICAL ELECTRICAL FORMAT

MROE 7805222203

620 0133 1

IBM

NAME	INSTALLATION INSTRS		
3705 MODELS A-H			
DESIGN			SHT 12OF35
DETAIL	TS	OCT76	
CHECK			CLASSIFICATION
APPRO			

	DATE	CHANGE NO		DATE	CHANGE NO
	SEE E/C HISTORY			SEP80	322670
	MAY79	318587		NOV80	344409
	SEP79	318544		JAN81	344581
	JAN80	321388		AUG81	344872

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ000

CABLE P/N	FROM (PRE-INSTALLED)	TO (TO BE CONNECTED)
5993271	1ST EXPANSION 0XA-W1 = 02A-W1	BASIC MACH 0XA-W1 = 01A-W1
	2ND EXPANSION 0XA-W1 = 03A-W1	1ST EXPANSION 0XA-W1 = 02A-W1
	3RD EXPANSION 0XA-W1 = 04A-W1	2ND EXPANSION 0XA-W1 = 03A-W1

CHART B - GROUND BUS CABLES

CABLE P/N	TERMINATION BASIC MACH 01E PNL	CABLE CARD LOC. OR DISCRETE WIRE NO.	
5993288	LABEL - J2 - CABLE CARD	LOC. 01E-P2	BASIC 3705 TO 1ST EXPANSION
	PANEL LOC. EC3-F CONN. PIN	WIRES (22,23)	
	PANEL LOC. EC3-A CONN. PIN	WIRE 24	
	PANEL LOC. EC3-D CONN. PIN	WIRE 26	
	PANEL LOC. EC4-A CONN. PIN	WIRE 13	
	PANEL LOC. EC4-E CONN. PIN	WIRE 15	
5993289	LABEL J3 - CABLE CARD	LOC. 01E-P3	BASIC 3705 TO 2ND EXPANSION
	PANEL LOC. EC3-G CONN. PIN	WIRES (22,23)	
	PANEL LOC. EC3-C CONN. PIN	WIRE 24 [1]	
	PANEL LOC. EC4-D CONN. PIN	WIRE 26	
	PANEL LOC. EC4-C CONN. PIN	WIRE 13	
	PANEL LOC. EC4-G CONN. PIN	WIRE 15	
5993290	LABEL J4 - CABLE CARD	LOC. 01E-P4	BASIC 3705 TO 3RD EXPANSION
	PANEL LOC. EC3-H CONN. PIN	WIRES (22,23)	
	PANEL LOC. EC3-C CONN. PIN	WIRE 24	
	PANEL LOC. EC4-H CONN. PIN	WIRE 26	
	PANEL LOC. EC4-C CONN. PIN	WIRE 13	
	PANEL LOC. EC4-G CONN. PIN	WIRE 15	

CHART C - SEQUENCE CONTROLS (SEE PAGE 35 IF INTERMIX POWER)

1 WIRE #24, CABLE P/N 5993289, CONNECTS TO EC3-B (NOT EC3-C) IF RPQ S30251 IN INSTALLED IN THE 2ND EXPANSION FRAME. (REFER TO YZ599 PROVIDED WITH RPQ S30251.

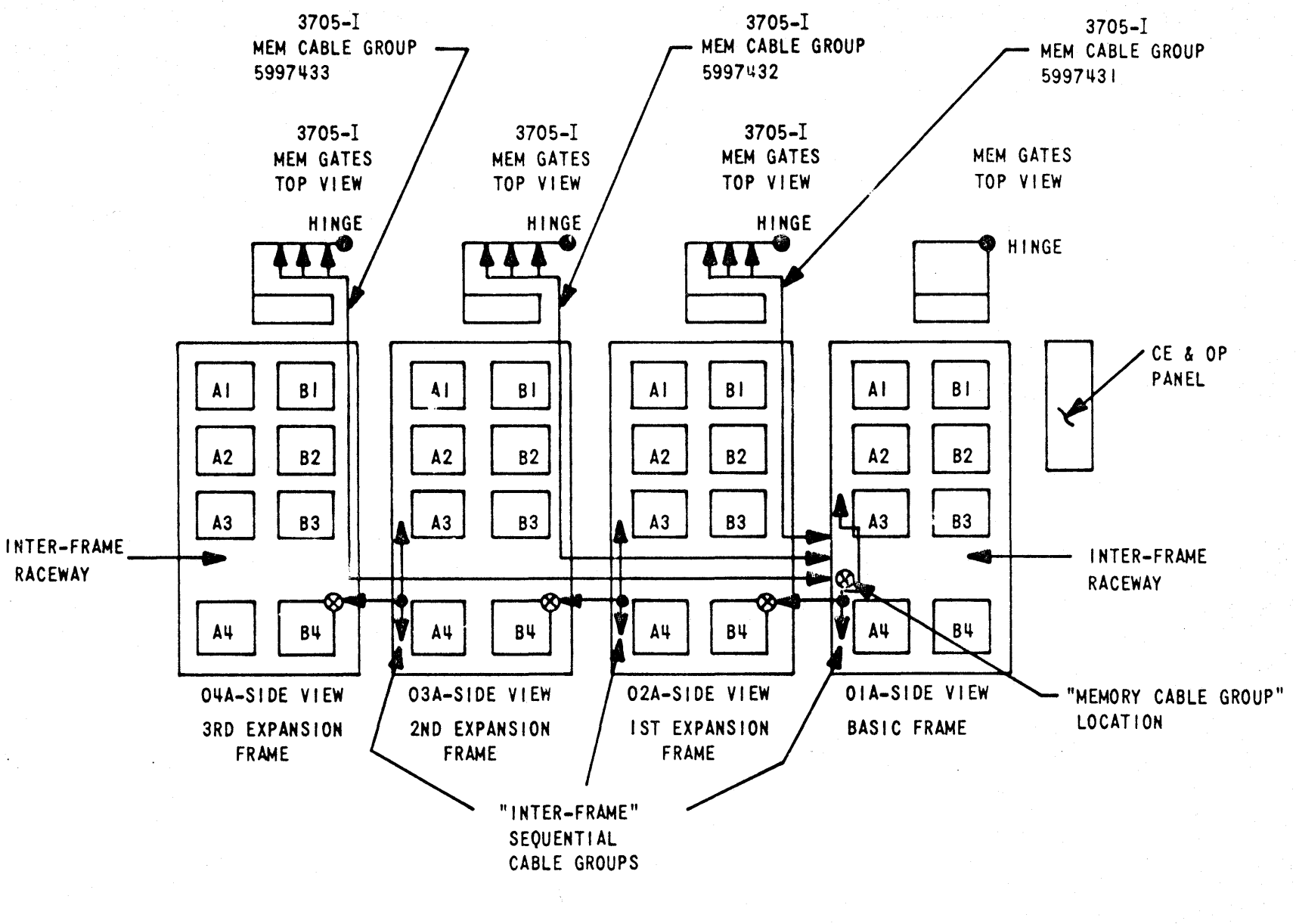
7.0 INTER FRAME FLAT CABLE, TERMINATOR CARD, AND LAST A4 BOARD WIRING REQUIREMENTS

7.1 INTER FRAME FLAT CABLES

ONE END OF THE APPROPRIATE CABLES WILL BE PRE-INSTALLED, THE OTHER ENDS WILL BE TIED-BACK INTO THE CABLE RACEWAY.

OPTIONAL MEMORY CABLES (3705 MODEL I) ARE ROUTED FROM THE 01A-B4 BOARD ON THE BASIC FRAME TO THE MEMORY GATE(S) ON EACH EXPANSION FRAME AND TERMINATED AT THE MEMORY CLOSEST TO THE HINGE. USE "FROM - TO AND FOLD" INFORMATION ON THE CABLE. ALL OTHER CABLES ARE ROUTED FROM THE LAST EXPANSION FRAME TO THE ADJACENT FRAME. USE "FROM - TO AND FOLD" INFORMATION ON THE CABLE.

SEE THE CHART BELOW FOR 3705-I MEMORY CABLING AND THE NEXT SHEET FOR THE REMAINDER OF THE INTER-FRAME CABLES.



7.1 CONTINUED ON NEXT SHEET

7.1 CONTINUED FROM PREVIOUS SHEET

INTER-FRAME ADDRESS, DATA, AND CONTROL CABLE ROUTING

PLUG SEQ	CABLE LOGIC REF	FUNCTION	PLUG LOCATION	REMARKS
A	AB009	ADBUS X.4, X.5	0XA-A4-Y2	APPLIES IF MEM IS OVER 256K. FET MEM IN 3705 AND 3706 IST EXP FRAME
B	PA060	L3 PRIORITIZATION	01A-A4-Z2	PRESENT ONLY IF FIRST EXPANSION FRAME CONTAINS CA-4 (S)
C	AB007	SCANNER	0XA-A3-A2	PRESENT ONLY IF EXPANSION FRAME CONTAINS A SCANNER
D	AB008	CONTROL	0XA-A3-A3	
E	AB001	INBUS	0XA-A4-A4	PRESENT IN ALL EXPANSION FRAMES
F	AB002	OUTBUS	0XA-A4-B4	
G	AB003	I/O REG CONTROL	0XA-A4-C4	
H	AB005	ADBUS	0XA-A4-A5	
I	AB006	ADAPTER CTLS	0XA-A4-B5	
J	AB004	CA CTLS. ADBUS	0XA-A4-C5	

7.2 PLUG TERMINATOR CARDS ACCORDING TO THE TABLE BELOW. THE TERMINATOR CARDS MAY ALREADY BE IN POSITION OR MAY HAVE BEEN REMOVED FROM A PRECEDING FRAME WHEN PLUGGING CABLES.

CARD P/N	LOCATION	REMARKS
5864672	0XA-A4-A4 (SEE NOTE BELOW)	PLUG IN A4 BOARD OF LAST FRAME
5862885	0XA-A4-B4	
5862884	0XA-A4-B5	
5862884	0XA-A4-C4	
5862884	0XA-A3-A2	PLUG IN LAST A3 BOARD

NOTE: THE A4A4 TERMINATOR CARD LISTED ABOVE APPLIES ONLY TO 3706 EXPANSION FRAMES ATTACHING TO ONE OF THE FOLLOWING 3705'S:

a. A 3705 MODEL J, K OR L (CONTAINS FET MEMORY IN 1st 3706).

b. A 3705 MODEL F, G OR H WITH A 900 NS CYCLE TIME R.P.Q. (8Q0054) INSTALLED. (CHECK IN 01A-B3 U5 FOR 17.778 MHZ OSCILLATOR. THE MHZ RATING IS PRINTED ON THE OSCILLATOR CAN).

c. A 3705 MODEL B, C OR D WITH AN A4 BOARD IN ANY EXPANSION FRAME.

TERMINATOR CARD SOURCE FOR (a) ABOVE IF CONVERTING FROM MODEL E, F, G, OR H TO J, K OR L SUPPLIED BY CONVERSION B/M. THE SOURCE FOR (b) IS THE RPQ B/M. E.C. 318544 SUPPLIES THE CARD FOR A MODEL B, C OR D MACHINE AND SHOULD BE INSTALLED CONCURRENTLY WITH THE INSTALLATION OF AN EXPANSION FRAME WITH AN A4 BOARD PRESENT.

THE FOLLOWING REWORK MUST BE PERFORMED ON THE LAST FRAME'S A4 BOARD ONLY IF THE A4A4 TERMINATOR CARD, P/N 5864672, IS REQUIRED. DEPENDENT UPON THE BOARD P/N INSTALLED, REMOVE THE FOLLOWING WIRE FROM THE LAST FRAME'S A4 BOARD:

	DEL	TYPE	FROM	TO		NET
CA-2 BOARD P/N 5997408 OR 1754346	XXX	YEL	G3B03	A4D11	(NOTE)	QM003GC6
CA-3 BOARD P/N 1785214 OR 1754348	XXX	YEL	G3B03	A4D11		SM003GC6
CA-4 BOARD P/N 1648400	XXX	YEL	F5D09	A4D11		PA107FH6

NOTE: G3B03 MAY BE A BOTTOM WRAP. TOP WRAP GOES TO A2D11 AND MUST BE ADDED BACK.

ADD THE FOLLOWING WIRE TO THE LAST FRAME'S CA-2, 3 OR 4 BOARD:

NET	ADD	TYPE	LGTH	FROM	TO
-4V	XXX	YEL	6.0	D4B05	A4D11

REVERSE THE ABOVE WIRING ON THE PREVIOUS LAST A4 BOARD

8.0 CHANNEL ADAPTER JUMPERING

SEE FLOW CHART ON PAGE 2 FOR NECESSARY REFERENCE INFORMATION.

9.0 POWER ON AND STAND-ALONE TESTS

AT THIS POINT, BEFORE CONNECTING THE MACHINE TO THE I/O CHANNEL AND BEFORE CONNECTING THE COMMUNICATIONS FACILITIES, IT IS ADVANTAGEOUS TO PERFORM ITEMS 9.1 AND 9.2 BELOW. IN ORDER TO BRING POWER-ON INDEPENDENT OF THE CPU(S) EMERGENCY POWER-OFF (EPO) CABLE. A DUMMY EPO PLUG (5182923) MUST BE PLACED IN ANY ONE OF THE CPU EPO RECEPTACLES J1 THRU J4 (SEE FIG. C, PAGE 12 AND FIG. IN SECTION 10 PAGE 17) IN THE BASIC FRAME. IT IS EXTREMELY IMPORTANT THAT THIS EPO PLUG BE REMOVED WHEN LEFT UNATTENDED. IF UNIT PROTECT FEATURE IS INSTALLED, VERIFY THAT THE UNIT PROTECT KEY IS PROPERLY INSERTED IN ORDER TO ENABLE THE PANEL.

9.1 POWER-ON MEASUREMENTS

POWER SUPPLY MEASUREMENT (AND ADJUSTMENT, IF NECESSARY) PROCEDURES SHOULD BE PERFORMED AS SPECIFIED IN THE 3705 FETMM - D.C. VOLTAGE MEASUREMENTS POWER SUPPLY SECTION. BEFORE ACTUAL POWER-ON. PLACE ALL CHANNEL ENABLE/DISABLE SWITCHES IN THE DISABLE POSITION.

9.2 STAND-ALONE HARDWARE CHECK-OUT (INVALID FOR REMOTE PROGRAM LOADER)

THIS TEST IS A VERY SIMPLE CHECKPOINT TO VERIFY THAT THE 3705 PROCESSING UNIT IS AT A FUNDAMENTAL OPERATING LEVEL BEFORE CONTINUING INSTALLATION OR GOING "ON-LINE" TO THE SYSTEM I/O CHANNEL.

9.2.1 PLACE ALL CHANNEL ENABLE/DISABLE SWITCHES IN THE DISABLE POSITION, MODE SELECT SWITCH TO PROCESS, DISPLAY/FUNCTION SELECT TO STATUS, AND DIAGNOSTIC CONTROL SWITCH TO THE PROCESS POSITION.

9.2.2 POWER ON OR DEPRESS CHECK RESET FOLLOWED BY LOAD IF ALREADY POWERED-ON. THE PROCESSING UNIT WILL NOW PERFORM A SELF-TEST AFTER THE POWER CHECK INDICATOR GOES OFF.

9.2.3 IF THE SELF-TEST WAS SUCCESSFUL, THE FOLLOWING LIST WILL REPRESENT THE STATE OF KEY INDICATORS. THE NUMBER IN () REPRESENTS NUMBER OF LIGHTS TO BE CHECKED.

	STATE		STATE
POWER CHECK	OFF	CS CYCLE	OFF
CHAN 1 INTF A OR CHAN 1 ENABLED	OFF	I CYCLE	ON
CHAN 1 INTF B OR CHAN 2 ENABLED	OFF	CYCLE TIME (2)	ON
CHAN 2 OR 3 INTF A OR CHAN 3 ENABLED	OFF	IPL PHASE (2)	ON
CHAN 2 OR 3 INTF B OR CHAN 4 ENABLED	OFF	ADAPTER CHECK	OFF
CC CHECK	OFF		
PANEL ACTIVE	ON	IN/OUT CHECK	OFF
POWER ON	ON	ADDRESS EXCEPT	OFF
		PROTECT CHECK	OFF
HARD STOP	OFF	INVALID OP	OFF
TEST	OFF		
WAIT	OFF	PROGRAM LEVEL 1	ON
PROGRAM STOP	OFF	PROGRAM LEVEL 2	OFF
LOAD	ON	PROGRAM LEVEL 3	OFF
CC CHECKS (9)	OFF	PROGRAM LEVEL 4	OFF

9.2.4 DEPRESS STOP

9.2.5 SET DIAGNOSTIC CONTROL TO STORAGE TEST PATTERN

9.2.6 SET FOUR STORAGE DATA SWITCHES TO HEX AAAA

9.2.7 SET THE DISPLAY/FUNCTION SELECT SWITCH TO THE STORAGE ADDRESS POSITION, DEPRESS START

9.2.8 IF CC CHECK INDICATOR IS OFF, TEST WAS SUCCESSFUL.

9.2.9 DEPRESS RESET.

9.2.10 SET DIAGNOSTIC CONTROL TO STORAGE SCAN.

9.2.11 DEPRESS START.

9.2.12 IF CC CHECK INDICATOR IS OFF, TEST IS SUCCESSFUL.

9.2.13 REPEAT 9.2.5 THRU 9.2.12 USING HEX 0000, FFFF, 5555, 8001, AND 7FFE IN STEP 9.2.6.

9.2.14 RE-DO 9.2.1 THRU 9.2.3.

10.0 INSTALLATION OF I/O CHANNEL INTERFACE CABLES AND KICK PLATES (FOR KICK PLATES, SEE DIAGRAM 5993106 IN SHIPPING GROUP). STICK-ON HEX LABELS ARE PROVIDED IN SHIPPING GROUP FOR CHAN ADDRESSES TO BE PLACED NEAR APPROPRIATE OPERATOR SWITCHES ON FRONT PANEL. IF A CHANNEL ADAPTER TYPE 3 (1785211 OR 1785212) IS INSTALLED AND USING THE REMOTE ENABLE/DISABLE FEATURE, INSTALL CABLE PN 5351178 BETWEEN REMOTE CONSOLE AND J7 AND/OR J8 ON EPO PANEL AS APPROPRIATE, ALSO REMOVE SWITCHES AND INSTALL BLANK BUTTONS SUPPLIED IN SHIPPING GROUP. SEE 13.9.7 FOR CABLE TERMINATION AT CE/OP PANEL.

BASIC 3705 FRAME

01S-B1

INTERFACE A FEATURE B/M 1648282

	BUS CABLE IN	BUS CABLE OUT	TAG CABLE IN	TAG CABLE OUT
2				
3				

INTF. FOR CA IN THE 01A-B1 BOARD (CA-4 ONLY)

01T-A1

INTERFACE A FEATURE B/M'S 5993331, 5993339, 1785211 OR 1749611

1	BUS CABLE OUT
2	BUS CABLE IN
3	TAG CABLE OUT
4	TAG CABLE IN

INTF. FOR CA IN THE 01A-A4 BOARD (CA-1,2,3, OR 4)

01U-A1

1	BUS CABLE OUT
2	BUS CABLE IN
3	TAG CABLE OUT
4	TAG CABLE IN

DUAL CA INTF FOR THE CA IN THE 01A-A4 BOARD

INTERFACE B FEATURE B/M'S 5993351, 1785211 OR 1648351

1ST 3705 EXPANSION FRAME

02S-B4

INTERFACE A FEATURE B/M 1648283

	BUS CABLE IN	BUS CABLE OUT	TAG CABLE IN	TAG CABLE OUT
2				
3				

INTF. FOR CA IN THE 02A-B4 BOARD (CA-4 ONLY)

02T-A1

INTERFACE A FEATURE B/M'S 5997515, 1785212 OR 1749616

1	BUS CABLE OUT
2	BUS CABLE IN
3	TAG CABLE OUT
4	TAG CABLE IN

INTF. FOR CA IN THE 02A-A4 BOARD (CA-2,3, OR 4 ONLY)

02U-A1

1	BUS CABLE OUT
2	BUS CABLE IN
3	TAG CABLE OUT
4	TAG CABLE IN

DUAL CA INTF. FOR THE CA IN THE 02A-A4 BOARD

INTERFACE B FEATURE B/M'S 5993351, 1785212 OR 1648351

BASIC FRAME EPO PANEL

J4	J3	J2	J1
1ST EXP INTF B FOR CA IN 02A-A4 BD OR FOR INTF A CA IN 02A-B4 BD	1ST EXP INTF B FOR CA IN 02A-A4 BD	BASIC INTF B FOR CA IN 01A-A4 BD OR FOR INTF A CA IN 01A-B1 BD	BASIC INTF A FOR CA IN 01A-A4 BD

J8	J7	J5
2ND CA TYPE 3 REMOTE ENABLE	1ST CA TYPE 3 REMOTE ENABLE	2711

11.0 IFT'S AND OLT'S

IF IT IS POSSIBLE TO OBTAIN THE CPU AT THIS POINT, THE FOLLOWING 3705 DIAGNOSTICS SHOULD BE CONFIGURED AND RUN BEFORE CONTINUING WITH HARDWARE INSTALLATION (SEE MAINTENANCE PROGRAM MANUAL,PID DOC D99-3705 C,D,E). SEE SECTION 27 FOR MORE INFORMATION ON THE CDS.

CHANNEL ADAPTER TYPE 1 OLT, T3705 AA-AE, (IF APPLICABLE).
CHANNEL ADAPTER TYPE 2 OLT, T3705 BA-BE, BG-BH, (IF APPLICABLE).
CHANNEL ADAPTER TYPE 3 OLT, T3705 BA-BH, (IF APPLICABLE).
CHANNEL ADAPTER TYPE 4 OLT, T3705 AA-AG, (IF APPLICABLE). ALSO AH AND AI IF PID 10.0 OR HIGHER.
IFT LOADER T3705A, WITH INITIAL TEST AND WITH ALL INTERNAL FUNCTIONAL TESTS (IFT).

CONTINUE HARDWARE INSTALLATION BEFORE COMPLETING DIAGNOSTICS WITH DOWN LINE TERMINAL TESTS.

12.0 INSTALLATION OF COMMUNICATION LINE EXTERNAL CABLING TO FACILITIES.

A CUSTOMIZED LINE SET CONFIGURATION CHART IS PROVIDED WITH EACH INITIAL 3705(VOL.1) SHIPMENT AND EACH FIELD FEATURE INSTALLATION INVOLVING INSTALLATION OF LINE SETS. THIS CHART KEYS ON LINE ADDRESSES (PHYSICAL) AND GIVES THE LINE SET TYPE INSTALLED, PHYSICAL PARTITION, AND OTHER PERTINENT INFORMATION. THIS CHART SHOULD BE IST CORRELATED WITH PHYSICAL CABLE PLANNING DATA (AT SITE) FOR CABLE CODE VERSUS LINE SET TYPE RELATIONSHIPS. THE FOLLOWING CHARTS GIVE LINE ADDRESS VERSUS I/O GATE SOCKET INFORMATION FOR THE INSTALLATION OF THESE EXTERNAL CABLES. ADJUST CABLE RETENTION BAR AS PER SHIPPING DIAGRAM 5993108.

3705 WITH COMMUNICATION SCANNER TYPE I (5997374) LINE ADDRESSES VERSUS I/O GATE (OXS) SOCKET RELATIONSHIP

ADDRESS	SOCKET	ADDRESS	SOCKET	ADDRESS	SOCKET	ADDRESS	SOCKET
000	A2R2	010	A1R2	020	B1R2	030	B2R2
002	A2R4	012	A1R4	022	B1R4	032	B2R4
004	A2S2	014	A1S2	024	B1S2	034	B2S2
006	A2S4	016	A1S4	026	B1S4	036	B2S4
008	A2T2	018	A1T2	028	B1T2	038	B2T2
00A	A2T4	01A	A1T4	02A	B1T4	03A	B2T4
00C	A2U2	01C	A1U2	02C	B1U2	03C	B2U2
00E	A2U4	01E	A1U4	02E	B1U4	03E	B2U4

3705 WITH COMMUNICATION SCANNER TYPE 2 OR TYPE 3 LINE ADDRESS VERSUS I/O GATE (OXS) SOCKET RELATIONSHIP WITHOUT REMOTE OR CA-4 IN THE 01A-B1 BOARD POSITION

ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3
020	A2R2	A2R2	036	A1S4	A1S4	04C	B1U2	B1U2
022	A2R4	A2R4	038	A1T2	A1T2	04E	B1U4	B1U4
024	A2S2	A2S2	03A	A1T4	A1T4			
026	A2S4	A2S4	03C	A1U2	A1U2	050	B2R2	——
028	A2T2	A2T2	03E	A1U4	A1U4	052	B2R4	——
02A	A2T4	A2T4				054	B2S2	——
02C	A2U2	A2U2	040	B1R2	B1R2	056	B2S4	——
02E	A2U4	A2U4	042	B1R4	B1R4	058	B2T2	——
			044	B1S2	B1S2	05A	B2T4	——
030	A1R2	A1R2	046	B1S4	B1S4	05C	B2U2	——
032	A1R4	A1R4	048	B1T2	B1T2	05E	B2U4	——
034	A1S2	A1S2	04A	B1T4	B1T4			

3705 WITH COMMUNICATION SCANNER TYPE 2 OR TYPE 3 LINE ADDRESS VERSUS I/O GATE (OXS) SOCKET RELATIONSHIP WITH REMOTE OR CA-4 IN THE 01A-B1 BOARD POSITION

ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3
020	A2R2	A2R2	030	A1R2	A1R2	040	B2R2	——
022	A2R4	A2R4	032	A1R4	A1R4	042	B2R4	——
024	A2S2	A2S2	034	A1S2	A1S2	044	B2S2	——
026	A2S4	A2S4	036	A1S4	A1S4	046	B2S4	——
028	A2T2	A2T2	038	A1T2	A1T2	048	B2T2	——
02A	A2T4	A2T4	03A	A1T4	A1T4	04A	B2T4	——
02C	A2U2	A2U2	03C	A1U2	A1U2	04C	B2U2	——
02E	A2U4	A2U4	03E	A1U4	A1U4	04E	B2U4	——

1ST 3705 EXPANSION FRAME (5997801 OR 1648363) WITH COMMUNICATION SCANNER TYPE 2 OR TYPE 3 LINE ADDRESS VERSUS I/O GATE (0XS) SOCKET RELATIONSHIP

ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3
0A0	A2R2	A2R2	0C0	B1R2	B1R2	0E0	B3R2	
0A2	A2R4	A2R4	0C2	B1R4	B1R4	0E2	B3R4	
0A4	A2S2	A2S2	0C4	B1S2	B1S2	0E4	B3S2	
0A6	A2S4	A2S4	0C6	B1S4	B1S4	0E6	B3S4	
0A8	A2T2	A2T2	0C8	B1T2	B1T2	0E8	B3T2	
0AA	A2T4	A2T4	0CA	B1T4	B1T4	0EA	B3T4	
0AC	A2U2	A2U2	0CC	B1U2	B1U2	0EC	B3U2	
0AE	A2U4	A2U4	0CE	B1U4	B1U4	0EE	B3U4	
0B0	A1R2	A1R2	0D0	B2R2	B3R2	0F0	B4R2	
0B2	A1R4	A1R4	0D2	B2R4	B3R4	0F2	B4R4	
0B4	A1S2	A1S2	0D4	B2S2	B3S2	0F4	B4S2	
0B6	A1S4	A1S4	0D6	B2S4	B3S4	0F6	B4S4	
0B8	A1T2	A1T2	0D8	B2T2	B3T2	0F8	B4T2	
0BA	A1T4	A1T4	0DA	B2T4	B3T4	0FA	B4T4	
0BC	A1U2	A1U2	0DC	B2U2	B3U2	0FC	B4U2	
0BE	A1U4	A1U4	0DE	B2U4	B3U4	0FE	B4U4	

2ND 3705 EXPANSION FRAME (5997802 OR 1648364) WITH COMMUNICATION SCANNER TYPE 2 OR TYPE 3 LINE ADDRESS VERSUS I/O GATE (0XS) SOCKET RELATIONSHIP

ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3
120	A2R2	A2R2	140	B1R2	B1R2	160	B3R2	
122	A2R4	A2R4	142	B1R4	B1R4	162	B3R4	
124	A2S2	A2S2	144	B1S2	B1S2	164	B3S2	
126	A2S4	A2S4	146	B1S4	B1S4	166	B3S4	
128	A2T2	A2T2	148	B1T2	B1T2	168	B3T2	
12A	A2T4	A2T4	14A	B1T4	B1T4	16A	B3T4	
12C	A2U2	A2U2	14C	B1U2	B1U2	16C	B3U2	
12E	A2U4	A2U4	14E	B1U4	B1U4	16E	B3U4	
130	A1R2	A1R2	150	B2R2	B3R2	170	B4R2	
132	A1R4	A1R4	152	B2R4	B3R4	172	B4R4	
134	A1S2	A1S2	154	B2S2	B3S2	174	B4S2	
136	A1S4	A1S4	156	B2S4	B3S4	176	B4S4	
138	A1T2	A1T2	158	B2T2	B3T2	178	B4T2	
13A	A1T4	A1T4	15A	B2T4	B3T4	17A	B4T4	
13C	A1U2	A1U2	15C	B2U2	B3U2	17C	B4U2	
13E	A1U4	A1U4	15E	B2U4	B3U4	17E	B4U4	

3RD 3705 EXPANSION FRAME (5997803 OR 1648365) WITH COMMUNICATION SCANNER TYPE 2 OR TYPE 3 LINE ADDRESS VERSUS I/O GATE (0XS) SOCKET RELATIONSHIP

ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3	ADDRESS	SOCKET WITH CS2	SOCKET WITH CS3
1A0	A2R2	A2R2	1C0	B1R2	B1R2	1E0	B3R2	
1A2	A2R4	A2R4	1C2	B1R4	B1R4	1E2	B3R4	
1A4	A2S2	A2S2	1C4	B1S2	B1S2	1E4	B3S2	
1A6	A2S4	A2S4	1C6	B1S4	B1S4	1E6	B3S4	
1A8	A2T2	A2T2	1C8	B1T2	B1T2	1E8	B3T2	
1AA	A2T4	A2T4	1CA	B1T4	B1T4	1EA	B3T4	
1AC	A2U2	A2U2	1CC	B1U2	B1U2	1EC	B3U2	
1AE	A2U4	A2U4	1CE	B1U4	B1U4	1EE	B3U4	
1B0	A1R2	A1R2	1D0	B2R2	B3R2	1F0	B4R2	
1B2	A1R4	A1R4	1D2	B2R4	B3R4	1F2	B4R4	
1B4	A1S2	A1S2	1D4	B2S2	B3S2	1F4	B4S2	
1B6	A1S4	A1S4	1D6	B2S4	B3S4	1F6	B4S4	
1B8	A1T2	A1T2	1D8	B2T2	B3T2	1F8	B4T2	
1BA	A1T4	A1T4	1DA	B2T4	B3T4	1FA	B4T4	
1BC	A1U2	A1U2	1DC	B2U2	B3U2	1FC	B4U2	
1BE	A1U4	A1U4	1DE	B2U4	B3U4	1FE	B4U4	

13.0 INSTALLATION OF SECOND CHANNEL ADAPTER SWITCH

THIS SECTION IS REQUIRED ONLY WHEN INSTALLING THE FIRST EXPANSION FRAME WITH A CHANNEL ADAPTER TYPE 2 OR 3 INSTALLED TO AN EXISTING 3705 FRAME.

13.1 IF A CHANNEL ADAPTER TYPE 3 IS INSTALLED IN THE EXPANSION FRAME AND EC 311059 IS NOT INSTALLED ON THE 3705, (CHECK HISTORY) BM 1785218 MUST BE INSTALLED NOW. REFER TO INSTRUCTIONS SUPPLIED ON THE BM.

13.2 INSTALLATION OF SECOND CHANNEL INTERFACE SWITCH AND INDICATOR ASSEMBLIES. B/M 5182875 OR 5182876 OR 5182877 OR 1785285 OR 1785286 OR 1785287.

NOTE: DWG 5993155 ACCOMPANIES THE SHIPPING GROUP. REFER TO CHART A, SHEET 3. YOU WILL BE INSTALLING LENS, LAMPS AND LAMP HOLDERS IN POSITIONS 2 AND 10. ALSO A SWITCH IN POSITION 6 FOR A TYPE 2 CHANNEL OR TWO SWITCHES P/N 725347 IN POSITIONS 6 AND 14 FOR A TYPE 3 CHANNEL, CHART A SUPPLIES P/N OF LENS AND BUTTONS ASSOCIATED WITH THE DIFFERENT LANGUAGE FEATURES, PHYSICAL LOCATION OF THESE INDICATORS & SWITCH IS SHOWN ON SHEET 2 COORDINATE E-3.

13.3 REMOVE AND DISCARD BLANK BUTTONS IN POSITION 2 AND 10. THESE BUTTONS ARE FRICTION FITTED AND CAN BE REMOVED FROM THE FRONT SIDE OF THE OP PANEL. IF SPRINGS ARE FOUND BEHIND THESE BUTTONS REMOVE AND DISCARD.

13.4 INSTALL LAMP 98608 AND LAMP HOLDER 827840 IN POSITION 2 AND 10. HOUSING 827841 IS ALREADY MOUNTED.

13.5 INSERT BUTTONS IN POSITION 2 AND 10. THESE BUTTONS ARE FRICTION FITTED AND CAN BE INSERTED FROM THE FRONT SIDE OF THE PANEL. SEE CHART A FOR PART NUMBERS FOR EACH POSITION.

13.6 IF A CA-2 IS INSTALLED IN THE 3706, REMOVE AND DISCARD BLANK BUTTON IN POSITION 6. THIS BUTTON IS HELD BY TWO SCREWS THROUGH THE BACKPLATE. INSTALL SWITCH 737901 AND BUTTON ASSEMBLY IN POSITION 6. THE BUTTON IS INSERTED FROM THE FRONT AND IS THREADED. THE SWITCH SCREWS INTO THE BUTTON FROM THE BACK PANEL. OBSERVE NOTE 3 (DWG 5993155) WHEN MOUNTING SWITCH. GO TO 13.8

13.7 IF A CA-3 IS INSTALLED IN THE 3706 AND IS TO BE CONNECTED TO A REMOTE CONFIGURATION PANEL GO TO 13.8. IF THE CA-3 IS NOT TO BE CONNECTED TO A REMOTE CONFIGURATION PANEL REMOVE BLANK BUTTONS IN POSITION 6 AND 14. INSTALL SWITCHES P/N 725347 (2) AND BUTTONS IN POSITION 6 AND 14. REFER TO STEP 13.6.

13.8 YOU WILL FIND LUGGED WIRES TAPED BACK INTO BODY OF CABLE 5993202. REMOVE THIS TAPE AND WIRE CABLE TO LAMP AND SWITCH ASSEMBLIES AS FOLLOWS FOR TYPE 2 CHANNEL ADAPTER ONLY. REFER TO SYSTEM PAGE SA072 FOR TYPE 3 CHANNEL ADAPTER SWITCH WIRING. IF THE TYPE 3 CHANNEL ADAPTER IS TO BE CONNECTED TO A REMOTE CONFIGURATION PANEL, THE WIRES WILL BE CONNECTED TO THE REMOTE INTERFACE ENABLE/DISABLE SWITCH CABLE.

WIRE #	POSITION	TERM.
173	LAMP 2	A (TOP)
198-199	LAMP 2	B
157	SWITCH 6	1
158-180	SWITCH 6	2
156	SWITCH 6	3
160	SWITCH 6	4
180	SWITCH 6	5
159	SWITCH 6	6
174	LAMP 10	A
161-236	LAMP 10	B

13.9 INSTALL CABLE P/N 1785217 FOR A CHANNEL ADAPTER TYPE 3 IN THE FIRST EXPANSION FRAME.

13.9.1 FOR EASE OF INSTALLATION REMOVE EPO PANEL FROM FRAME BY REMOVING THE TWO MOUNTING SCREWS AND WASHERS.

13.9.2 LOCATE CABLE ASSEMBLY P/N 1785217 AND SPRING (P/N 5236960) SUPPLIED WITH 3706. SLIDE SPRING CLIP OVER CABLE UNTIL IT SEATS AGAINST THE SIX PIN CABLE CONNECTOR. THE FINGERS ON THE SPRING CLIP SHOULD EXTEND OVER THE CONNECTOR. INSTALL THE CABLE ASSEMBLY IN SPARE CONNECTOR

(CONTINUED ON PAGE 21)

13.9.2 (CONTINUED)

POSITION J8 OF THE EPO PANEL. THE CABLE WILL HAVE TO BE FED THRU THE MOUNTING HOLE FROM THE FRONT OF THE PANEL. ATTACH THE CONNECTOR TO EPO PANEL WITH SCREW P/N 251970 (2).

13.9.3 ROUTE CABLE TO AREA OF CONTROL PANEL. FOLLOW FRAME MEMBERS TO THE CHANNEL BETWEEN BOARDS 01A-A2 AND 01A-A3, THEN ROUTE ALONG SIDE OF EXISTING CABLES INSTALLED TO THE OPERATOR'S PANEL. SECURE TO EXISTING CABLES AND MACHINE FRAME MEMBERS USING CABLE TIES P/N 556450.

13.9.4 ATTACH TWO TABS P/N 5271288 TO EPO PANEL BELOW CONNECTOR (INSTALLED IN 13.9.2) USING SCREW P/N 236550, LOCKWASHER P/N 338169, AND NUT P/N 37913. INSTALL ONE TAB ON EACH SIDE OF EPO PANEL. CONNECT GND FROM CABLE TO BACK TAB.

13.9.5 RE-INSTALL EPO PANEL. BE SURE STAR WASHER IS LOCATED UNDER REAR SCREW BETWEEN EPO PANEL AND MACHINE FRAME MEMBER.

13.9.6 INSTALL LABEL P/N 1785912 ON HORIZONTAL FRAME MEMBER BELOW THE J8 POSITION OF EPO PANEL.

13.9.7 TERMINATION OF CABLE ASM P/N 1785217 AT OPERATOR'S PANEL.

13.9.7.1 WITH REMOTE ENABLE/DISABLE CAPABILITY: SLIP A LENGTH OF SHRINK TUBING P/N 535335 (1.75 (44,4) LONG) OVER EACH LEAD OF CABLE P/N 1785217 AND CONNECT TO WIRES OF MAIN CE/OP PANEL CABLE AS DESCRIBED ON SA072. SLIDE THE SHRINK TUBING OVER CABLE TERMINALS AND HEAT SHRINK.

13.9.7.2 WITHOUT REMOTE ENABLE/DISABLE CAPABILITY: CONNECT THE WIRES FROM CE/OP PANEL CABLE TO SWITCHES AS DESCRIBED ON SA072. TAPE THE END OF CABLE P/N 1785217 INSULATING THE INDIVIDUAL TERMINALS AND TIE BACK TO BODY OF THE MAIN CE/OP PANEL CABLE.

14.0 INSTALLATION OF LOCALLY ATTACHED 2740'S WITHOUT STATION CONTROL:

THIS SECTION IS REQUIRED ONLY WHEN ATTACHING 2740'S WITHOUT STATION CONTROL TO A LINE SET IC (5997477)OR ID(5997351).REFER TO LOGIC VA000 FOR CARD LOCATIONS.

14.1 IF A 2740 W/O STATION CONTROL IS BEING ATTACHED TO THE EVEN NUMBERED LINE OF THE LINE SET PAIR, JUMPER PIN B10 TO PIN D10 ON THE LINE SET DRIVER (CARD CODE 7573).

14.2 IF A 2740 W/O STATION CONTROL IS BEING ATTACHED TO THE ODD NUMBERED LINE OF THE LINE SET PAIR, JUMPER PIN G10 TO PIN J10 ON THE LINE SET DRIVER (CARD CODE 7573).

14.3 INFORM THE S.E. OR THE CUSTOMER THAT THE LOCALLY ATTACHED 2740'S WITHOUT STATION CONTROL MUST BE SYSGENED HALF-DUPLEX.

15. REMOTE PROGRAM LOADER SIGNAL CABLE INSTALLATION (3705-I ONLY)

15.1 A SIGNAL CABLE, PART NUMBER DEPENDENT ON THE NUMBER OF FRAMES IN THE 3705 CONFIGURATION, MUST BE INSTALLED FROM THE BASE OF THE 33FD FILE MOUNTING ASSEMBLY, SOCKET P2, LOCATED IN THE LAST FRAME OF THE 3705 CONFIGURATION, TO THE BASIC FRAME, BOARD POSITION 01A-A4V2. REFER TO TABLE BELOW FOR APPROPRIATE CABLE PART NUMBER; USE CABLE ROUTING DRAWING 1851901. ONE END OF THE APPROPRIATE CABLE WILL BE PRE-INSTALLED AT THE 33FD FILE MOUNTING ASSEMBLY. ROUTE CABLE ALONG CABLE RACEWAY

	CABLE PN	CABLE FEATURE BM
3705 A MODELS (ONE FRAME CONFIGURATION)	BM 1851931	1851891 OR 1851895
3705 B MODELS (TWO FRAME CONFIGURATION)	BM 1851932	1851892 OR 1851896
3705 C MODELS (THREE FRAME CONFIGURATION)	BM 1851933	1851893 OR 1851897
3705 D MODELS (FOUR FRAME CONFIGURATION)	BM 1851934	1851894 OR 1851898

16. DISKETTE INSTALLATION

REMOVE A CONFIGURED DISKETTE WHICH IS STORED ON THE INSIDE OF THE COVER DOOR: REMOVE DISKETTE FROM THE CLEAR PLASTIC SHIPPING PACKAGE AND ENVELOPE. INSTALL DISKETTE IN 33FD FILE; ORIENT THE DISKETTE IN ORDER THAT THE LABEL IS FACING THE INSTALLER. TWO IDENTICAL DISKETTES ARE PROVIDED IN CASE ONE IS DAMAGED. (TO OPEN THE 33FD, PRESS THE LATCH WHICH IS LOCATED ON THE FRONT OF THE 33FD DRIVE UNIT)

17. REMOTE POWER AND STAND ALONE TESTS

AT THIS POINT BEFORE CONNECTING THE COMMUNICATION FACILITIES, IT IS ADVANTAGEOUS TO PERFORM THE TWO PROCEDURES BELOW. DISABLE ALL ATTACHED CHANNEL ADAPTERS (IF ANY) BEFORE PROCEEDING.

17.1 POWER ON MEASUREMENTS.

POWER SUPPLY MEASUREMENT AND PROCEDURES (AND ADJUSTMENTS IF NECESSARY) SHOULD BE PERFORMED AS SPECIFIED IN THE 3705 FETMM - DC VOLTAGE MEASUREMENTS - POWER SUPPLY SECTION. BEFORE POWERING ON VERIFY THAT EITHER AN EPO CABLE OR A DUMMY EPO PLUG (5182923) IS INSTALLED IN ANY ONE OF THE EPO RECEPTACLES J1 THRU J4 (SEE FIGURE C PAGE 12 AND FIGURE IN SECTION 10 PAGE 17) IN THE BASIC FRAME.

17.2 REMOTE HARDWARE CHECK OUT.

THIS TEST IS A CHECKPOINT TO VERIFY THAT THE REMOTE 3705 IS AT A FUNDAMENTAL OPERATING LEVEL BEFORE CONTINUING INSTALLATION OR INSTALLING COMMUNICATION LINES.

17.2.0 PLACE ALL CHANNEL ADAPTER SWITCHES TO DISABLE.

17.2.1 PLACE THE PANEL MODE SELECT SWITCH TO PROCESS.

17.2.2 PLACE THE DISPLAY/FUNCTION SELECT SWITCH TO STATUS

17.2.3 PLACE THE DIAGNOSTIC CONTROL SWITCH TO PROCESS.

17.2.4 PLACE IN THE ROTARY ADDRESS/DATA SWITCHES A THROUGH E THE VALUE X'0DDDD'

17.2.5 IF THE UNIT PROTECTION FEATURE IS INSTALLED, VERIFY THAT THE UNIT PROTECTION KEY IS PROPERLY INSERTED IN ORDER TO ENABLE THE PANEL.

17.2.6 DEPRESS THE POWER ON BUTTON. AFTER THE POWER CHECK INDICATOR LIGHT GOES OFF, DEPRESS THE INTERRUPT PUSHBUTTON.

IF ALREADY POWERED ON, DEPRESS THE RESET PUSHBUTTON, FOLLOWED BY DEPRESSING THE LOAD THEN INTERRUPT PUSHBUTTON.

THE PROCESSING UNIT WILL NOW PERFORM A SELF-TEST. THIS TEST SHOULD LAST FOR APPROXIMATELY THIRTY SECONDS IF SUCCESSFUL; OR IF NOT SUCCESSFUL, THE UNIT MAY POSSIBLY RUN FOR APPROXIMATELY THREE MINUTES BEFORE THE MACHINE HARD STOPS.

17.2.7 IF THE SELF-TEST WAS SUCCESSFUL, THE FOLLOWING LIST WILL REPRESENT THE STATE OF KEY INDICATORS. (PLACE THE DISPLAY/FUNCTION SELECT SWITCH TO "STATUS")

POWER CHECK	OFF	ADDRESS COMPARE	OFF
CC CHECK	OFF	IPL PHASE (2 INDICATORS)	OFF
PANEL ACTIVE	ON	ADAPTER CHECK	OFF
POWER ON	ON	IN/OUT CHECK	OFF
HARD STOP	ON	ADDRESS ACCEPT	OFF
TEST	ON	PROTECT CHECK	OFF
WAIT	ON	INVALID OP	OFF
PROGRAM STOP	ON	C LATCH	OFF
LOAD	OFF	Z LATCH	ON
CC CHECKS (9 INDICATORS)	OFF	PROGRAM LEVEL 1	OFF
CS CYCLE	OFF	PROGRAM LEVEL 2	OFF
I CYCLE	OFF	PROGRAM LEVEL 3	OFF
CYCLE TIME (2 INDICATORS)	ON	PROGRAM LEVEL 4	ON

(CONTINUED ON PAGE 23)

17.2.7 CONTINUED

PLACE THE DISPLAY/FUNCTION SELECT SWITCH IN STORAGE ADDRESS POSITION; IF TEST WAS SUCCESSFUL, BYTE 0 AND BYTE 1 OF DISPLAY A AND B SHOULD CONTAIN HEX 'FFFF'.
IF THIS SELF TEST WAS UNSUCCESSFUL, REFER TO THE REMOTE PROGRAM LOADER DIAGNOSTIC MANUAL FOR SYSTEMATIC TROUBLESHOOTING PROCEDURE.

17.2.8 UPON SUCCESSFUL COMPLETION OF PARAGRAPH 17.2.7, PERFORM THE FOLLOWING STORAGE TEST PATTERN TEST

17.2.8.1 SET DIAGNOSTIC CONTROL TO STORAGE TEST PATTERN

17.2.8.2 SET THE STORAGE DATA SWITCHES TO HEX 'AAAAA' AND DEPRESS START.

17.2.8.3 IF THE CC CHECK INDICATOR IS OFF, TEST WAS SUCCESSFUL. DEPRESS RESET.

17.2.9 PERFORM THE FOLLOWING STORAGE SCAN TEST.

17.2.9.1 SET DIAGNOSTIC CONTROL TO STORAGE SCAN.

17.2.9.2 DEPRESS START. IF THE CC CHECK INDICATOR IS OFF, TEST IS SUCCESSFUL.

17.2.10 REPEAT 17.2 THRU 17.2.7.

18. INTERNAL FUNCTION TESTS.

18.1 VERIFY THAT THE CONFIGURATION OF FEATURES AND LINE SETS ARE THE SAME AS THAT SHIPPED FROM THE MANUFACTURING PLANT. IF THE MACHINE CONFIGURATION HAS CHANGED, AN ALTERATION OF THE CONFIGURATION DATA SET (CDS), PREVIOUSLY WRITTEN ON THE DISKETTE AT THE PLANT, IS REQUIRED. REFER TO THE REMOTE PROGRAM LOADER DIAGNOSTIC MANUAL, FOR AN EXPLANATION OF THIS PROCEDURE.

18.2 RUN THE IFT'S FOR THE REMOTE 3705 AS EXPLAINED IN THE REMOTE PROGRAM LOADER DIAGNOSTIC MANUAL.

19. DEFINE LINE ADDRESS FOR REMOTE LINK AND CONTINUE DOWN LINE TESTS.

19.1 BEFORE A COMMUNICATION LINK IS ESTABLISHED BETWEEN THE REMOTE 3705 AND A LOCAL 3705/4, THE LINE ADDRESS FOR THIS LINK LINE MUST BE DEFINED AND CONFIGURED ON THE DISK. REFER TO THE REMOTE PROGRAM DIAGNOSTIC MANUAL, FOR AN EXPLANATION OF THIS PROCEDURE.

19.2 COMPLETE DIAGNOSTIC TESTING OF THE REMOTE 3705 BY RUNNING THE DOWN LINE TERMINAL TESTS.

20. CHECK OUT OF UNIT PROTECTION FEATURE. PLACE THE MACHINE IN A DIAGNOSTIC LOOP MODE, REMOVE THE UNIT PROTECTION KEY FROM ITS SOCKET. AT THIS POINT, THE PANEL ACTIVE INDICATOR WILL TURN OFF AND THE DEPRESSION OF ANY OTHER PANEL PUSHBUTTON (EXCEPT POWER ON/OFF) WILL NOT HAVE AN EFFECT ON MACHINE OPERATION. REINSERT THE UNIT PROTECTION KEY AND ENABLE THE PANEL.

21. CHECK OUT OF REMOTE POWER OFF FEATURE: THIS FEATURE PROVIDES THE CAPABILITY OF POWERING THE 3705 DOWN UNDER PROGRAM CONTROL WHEN BYTE 0 BIT 4 IS EQUAL TO 1 AND IS STORED INTO HARDWARE REGISTER HEXIDECIMAL '79'. PERFORM THIS OPERATION MANUALLY FROM THE OPERATOR CONTROL PANEL, AND VERIFY THAT THE MACHINE POWERS DOWN WITHOUT ABNORMAL POWER CHECKS. POWER THE 3705 ON AND VERIFY THAT IT POWERS ON WITHOUT ANY POWER CHECKS.

22. INSTALLATION OF KICK PLATES. SEE DIAGRAM 5993106 IN SHIPPING GROUP.

23. LOCATE REMOTE SHIPPING GROUP (FEAT BM 1851867), REMOVE LOGIC PAGE TM020 (PN 2305606) AND PLACE IN FRONT OF REMOTE LOGIC BINDER VOLUME 17.

24. IF THE 3706 IS BEING ATTACHED TO A 3705-I EC 314416 MUST BE INSTALLED ON THE 3705 FOR THE TYPE 3 SCANNER TO FUNCTION. THE NECESSARY REWORK IS AS FOLLOWS:

BOARD-01A-B3 PN-5997402 PREVIOUS EC-310262 PRESENT EC-314416

DELETE				ADD				
DELETE PROBE	DELETE CARD	PINS IN NET	NET IMAGE AA002DM7	ADD	WIRE TYPE	LGTH	FROM	TO
1		M5D05	P ⌐	XXX	YEL	15.0 (381)	A4D09	T5B08
1		A4D09	P ⌙					
			CP001GG2	XXX	YEL	15.0 (381)	A5D09	T4D04
2	0		TOTALS	2				

ADD LABEL TO BOARD INDICATING EC 314416 IS INSTALLED.

25. 3705 JUMPERING AND CARD REFERENCE INFORMATION

LOGIC REFERENCE					
FEATURE	BOARD JUMPERS	CARD JUMPERS	TERMINATOR CARDS	SOCKET LISTING	CARD SUBSTITUTION
CHANNEL ADAPTERS					
CA1	RA052	RA050-RA052	RA001	RA000	RA000A1
CA2	QA070	QA070-QA071	QA001	QA000	
CA3	SA070	SA070-SA071	SA001	SA000	
CA4	PA048	PA048	PA001	PA000	
DUMMY A4 BOARD	(SEE [1])				
COMMUNICATIONS SCANNERS					
CS1				RA000	
CS2			TA000*	TA000	TA000A1
CS3	TE262		TD000	TE000, TF000	
LIBS	V*002 *:REFER X:RFFER	V*00X TO SPECIFIC TO SPECIFIC	V*002 LIB TYPE LIB TYPE	V*000	V*000
CCU	AJ001-AJ003			DZ001-DZ002	DZ001A
STORAGE					
16K-BSM	SR229	SR254	SR227	SR227	
32K-BSM	SR200	SR254	SR200	SR224	
FET	MM000, YZ195			MM000	
REMOTE PROGRAM LOADER				GA000(MOD I) GE000(MOD II)	
POWER CONTROL	YZ111			YZ099	YZ099A

[1] JUMPER A4C2D09 TO A4C4D09 AND A4B3B10 TO A4B5B12 (SEE AB003)

	LOGIC REF 3705-I	LOGIC REF 3705-II
PRIME POWER JUMPERS	YZ003, YZ013, YZ015 YZ023, YZ071, YZ073	YZ003, YZ013, YZ023 YZ071, YZ073, YZ075

26.0 INSTALLATION OF CHANNEL ADAPTER SWITCHES AND ROS REQUIREMENTS

THIS SECTION IS REQUIRED WHEN INSTALLING THE 1ST EXPANSION FRAME WITH A CHANNEL ADAPTER OR ADAPTERS TYPE 4 TO AN ALREADY INSTALLED 3705.

ONLY ROS B/M NUMBERS ARE MENTIONED. FOR ROS P/N'S SEE THE YZ000A PAGES, SECTION 4.0. ALL PANEL REFERENCES USE THE ENGLISH LANGUAGE GROUP AND MUST BE APPROPRIATELY CONVERTED.

26.1 EXAMINE THE FINAL CHANNEL CONFIGURATION CHART BELOW AND PERFORM ONLY THOSE OPERATIONS PERTAINING TO YOUR FINAL CHANNEL ADAPTER TYPE 4 CONFIGURATION.

FRAME BOARD POSITION	3705		3705 1ST EXPANSION FRAME		
	01A - B1	01A - A4	02A - B4	02A - A4	SECTION REQUIRED
CONFIGURATION 1		CA - 4 B/M 1749611		CA - 4 B/M 1749616	26.3 ONLY
CONFIGURATION 2		CA - 4 B/M 1749611	CA - 4 B/M 1648283	CA - 4 B/M 1749616	26.4 ONLY
CONFIGURATION 3	CA - 4 B/M 1648282	CA - 4 B/M1749611		CA - 4 B/M 1749616	26.5 ONLY
CONFIGURATION 4	CA - 4 B/M 1648282	CA - 4 B/M 1749611	CA - 4 B/M 1648283	CA - 4 B/M 1749616	26.6 ONLY

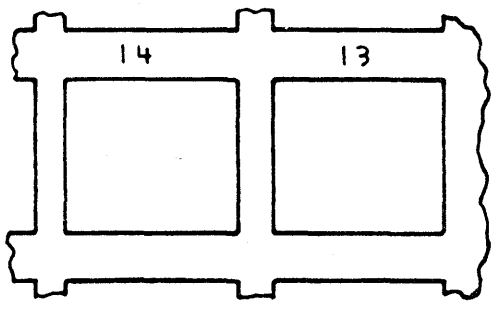
26.2 SWITCH MOUNTING PLATE EC LEVEL

CHECK SWITCH POSITIONS 13 AND 14 FROM THE WIRING SIDE OF THE OPERATOR'S PANEL. IF RECTANGULAR HOLES ARE PRESENT; B/M 1785218 MUST BE INSTALLED. B/M 1785218 CONTAINS A NEW SWITCH PLATE, P/N 1785281, WITH ROUND HOLES. REFER TO THE FIGURE BELOW TO DIFFERENTIATE BETWEEN AN OLD AND NEW SWITCH PLATE. IF A NEW SWITCH PLATE IS NOT REQUIRED, RETURN TO THE APPROPRIATE SECTION. IF A NEW SWITCH PLATE IS REQUIRED, IGNORE THE ACCOMPANYING INSTRUCTIONS SHIPPED WITH B/M 1785218 AND PROCEED.

TO INSTALL THE NEW SWITCH PLATE, P/N 1785281, FIRST REMOVE ALL THE WIRES FROM THE SWITCHES AND INDICATORS. USE CARE TO AVOID DAMAGING THE TERMINALS. TRANSFER ALL HARDWARE TO THE NEW SWITCH PLATE EXCEPT THE LENSES AND PUSHBUTTONS (IT IS EASIER TO REMOUNT THE SWITCH PLATE WITHOUT THESE) INCLUDING THE HARDWARE FROM THE NEW LANGUAGE FEATURE B/M'S REQUIRED (REFER TO THE APPROPRIATE SECTION). A CHART IS PROVIDED IN THE APPROPRIATE SECTION TO REWIRE THE PANEL.

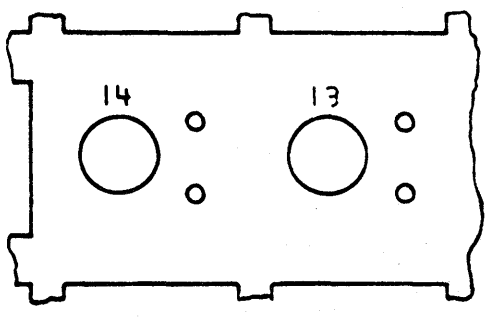
RETURN TO THE APPROPRIATE SECTION.

OLD STYLE PLATE (WIRING SIDE)



SEE APPROPRIATE SECTION TO LOCATE POSITIONS 13 AND 14

NEW STYLE PLATE (WIRING SIDE)

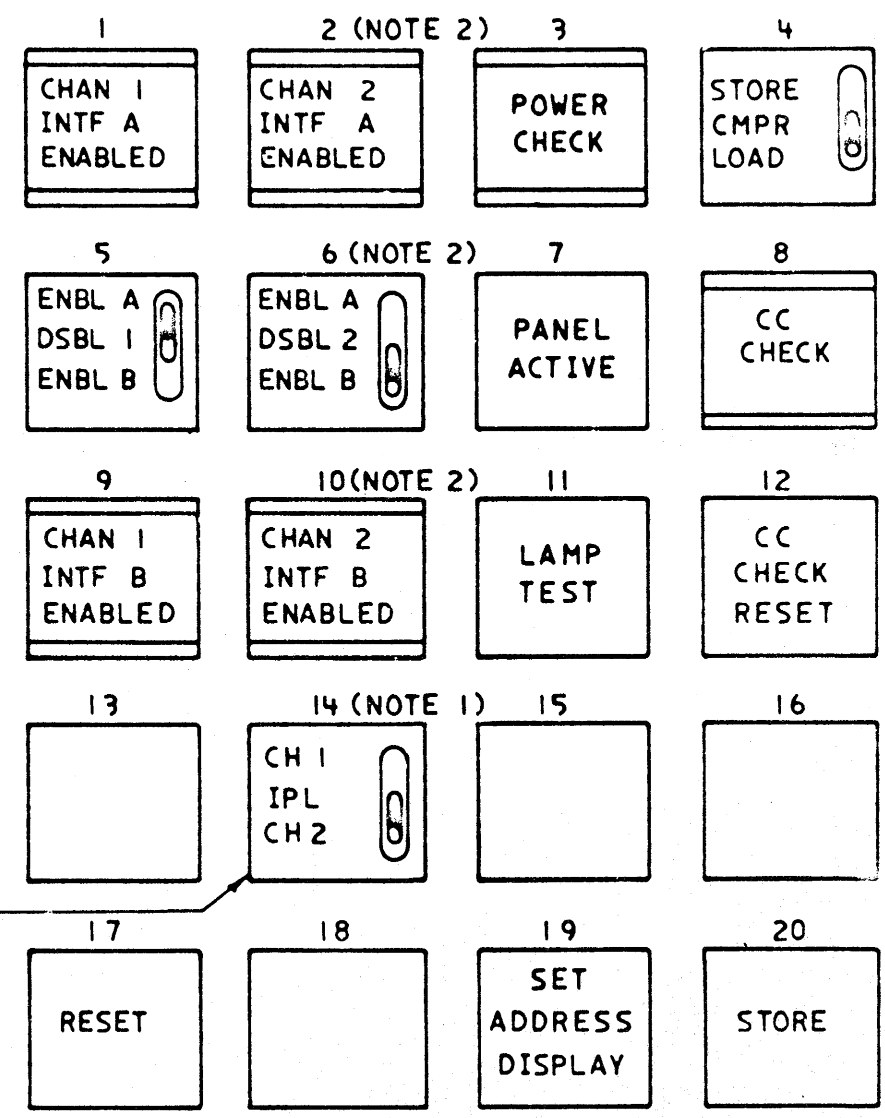


26.3 PANEL REWORK FOR CA-4'S IN THE 01A-A4 AND 02A-A4 BOARD POSITIONS

26.3.1 EXAMINE THE FINAL CONFIGURATION OF THE OPERATOR'S PANEL BELOW. PERFORM THE OPERATIONS INDICATED BY THE NOTES. WHEN REMOVING WIRES, USE CARE TO AVOID DAMAGE TO THE TERMINALS. READ ALL NOTES THAT APPLY TO AVOID DUPLICATION OF EFFORT. MOUNT ALL SWITCHES WITH THE SWITCH KEYWAY UP.

READ NOTE 1 BELOW. IF SECTION 26.2 APPLIES, PERFORM THE OPERATIONS UNDER 26.2 AT THIS TIME. IF 26.2 DOES NOT APPLY, REMOVE THE SWITCH PLATE. DO NOT REMOVE ANY WIRES AT THIS TIME. REMOVE ALL LENSES AND PUSHBUTTONS BEFORE ATTEMPTING REINSTALLATION AS IT WILL MAKE IT EASIER TO REMOUNT THE SWITCH PLATE.

PERFORM THE REWORK INDICATED BY THE NOTES.

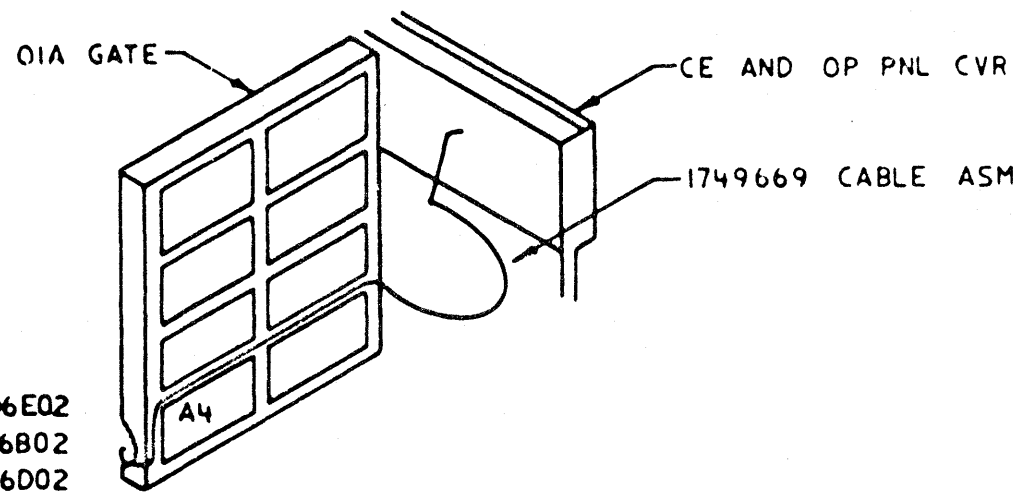


INSTALL THE IPL SOURCE SWITCH ONLY IF N-CHANNEL ROS, B/M 1648305, IS NOT TO BE INSTALLED AS PART OF THIS 1ST EXPANSION FRAME INSTALLATION. IF AN IPL SOURCE SWITCH IS TO BE INSTALLED, TYPE 1 ROS, B/M 5997484, IS REQUIRED.

NOTE 1: EITHER N-CHANNEL ROS, B/M 1648305, OR AN IPL SOURCE SWITCH, B/M 1750524 (ENG), B/M 1648366 (FR) OR B/M 1648367 (GER), WAS SHIPPED WITH THIS 1ST EXPANSION FRAME. IF AN IPL SOURCE SWITCH WAS SHIPPED, DO SECTION 26.2 AND RETURN HERE. LOCATE THE PROPER IPL SOURCE SWITCH B/M, IGNORE ANY ACCOMPANYING INSTRUCTIONS AND INSTALL THE SWITCH AND THE CABLE, P/N 1749669, ACCORDING TO THE FIGURE ABOVE AND ON THE NEXT PAGE. THE LENS HOLDER IN POSITION 15 WILL HAVE TO BE REMOVED TO INSTALL THE SWITCH IN POSITION 14. THE CABLE GOES FROM THE IPL SOURCE SWITCH TO THE 01A-A4 BOARD, PINS D6E02, E6B02 AND E6D02 (SEE NEXT PAGE). IF AN IPL SOURCE SWITCH IS NOT TO BE INSTALLED, POSITION 14 WILL REMAIN BLANK. USE THE BLANK AND TWO SCREWS REMOVED FROM POSITION 6 FOR POSITION 13 IF A NEW SWITCH PLATE WAS INSTALLED. TYPE 1 ROS IS CONCURRENT WITH AN IPL SOURCE SWITCH, B/M 5997484.

NOTE 2: B/M 5182875 (ENG), B/M 5182876 (FR) OR B/M 5182877 (GER) SUPPLIES THE PARTS FOR POSITIONS 2,6 AND 10. THE LENS HOLDER IN POSITION 11 WILL HAVE TO BE REMOVED TO INSTALL THE SWITCH IN POSITION 6.

IPL SOURCE SWITCH CABLE ROUTING

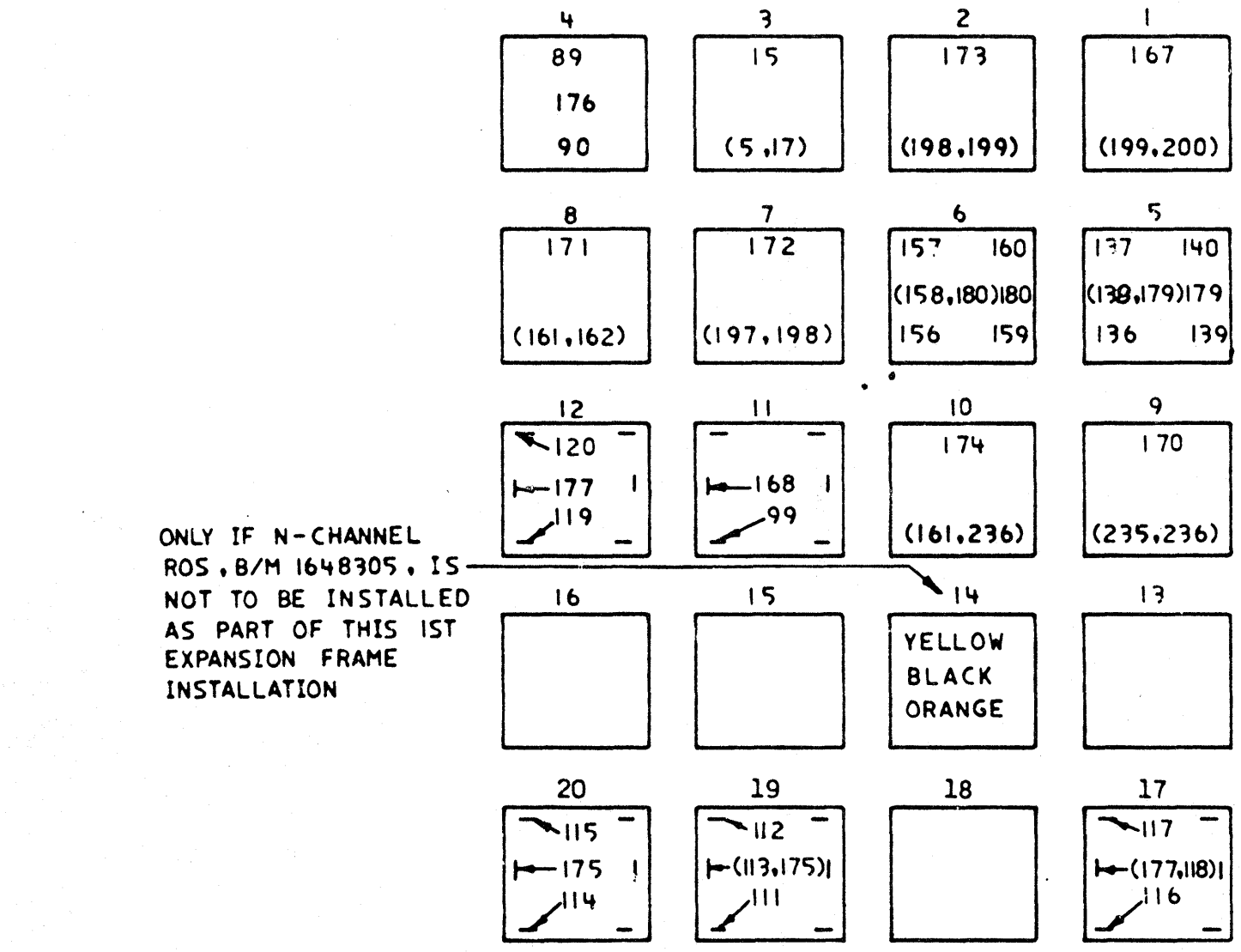


26.3.2 REINSTALL THE SWITCH PLATE

26.3.3 INSTALL THE LENSES AND PUSHBUTTONS, REFERENCING THE FIGURE ON THE PREVIOUS PAGE.

26.3.4 REWIRE THE PANEL ACCORDING TO THE FIGURE BELOW. ONLY THE WIRING FOR POSITIONS 2,6,10 AND 14 (14 ONLY IF AN IPL SOURCE SWITCH WAS INSTALLED) HAS BEEN AFFECTED. THE WIRES TO BE USED ARE PRESENTLY TAPED.

PANEL (WIRING SIDE)



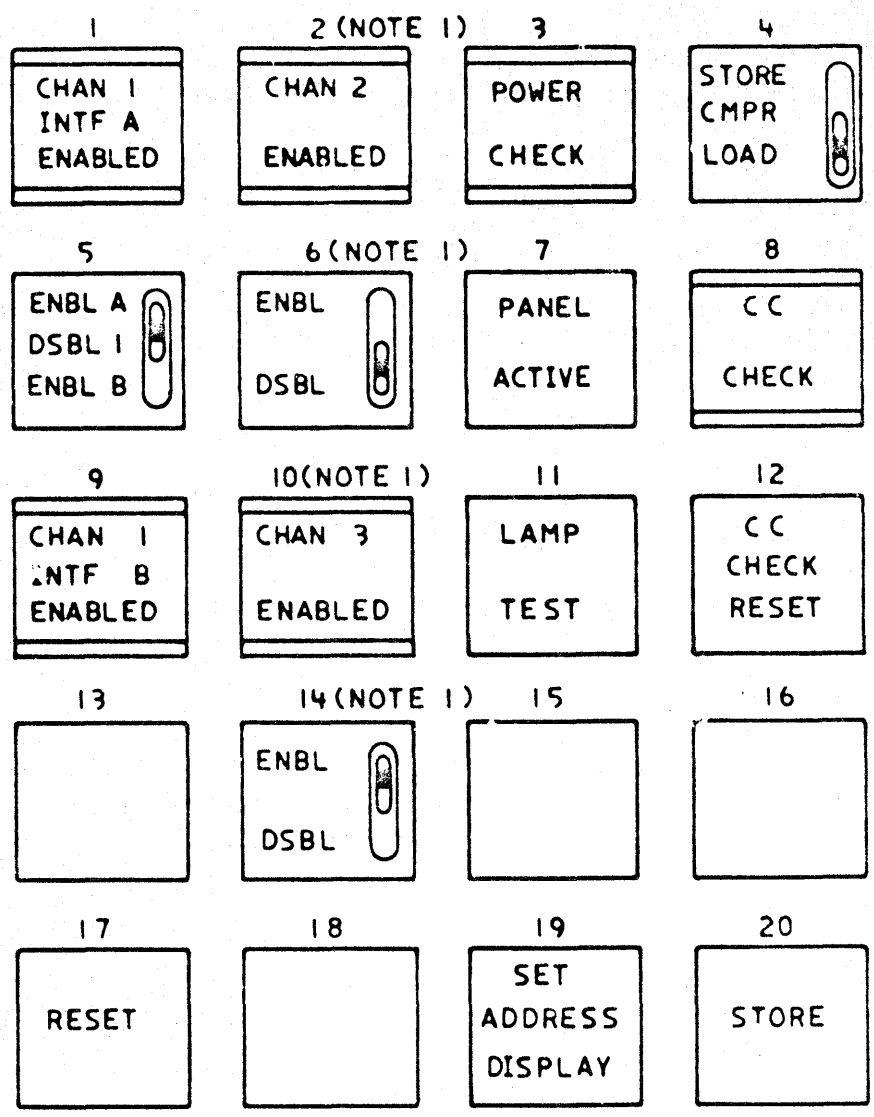
26.3.5 THIS COMPLETES THE PANEL REWORK. RETURN TO YZ000 INSTALLATION FLOW CHART.

26.4 PANEL REWORK FOR CA-4'S IN THE 01A-A4,02A-B4 AND 02A-A4 BOARD POSITIONS.

26.4.1 EXAMINE THE FINAL CONFIGURATION OF THE OPERATOR'S PANEL BELOW. PERFORM THE OPERATIONS INDICATED BY THE NOTE. WHEN REMOVING WIRES, USE CARE TO AVOID DAMAGE TO THE TERMINALS. MOUNT ALL SWITCHES WITH THE SWITCH KEYWAY UP.

AT THIS TIME, PERFORM THE OPERATIONS INDICATED BY SECTION 26.2 AND PROCEED DIRECTLY TO THE NOTE AFTER COMPLETING 26.2, IF IT IS APPLICABLE. IF 26.2 IS NOT APPLICABLE, REMOVE THE SWITCH PLATE. DO NOT REMOVE ANY WIRES AT THIS TIME. REMOVE ALL LENSES AND PUSHBUTTONS BEFORE ATTEMPTING REINSTALLATION AS IT WILL MAKE IT EASER TO REMOUNT THE SWITCH PLATE.

PERFORM THE REWORK INDICATED BY THE NOTE.



NOTE 1: B/M 1648334 (ENG), B/M 1648335 (GER) OR B/M 1648336 (FR) SUPPLIES THE PARTS FOR POSITIONS 2,6,10 AND 14. THE LENS HOLDERS IN POSITIONS 7 AND 15 WILL HAVE TO BE REMOVED IN ORDER TO INSTALL THE SWITCHES IN POSITIONS 6 AND 14. IF A NEW SWITCH PLATE WAS INSTALLED, USE THE BLANK AND 2 SCREWS REMOVED FROM POSITION 6 FOR POSITION 13.

26.4.2 REINSTALL THE SWITCH PLATE.

26.4.3 INSTALL THE LENSES AND PUSHBUTTONS, REFERENCING THE FIGURE ABOVE.

26.4.4 REWIRE THE PANEL ACCORDING TO THE FIGURE ON THE THIS PAGE. ONLY THE WIRING FOR POSITIONS 2,6,10 AND 14 HAS BEEN AFFECTED. THE WIRES TO BE USED ARE PRESENTLY TAPED.

PANEL (WIRING SIDE)

4	3	2	1
89 176 90	15 (5,17)	173 (198,199)	167 (199,200)
8	**7**	**6**	**5**
171 (161,162)	172 (197,198)	156 (158,180) 157	137 140 (138,179) 179 136 139
12	**11**	**10**	**9**
120 177 119	168 99	174 (161,236)	170 (235,236)
16	**15**	**14**	**13**
		160 180 159	
20	**19**	**18**	**17**
115 175 114	112 (113,175) 111		117 (177,118) 116

26.4.5 N-CHANNEL ROS, B/M 1648305, IS REQUIRED.

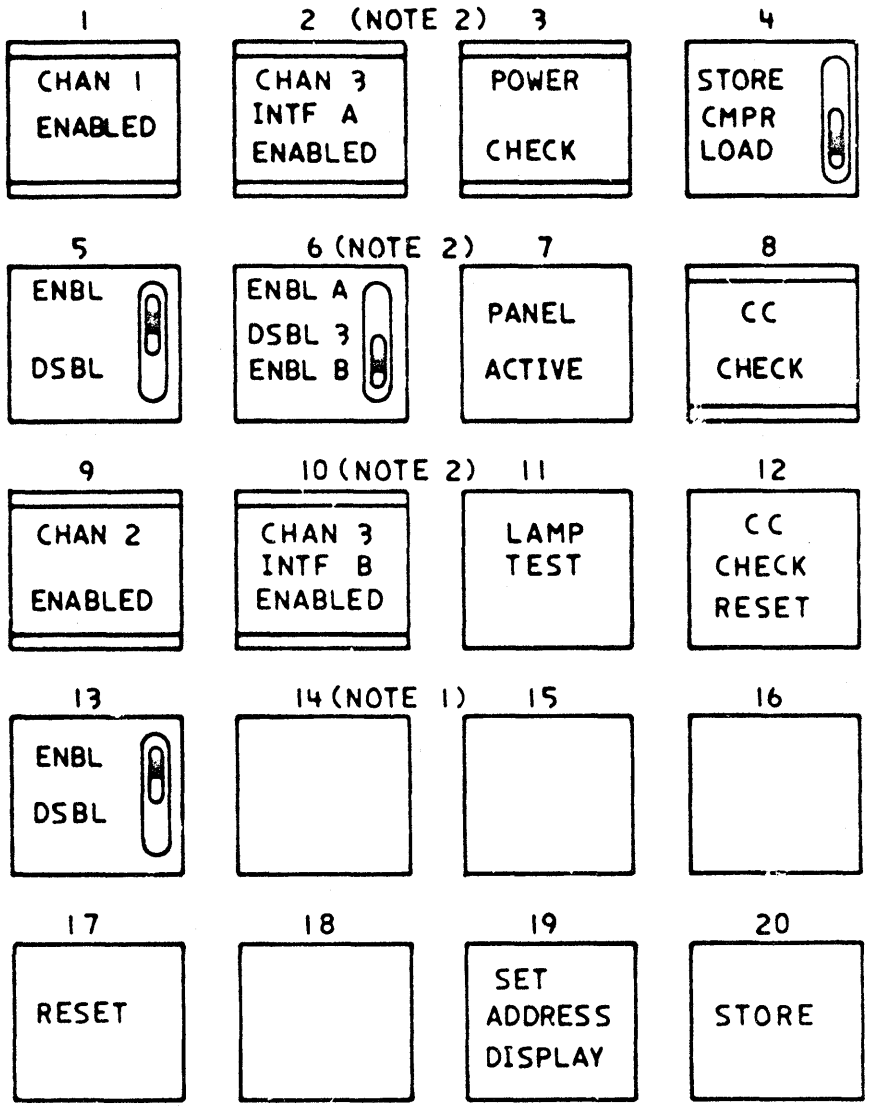
26.4.6 THIS COMPLETES THE PANEL REWORK. RETURN TO YZ000 INSTALLATION FLOW CHART.

26.5 PANEL REWORK FOR CA-4'S IN THE 01A-B1, 01A-A4 AND 02A-A4 BOARD POSITIONS.

26.5.1 EXAMINE THE FINAL CONFIGURATION OF THE OPERATOR'S BELOW. PERFORM THE OPERATIONS INDICATED BY THE NOTES. A CHART IS INCLUDED ON THE NEXT PAGE TO REWIRE THE PANEL. READ ALL NOTES THAT APPLY TO AVOID DUPLICATION OF EFFORT. MOUNT ALL SWITCHES WITH THE SWITCH KEYWAY UP.

REMOVE THE SWITCH PLATE. DO NOT REMOVE ANY WIRES AT THIS TIME. REMOVE ALL LENSES AND PUSHBUTTONS BEFORE ATTEMPTING REINSTALLATION AS IT WILL MAKE IT EASIER TO REMOUNT THE SWITCH PLATE.

PERFORM THE REWORK INDICATED BY THE NOTES.



NOTE 1: IF AN IPL SOURCE SWITCH IS INSTALLED IN POSITION 14, IT MUST BE REMOVED ALONG WITH THE ASSOCIATED CABLE. THE CABLE HAS ORANGE, BLACK AND YELLOW LEADS AND GOES TO THE 01A-B1 BOARD, PINS D6E02, E6B02 AND E6D02. THE LENS HOLDER IN POSITION 15 HAS TO BE REMOVED IN ORDER TO REMOVE THE SWITCH IN 14 (IF PRESENT). USE THE BLANK AND SCREWS FROM POSITION 6 FOR POSITION 14, IF REQUIRED. THE IPL SOURCE SWITCH HOLDER READS:

CH1
IPL
CH2

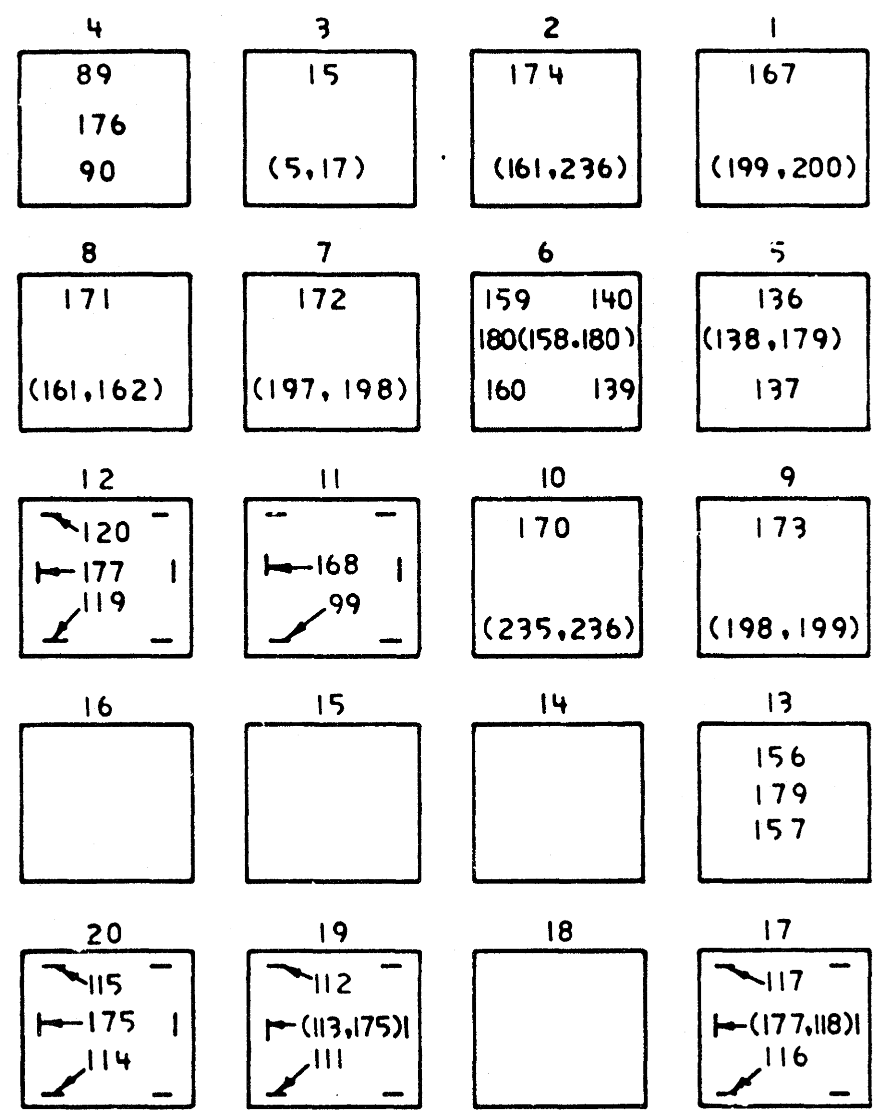
NOTE 2: B/M 1648331 (ENG), B/M 1648332 (GER) OR B/M 1648333 (FR) SUPPLIES THE PARTS FOR POSITIONS 2,6 AND 10. THE LENS HOLDER IN POSITION 11 WILL HAVE TO BE REMOVED TO INSTALL THE SWITCH IN POSITION 6.

26.5.2 REINSTALL THE SWITCH PLATE

26.5.3 INSTALL THE LENSES AND PUSHBUTTONS, REFERENCING THE FIGURE ON THE PREVIOUS PAGE.

26.5.4 REWIRE THE PANEL ACCORDING TO THE FIGURE BELOW. ONLY THE WIRING FOR POSITIONS 2, 6 AND 10 HAS BEEN AFFECTED. THE WIRES TO BE USED ARE PRESENTLY TAPED.

PANEL (WIRING SIDE)



26.5.5 N-CHANNEL ROS, B/M 1648305, IS REQUIRED.

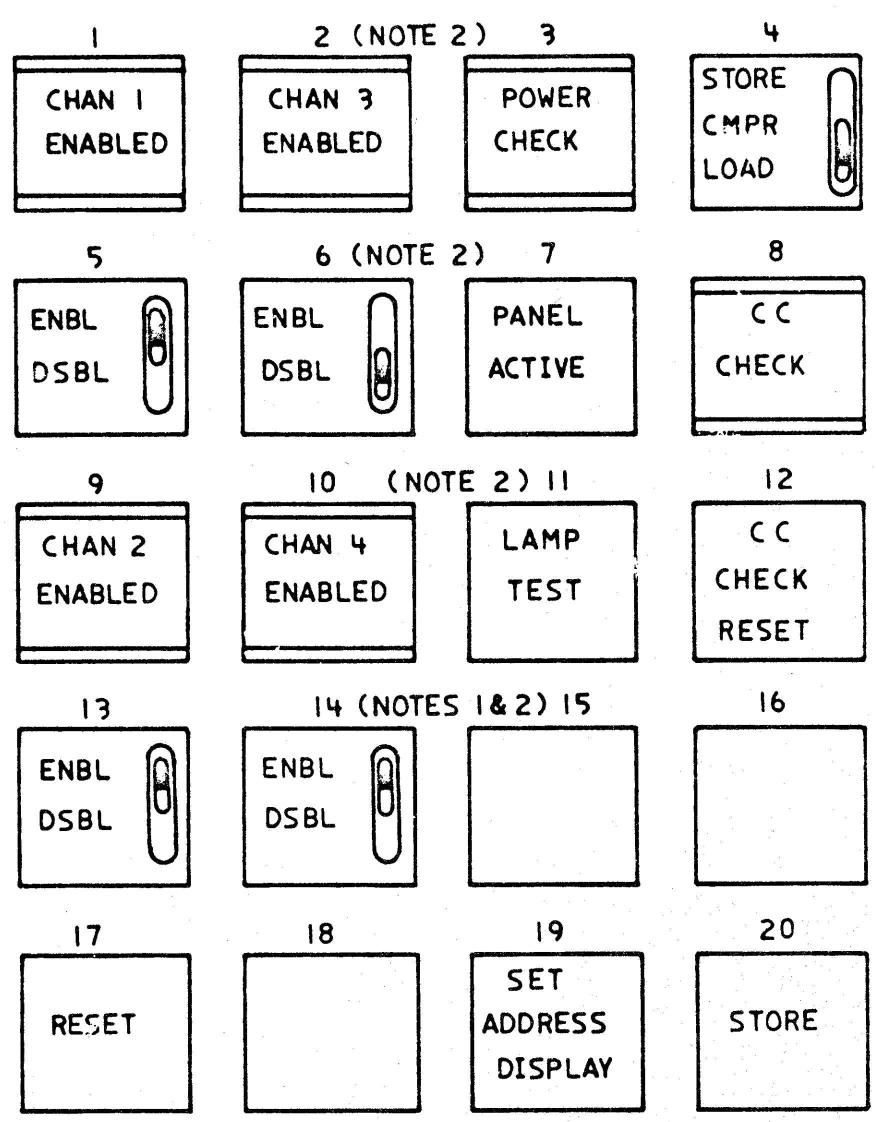
26.5.6 THIS COMPLETES THE PANEL REWORK. RETURN TO YZ000 INSTALLATION FLOW CHART.

26.6 PANEL REWORK FOR CA-4'S IN THE 01A-B1, 01A-A4, 02A-B4 AND 02A-A4 BOARD POSITIONS.

26.6.1 EXAMINE THE FINAL CONFIGURATION OF THE OPERATOR'S PANEL BELOW. PERFORM THE OPERATIONS INDICATED BY THE NOTES. A CHART IS INCLUDED ON THE NEXT PAGE TO REWIRE THE PANEL. READ ALL NOTES THAT APPLY TO AVOID DUPLICATION OF EFFORT. MOUNT ALL SWITCHES WITH THE SWITCH KEYWAY UP.

REMOVE THE SWITCH PLATE. DO NOT REMOVE ANY WIRES AT THIS TIME. REMOVE ALL LENSES AND PUSHBUTTONS BEFORE ATTEMPTING REINSTALLATION AS IT WILL MAKE IT EASIER TO REMOUNT THE SWITCH PLATE.

PERFORM THE REWORK INDICATED BY THE NOTES



NOTE 1: IF AN IPL SOURCE SWITCH IS INSTALLED IN POSITION 14, IT MUST BE REMOVED ALONG WITH THE ASSOCIATED CABLE. THE CABLE HAS ORANGE, BLACK AND YELLOW LEADS AND GOES TO THE 01A-B1 BOARD, PINS D6E02, E6B02 AND E6D02. THE LENS HOLDER IN POSITION 15 HAS TO BE REMOVED IN ORDER TO REMOVE THE SWITCH IN 14 (IF PRESENT). THE IPL SOURCE SWITCH HOLDER READS: CH 1
IPL
CH 2

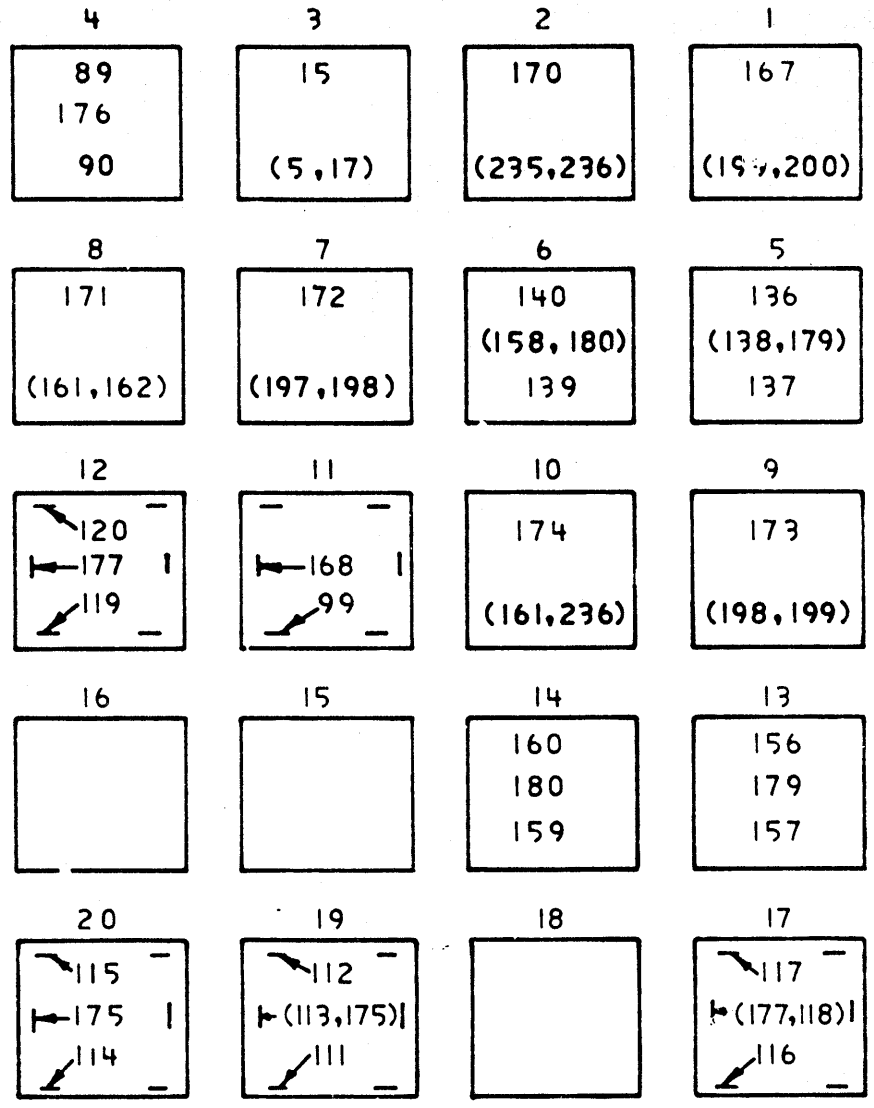
NOTE 2: B/M 1648337 (ENG), B/M 1648338 (GER) OR B/M 1648339 (FR) SUPPLIES THE PARTS FOR POSITIONS 2, 6, 10 AND 14.

26.6.2 REINSTALL THE SWITCH PLATE

26.6.3 INSTALL THE LENSES AND PUSHBUTTONS, REFERENCING THE FIGURE ON THE PREVIOUS PAGE.

26.6.4 REWIRE THE PANEL ACCORDING TO THE FIGURE BELOW. ONLY THE WIRING FOR POSITIONS 2,6,10 AND 14 HAS BEEN AFFECTED. THE WIRES TO BE USED ARE PRESENTLY TAPED.

PANEL (WIRING SIDE)



26.6.5 N-CHANNEL ROS,B/M 1648305, IS REQUIRED.

26.6.6 THIS COMPLETES THE PANEL REWORK. RETURN TO YZOOO INSTALLATION FLOW CHART.

27.0 CDS REFERENCE

A PREPUNCHED CDS IS INCLUDED IN THE SHIPPING GROUP FOR ALL 3705 ORDERS EXCEPT AN MES FOR A 3706. SOME ADDITIONAL INFORMATION HAS TO BE PUNCHED INTO THIS DECK BEFORE IT CAN BE USED. THIS DECK SHOULD BE DUPLICATED BEFORE BEING MODIFIED TO PROVIDE A DECK FOR EACH CHANNEL INTERFACE (UP TO 4) ON THE 3705. THE FOLLOWING INFORMATION SHOULD THEN BE ADDED TO THE DECK(S):

CARD	CARD COL(S)	CONTENTS/DESCRIPTION
1	10-17	NATIVE SUBCHANNEL ADDRESS IN HEX RIGHT JUSTIFIED (EX 0000010A)
	20-21	FEATURE CODE, ENTER ONLY THE CA DEFINED IN COLS 10-17.
	20	HEX 8 1 = STORAGE GREATER THAN 64K 4 1 = NCP USED 2 1 = TYPE 4 CA 1 1 = TYPE 1 CS 8 1 = TYPE 2 CS 4 1 = TYPE 3 CS 2 1 = TYPE 1 CA 1 1 = TYPE 2 OR 3 CA
	30-31	FLAGS
	30	= 4 IF DEVICE SHARED WITH ANOTHER CPU (LEAVE BLANK)
	31	= 4 IF TWO CHANNEL SWITCH IS INSTALLED
	36-39	ESC UNIT ADDRESS IN HEX OF LOWEST EMULATOR LINE ADDRESS (EX 0010). LEAVE BLANK IF CA 2 OR 3 OR MACHINE USES NCP ONLY.
	40-41	HEX NUMBER OF EMULATOR LINE ADDRESSES
	52-67	HEX REPRESENTATION OF THE SYMBOLIC NAME OF THE NCP. LEAVE BLANK IF NO NCP USED.
3	36-37	NSC ADDRESS INTF A FOR THE FIRST CA. MAY BE CA TYPE 1/2/3/4.
	44-45	NSC ADDRESS INTF A FOR THE SECOND CA. MAY BE CA TYPE 2/3/4. LEAVE BLANK IF ONLY ONE CA INSTALLED.
	48-49	NSC ADDRESS INTF A FOR THE THIRD CA TYPE 4. LEAVE BLANK IF TWO OR LESS CA'S.
	52-53	NSC ADDRESS INTF A FOR THE FOURTH CA TYPE 4. LEAVE BLANK IF THREE OR LESS CA'S.

IF A THIRD SCANNER IS INSTALLED ON THE MACHINE, THE SYMBOLIC CDS NAME USED WILL BE CU3705. IF MULTIPLE 3705'S WITH 3 OR MORE SCANNERS ARE CONFIGURED ON THE SAME SYSTEM THEN THIS SYMBOLIC NAME WILL HAVE TO BE CHANGED TO BE UNIQUE FOR EACH 3705.

FRAME POWER SYSTEM INTERMIX (REFERENCE)

THE POWER SYSTEM AND CONTROL FOR THE 3705 AND 3706 HAS BEEN MODIFIED AND WILL BE IN THOSE MACHINES BUILT AFTER 1980. THE POWER TYPE CAN BE DETERMINED BY OBSERVING THE OXD POWER CONTROL GATE. UN-MODIFIED POWER CONTAINS A BOARD WITH MORE THAN 20 CARDS. THE MODIFIED POWER SYSTEM WILL CONTAIN THREE (3) CARDS IN THE 3705 AND TWO (2) CARDS IN THE 3706 CONTROL GATE.

3705 WITH MODIFIED POWER ATTACHED TO 3706(S) WITH UN-MODIFIED POWER:

WHEN ONE OR MORE 3706(S) WITH UN-MODIFIED POWER IS ATTACHED TO A 3705 WITH MODIFIED POWER, RPQ S30251 (B/M 1644026) MUST BE INSTALLED IN THE 3706(S). REFER TO RPQ LOGIC PAGE YZ599 AND THE RPQ INSTRUCTIONS FOR THE REQUIRED WIRING CONNECTIONS.

3705 WITH UN-MODIFIED POWER ATTACHED TO 3706(S) WITH MODIFIED POWER:

WHEN ONE OR MORE 3706(S) WITH MODIFIED POWER IS ATTACHED TO A 3705 WITH UN-MODIFIED POWER, THE SEQUENCE CONTROL CABLE CONNECTIONS WILL BE PER THE FOLLOWING CHART AND WIRING LIST AND NOT PER CHART C ON PAGE 13.

1. PRIME POWER BOX:

ADD JUMPER (P/N 8496460) IN THE 3706 PRIME POWER BOX FROM RELAY K1-A TO K1-L4 (1A INSTEAD OF L4 IN WORLD TRADE COUNTRIES). REFER TO YZ686, SHEET 3, FOR PPB-K1 LOCATION (VOL. 1A PROVIDED WITH THE 3706).

2. OIE PANEL:

(a)

CABLE P/N	TERMINATION - 3705 OIE PANEL	CABLE CARD/WIRE LOC	MODIFIED 3706 LOC
1643775	J2 CABLE CARD	OIE-P2	FIRST EXPANSION
	RY3-10 COM	WIRE 17	
	TIE BACK	WIRE 18	
	TIE BACK	WIRE 19	
1643776	J3 CABLE CARD	OIE-P3	SECOND EXPANSION
	RY6-9 COM	WIRE 17	
	TIE BACK	WIRE 18	
	TIE BACK	WIRE 19	
1643777	J4 CABLE CARD	OIE-P4	THIRD EXPANSION
	RY3-4 COM	WIRE 17	
	TIE BACK	WIRE 19	

(b) REMOVE AND TIE BACK WIRE #137 FROM RY1-2 N/O.
(c) REMOVE JUMPER FROM RY2-4 COM TO RY6-11 COM.
(d) MOVE WIRE #28 FROM RY2-4 N/O TO RY11-1 N/C.
(e) MOVE WIRE #24 FROM RY2-4 COM TO RY11-1 COM.
(f) ADD JUMPER (P/N 1273020) FROM RY6-11 COM TO RY11-1 COM. (PROVIDED ON 3706 SHIP GROUP B/M).

REFER TO YZ301, SHEET 10, FOR THE OIE RELAY AND CONNECTOR LOCATIONS. (VOL 1 PROVIDED WITH THE 3705).

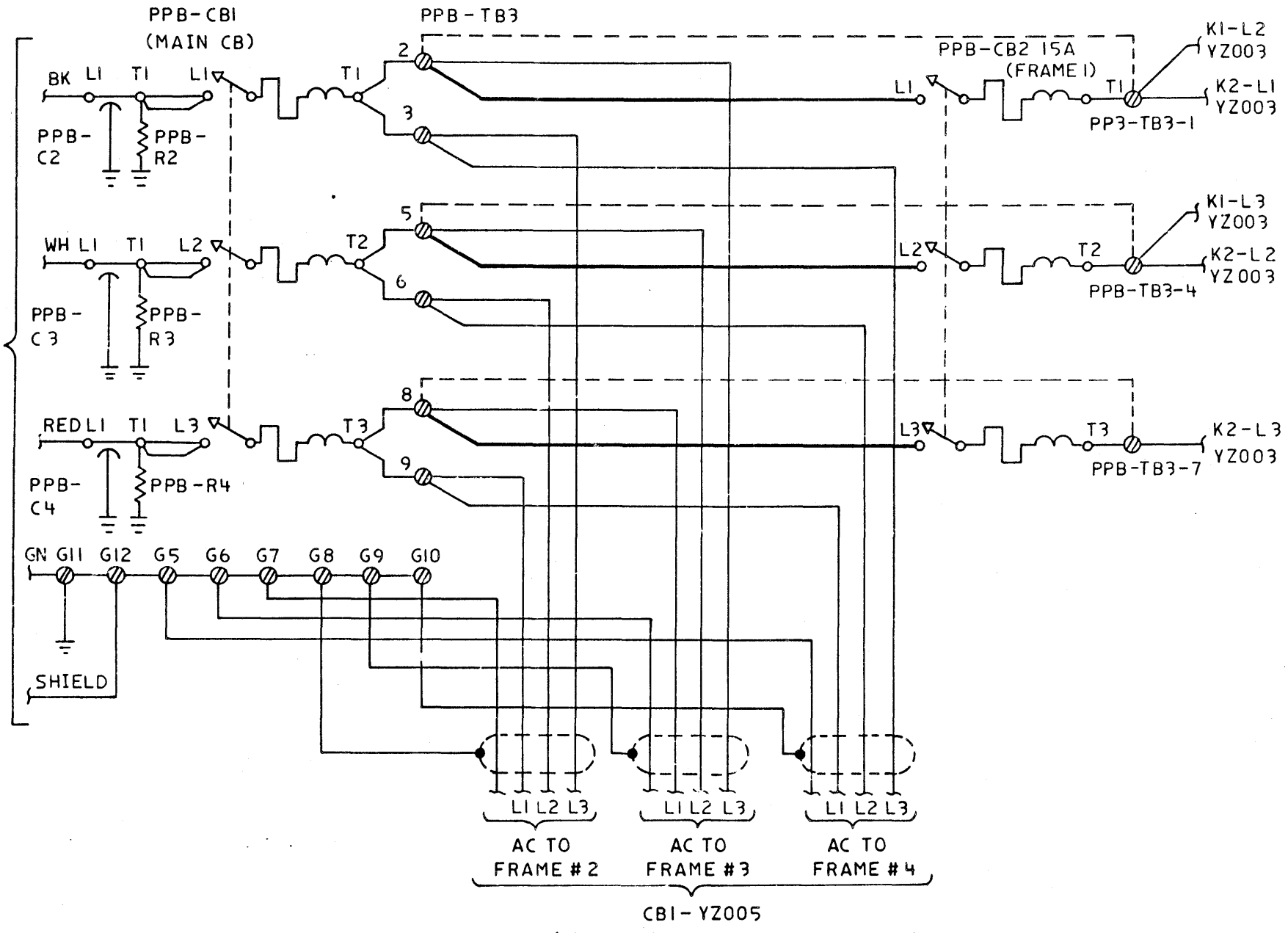
C | 1770710

1770710 | YZ001

DUPLICATE MASTER

NO. OF FRAMES	CB1 RATING	CB2 RATING
1	15A	—
2	30A	15A
3	40A	15A
4	50A	15A

208/230 60HZ
MAIN FRAME



CB1-YZ005
(EXPANSION FRAME LOGIC-VOL 1)

NOTES

1. IF SYSTEM HAS ONLY 1 FRAME DOTTED JUMPERS ARE USED.— WIRES AND CB2 ARE OMITTED.
2. IF SYSTEM HAS MORE THAN 1 FRAME — WIRES AND CB2 ARE USED AND DOTTED JUMPERS ARE OMITTED.

---- SINGLE FRAME WIRING
—— MULTIPLE FRAME WIRING

					DATE	CHANGE NO		DATE	CHANGE NO
NAME	208/230 V 60 HZ (DOM)				SEE EC HISTORY				
	MAIN FRAME				MAR74	310271			
DESIGN	CD	JUL71	TITLE		JUN76	314419			
DETAIL	TS	AUG76		RED	AUG76	315608			
CHECK									
APPROV			CD	JUL71					

SCHEMATIC NO	REVISED SCHEMATIC NO	LOGIC NO
		YZ001

1770710 C

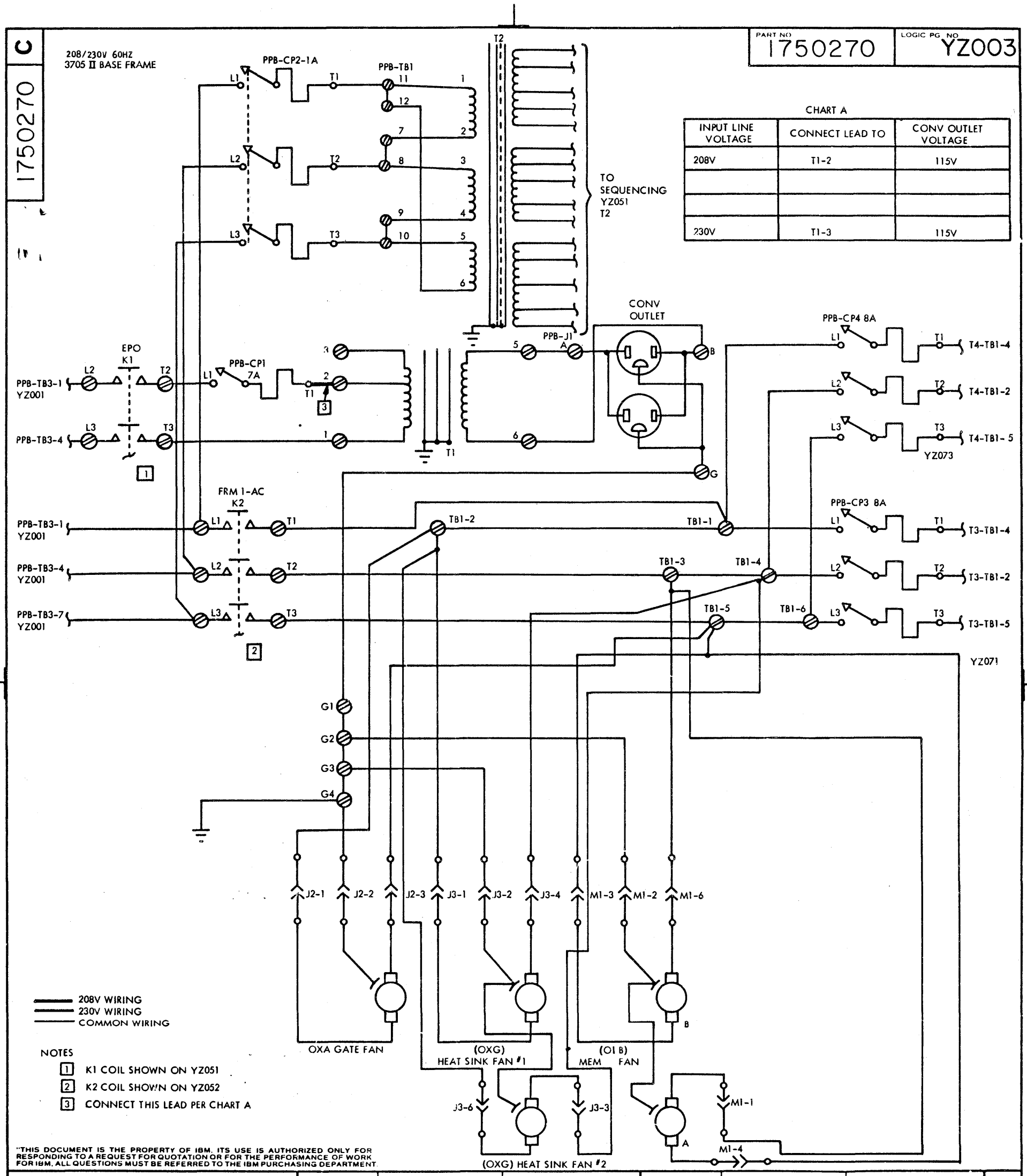
1750270 C

208/230V 60HZ
3705 II BASE FRAME

PART NO 1750270 | LOGIC PG NO YZ003

CHART A

INPUT LINE VOLTAGE	CONNECT LEAD TO	CONV OUTLET VOLTAGE
208V	T1-2	115V
230V	T1-3	115V



NOTES

1. K1 COIL SHOWN ON YZ051
2. K2 COIL SHOWN ON YZ052
3. CONNECT THIS LEAD PER CHART A

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	208/230V 60 HZ (DOM)				MAY76	314419			
	3705 II BASE FRAME								
DESIGN	TS	MAY76	SHT OF						
DETAIL									
CHECK	TS	MAY76	CLASSIFICATION		MUST CONFORM TO ENG SPEC	DEVELOPMENT NO		LOGIC PG NO	
APPRO	TS	MAY76						YZ003	

1750270 C

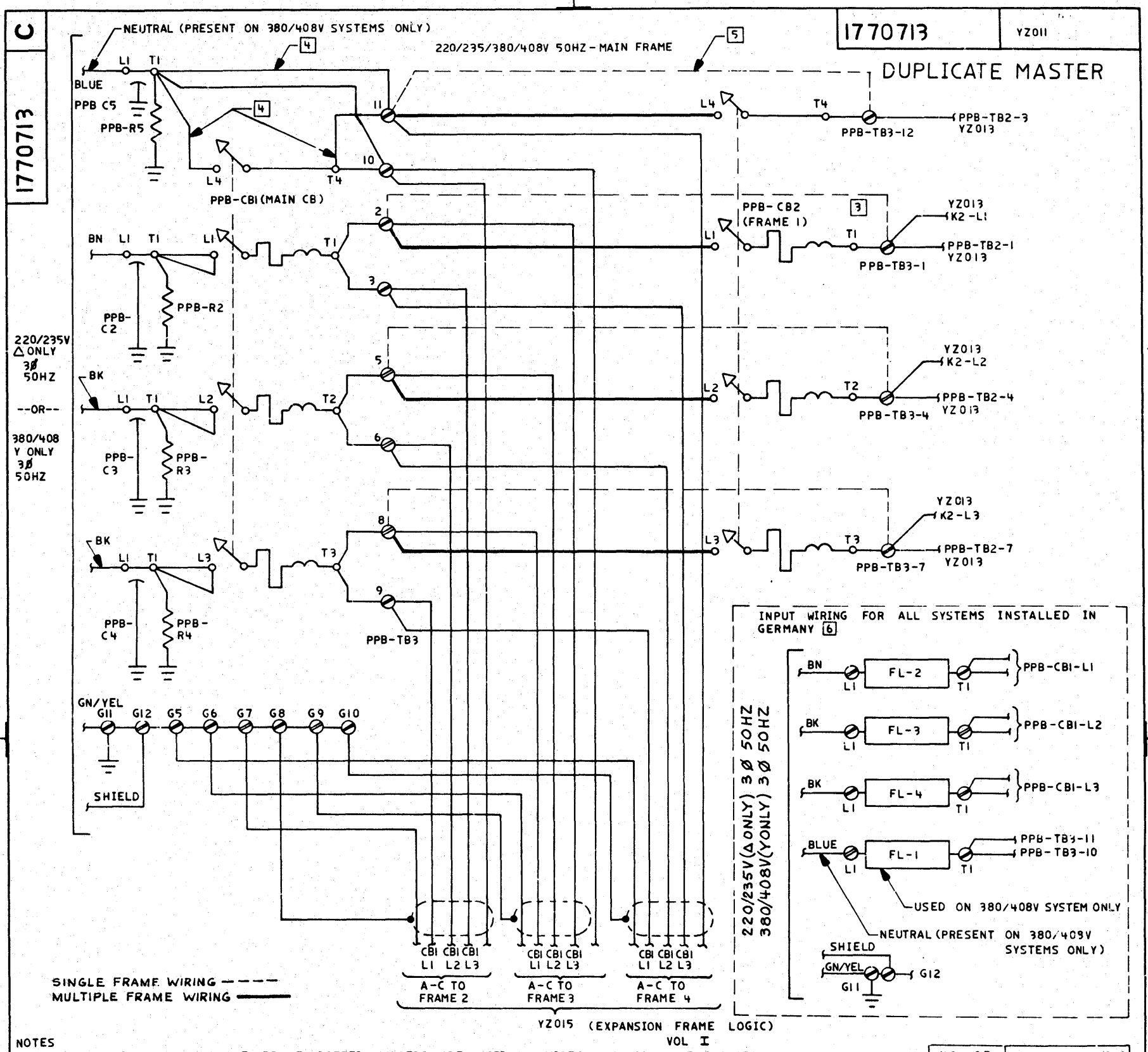
620-0134-1 MRO# 760822204 VERTICAL ELECTRICAL FORMAT ASTROCLOTH N6501

C

1770713

1770713 | YZ011

DUPLICATE MASTER



NOTES

1. IF SYSTEM HAS ONLY ONE FRAME DOTTED JUMPERS ARE USED. —— WIRES AND CB2 ARE OMITTED
2. IF SYSTEM HAS MORE THAN ONE FRAME —— WIRES AND CB2 ARE USED, AND DOTTED JUMPERS ARE OMITTED
3. A FOUR POLE BREAKER IS USED IN 380/408 V SYSTEMS INSTALLED IN FRANCE. A THREE POLE BREAKER IS USED IN ALL OTHER SYSTEMS.
4. FOR 380/408 V SYSTEMS INSTALLED IN FRANCE A FOUR POLE CIRCUIT BREAKER IS USED TO INTERRUPT THE NEUTRAL. IN ALL OTHER SYSTEMS A THREE POLE CIRCUIT BREAKER IS USED AND C5-T1 IS WIRED DIRECTLY TO TB3-10 AND TB3-11.
5. THIS JUMPER IS USED IN ALL 380/408 V SYSTEMS INSTALLED OUTSIDE FRANCE AND IN SINGLE FRAME 380/408 V SYSTEMS INSTALLED IN FRANCE.
6. IN ALL SYSTEMS INSTALLED IN GERMANY EMC FILTERS FL-1, FL-2, FL-3, AND FL-4 ARE USED IN PLACE OF CAPACITORS PPB-C2, PPB-C3, PPB-C4, AND PPB-C5 AND RESISTORS PPB-R2, PPB-R3, PPB-R4, AND PPB-R5. ALL OTHER PRIMARY WIRING IS UNCHANGED.

NO. OF FRAMES	MAIN CB RATING 220/235 Δ	MAIN CB RATING 380/408 Y
1	15A	15A
2	30A	15A
3	40A	30A
4	50A	30A

					DATE	CHANGE NO.	DATE	CHANGE NO.
JOB	MAIN FRAME				SEE E/C HISTORY			
	220/235/380/408 V 50 HZ				MAR74	310271		
DESIGN	CD	JUL71			JUN76	314419		
RELEASE	TS	AUG76		RED	AUG76	315608		
CHECK								
APPR			CD	JUL71				

1770713

C

YZ011

1750271

STANDARDS CODE

CARD CODE 1750271

220/235/380/408V 50 HZ 3705 II BASE FRAME

PPB-CP2 1A

PPB-TB3-12
PPB-TB3-1
PPB-TB3-4
PPB-TB3-7
YZ011

PPB-TB2

PPB-TB1

TO SEQUENCING
YZ051
T2

T2

T3-TBI-7
YZ071

JUMPER CHART (PPB-TB1)	
INPUT LINE VOLTAGE	JUMPER CONNECTIONS
220	7-8, 9-10, 11-12
235	7-8, 9-10, 11-12
380	7-9, 9-12, 12-13
408	7-9, 9-12, 12-13

NOTE 5
K2
NOTE 1

PPB-R8 5Ω 10W
PPB-R9 5Ω 10W
PPB-R10 5Ω 10W
K3

TBI-1
TBI-2

PPB-CP4 8A
T4-TBI-4
T4-TBI-2
T4-TBI-5
YZ073

NOTE 3

PPB-CP3 8A
T3-TBI-4
T3-TBI-2
T3-TBI-5
YZ071

TBI-3
TBI-4
TBI-5
TBI-6

NOTE 2

NOTE 4 K1

J2-1 J2-2 J2-3 J3-1 J3-2 J3-4
J3-3
J3-6

GATE FAN (0XA)
HEAT SINK FAN #1 (0XG)
HEATSINK FAN #2 (0XG)

PPB-J1

220/235V CONV. OUTLET

M1-3 M1-2 M1-6 M1-4 M1-1

MEM FAN (01B)

G3 G4 G1 G2

NOTES

1. THIS JUMPER IS USED ONLY ON 308/408V MACHINES INSTALLED OUTSIDE FRANCE. IT MUST NOT BE USED ON ANY 220/235V MACHINE OR ON ANY 308/408V MACHINE INSTALLED IN FRANCE.
2. 220/235V WIRING SHOWN. THIS LEAD IS CONNECTED TO TBI-1 ON 380/408V SYSTEM
3. 220/235V WIRING SHOWN. THIS LEAD IS CONNECTED TO TBI-5 ON 380/408V SYSTEMS
4. K1 COIL SHOWN ON YZ051
5. K2, K3 COILS SHOWN ON YZ052

PPB-TB2 JUMPER CONN.

380/408V (Y)

220/235V (Δ)

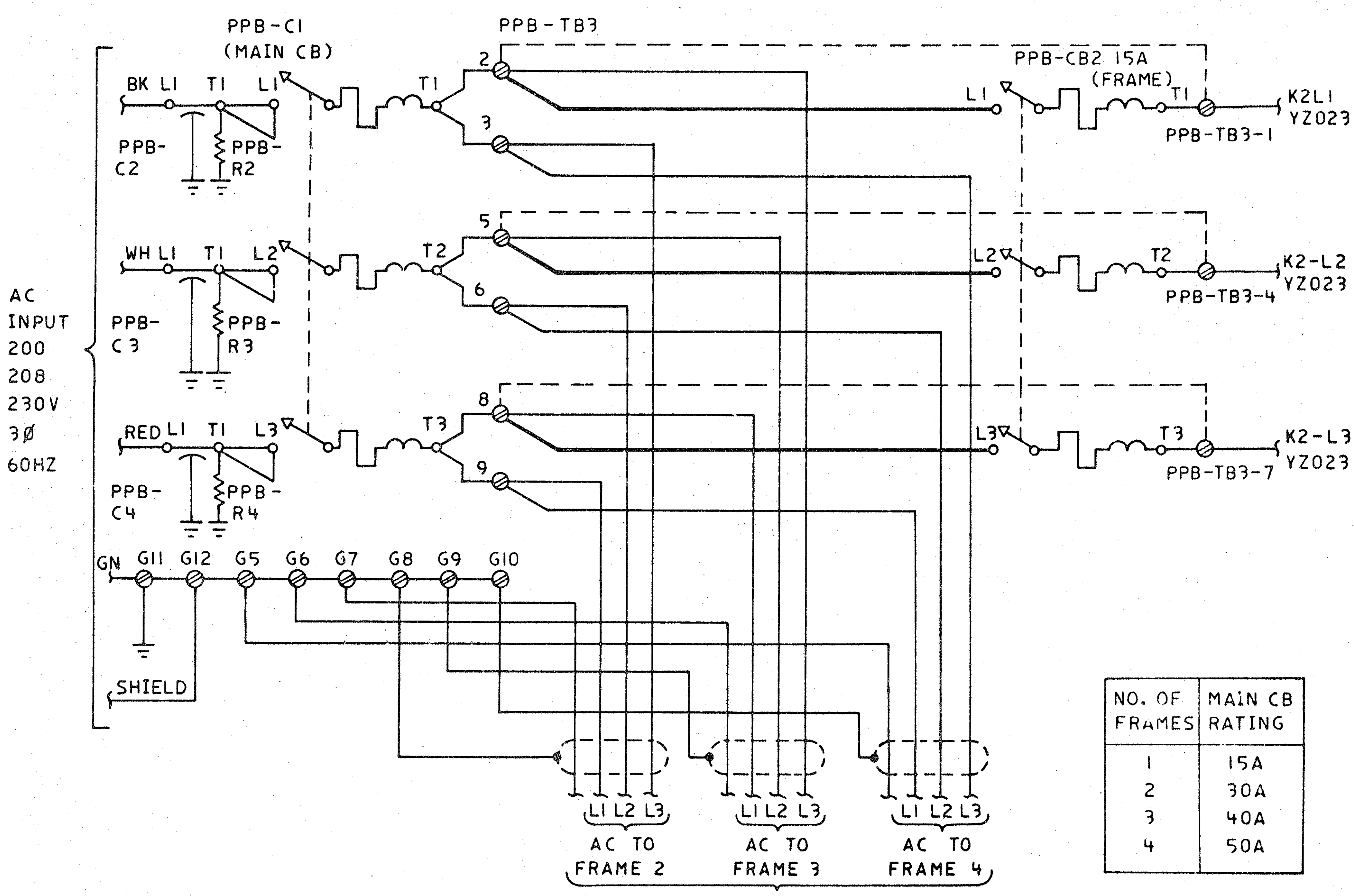
CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.						DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.	1750271
NAME	3705 II BASE FRAME					MAY76	314419						
	220/235/380/408V 50HZ												
DESIGN	TS	MAY76	MODEL									YZ013	
DETAIL			SCALE										
CHECK	TS	MAY76	DRAW										
APPRO	TS	MAY76	CHECK										

C

DUPLICATE MASTER

200V 60HZ JAPAN
208/230V/60HZ WTC (MAIN FRAME)



NO. OF FRAMES	MAIN CB RATING
1	15A
2	30A
3	40A
4	50A

NOTES
1 IF SYSTEM HAS ONLY 1 FRAME DOTTED JUMPERS ARE USED. —— WIRES AND CB2 ARE OMITTED.
2 IF SYSTEM HAS MORE THAN 1 FRAME —— WIRES AND CB2 ARE USED AND DOTTED JUMPERS ARE OMITTED
- - - - SINGLE FRAME WIRING
———— MULTIPLE FRAME WIRING

			DATE	CHANGE NO.
NAME	200 V 60 HZ JAPAN, 208/230 V 60 HZ WTC MAIN FRAME		SEE E.C. HISTORY	
DESIGN	CD	JUL71	RED MAR74	311065
DETAIL	TS	AUG76	JUN76	314419
CHECK			RED AUG76	315608
APPRD		CD JUL71		

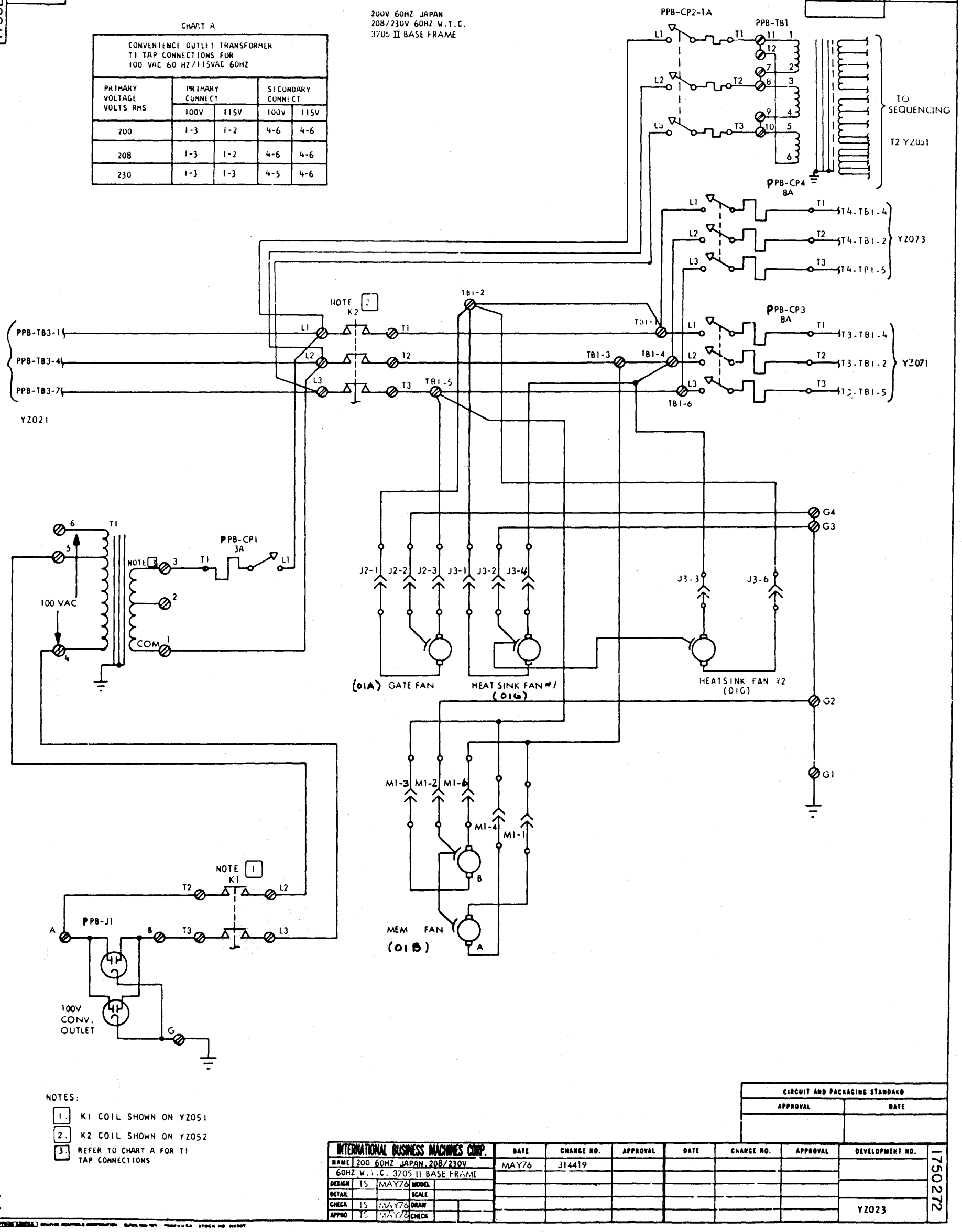
1750272 | STANDARDS CODE

CARD CODE 1750272

CHART A

CONVENIENCE OUTLET TRANSFORMER T1 TAP CONNECTIONS FOR 100 VAC 60 HZ/115VAC 60HZ				
PRIMARY VOLTAGE VOLTS RMS	PRIMARY CONNECT		SECONDARY CONNECT	
	100V	115V	100V	115V
200	1-3	1-2	4-6	4-6
208	1-3	1-2	4-6	4-6
230	1-3	1-3	4-5	4-6

200V 60HZ JAPAN
208/230V 60HZ W.T.C.
3705 II BASE FRAME



NOTES:

1. K1 COIL SHOWN ON YZ051
2. K2 COIL SHOWN ON YZ052
3. REFER TO CHART A FOR T1 TAP CONNECTIONS

C

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

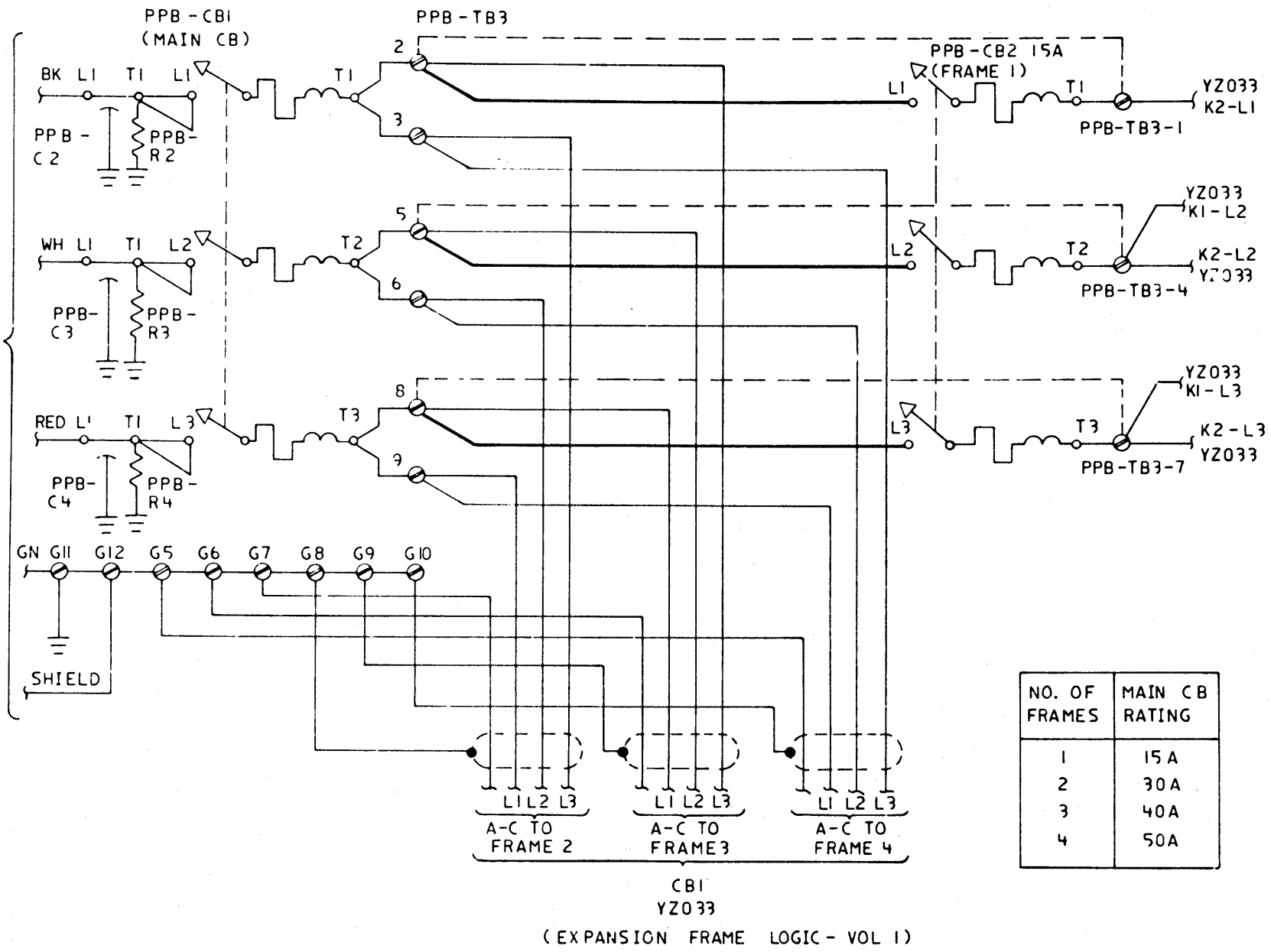
INTERNATIONAL BUSINESS MACHINES CORP.					DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.	1750272
NAME 200 60HZ JAPAN 208/230V 60HZ W.T.C. 3705 II BASE FRAME					MAY76	314419						
DESIGN	TS	MAY76	MODEL									
DETAIL			SCALE								YZ023	
CHECK	TS	MAY76	DRAW									
APPRO	TS	MAY76	CHECK									

C 1770719

1770719 YZ031

DUPLICATE MASTER

200/220V 50HZ JAPAN (MAIN FRAME)



NO. OF FRAMES	MAIN CB RATING
1	15A
2	30A
3	40A
4	50A

NOTES
1 IF SYSTEM HAS ONLY 1 FRAME DOTTED JUMPERS ARE USED. —— WIRES AND CB2 ARE OMITTED.
2 IF SYSTEM HAS MORE THAN 1 FRAME —— WIRES AND CB2 ARE USED AND DOTTED JUMPERS ARE OMITTED

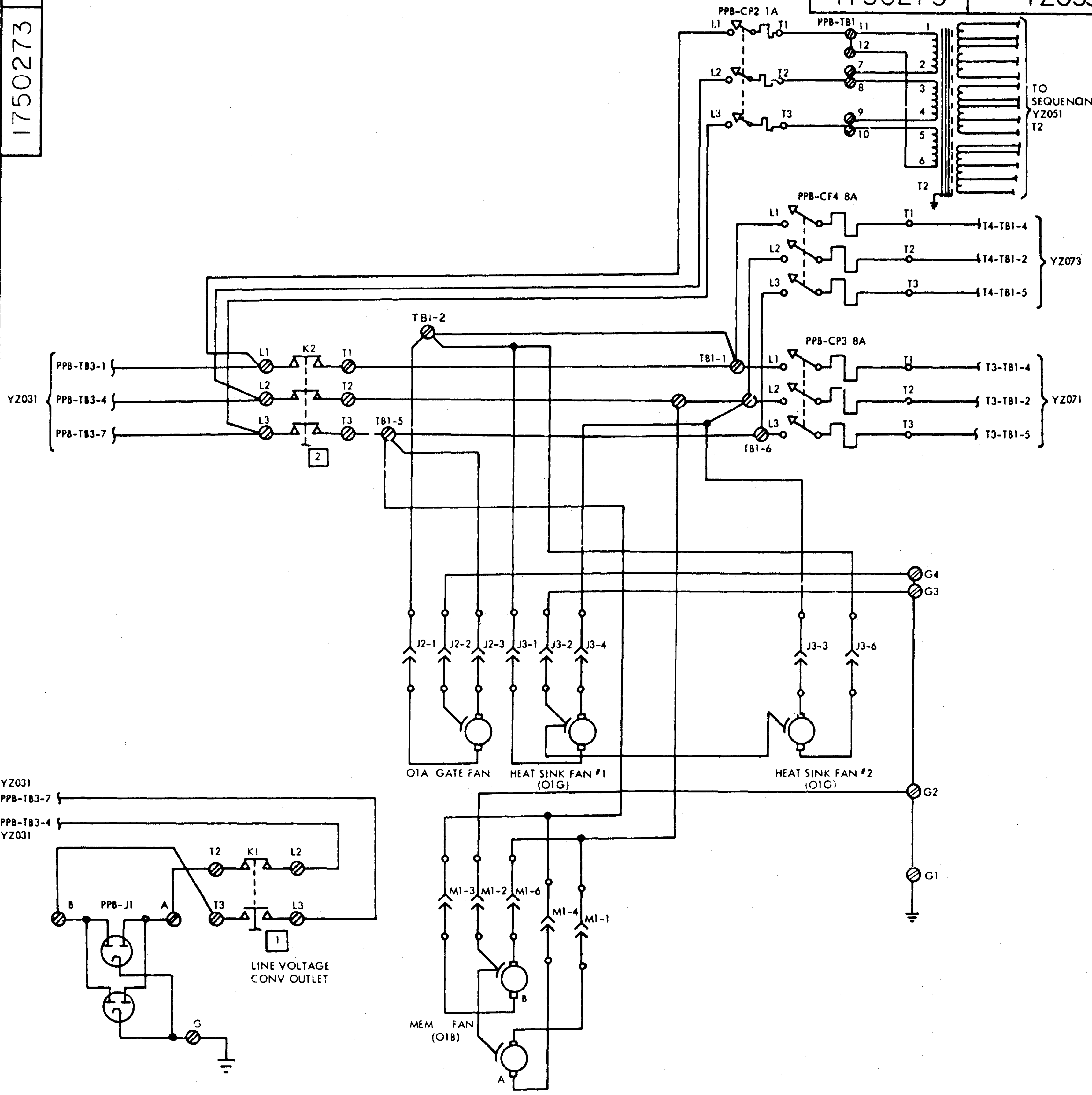
---- SINGLE FRAME WIRING
—— MULTIPLE FRAME WIRING

200/220V 50HZ JAPAN MAIN FRAME						C 1770719
CD JUL71		SEE E/C HISTORY				
TS AUG76	RED	MAR74	310271			
		JUN76	314419			
CD JUL71	RED	AUG76	315608			
				YZ031		

C	1750273

200/220V 50HZ JAPAN - 3705 II BASE FRAME

PART NO	LOGIC PG NO
1750273	YZ033



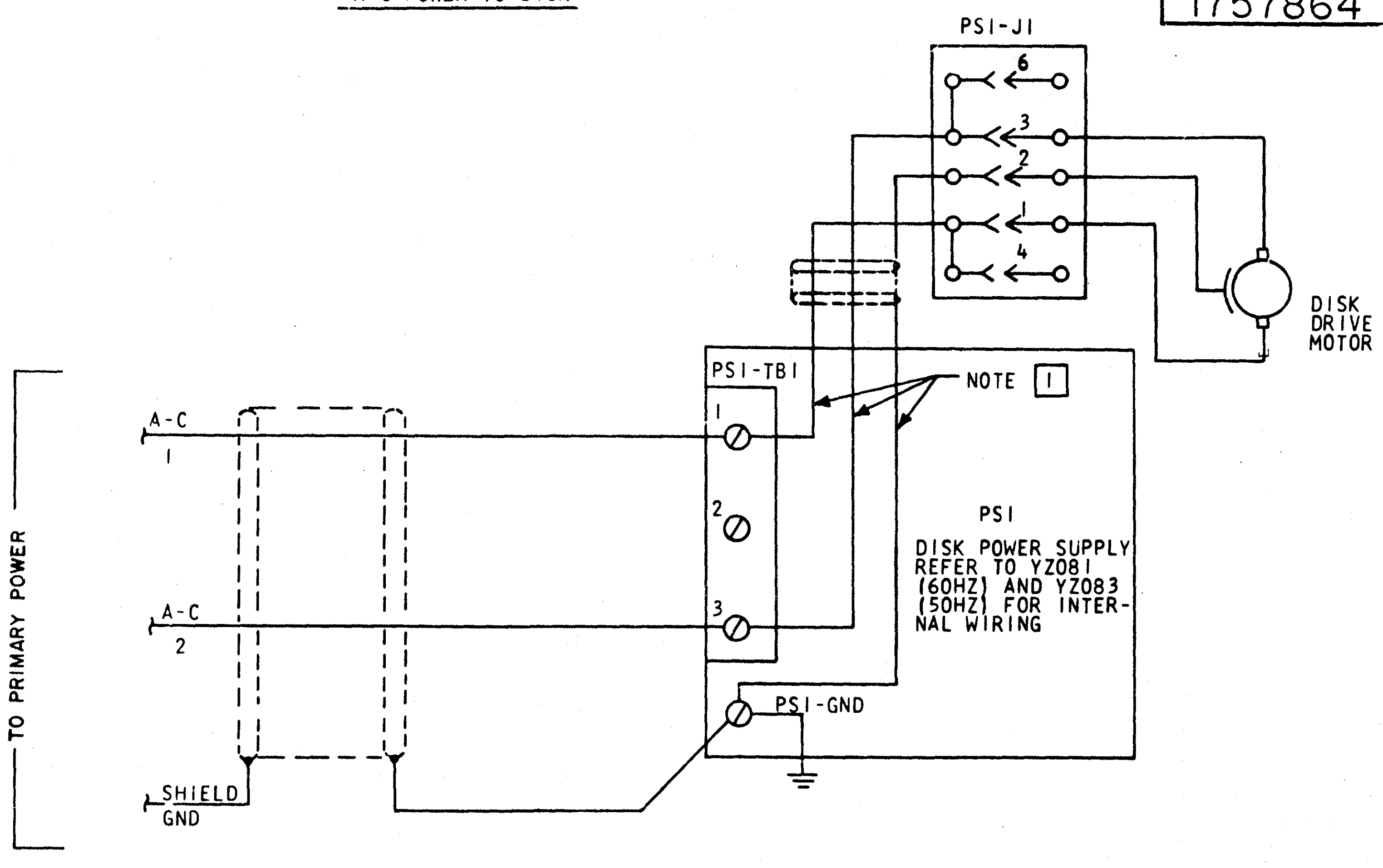
NOTES

1. K1 COIL SHOWN ON YZ051
2. K2 COIL SHOWN ON YZ052

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	200/220V 50 HZ JAPAN				MAY76	314419			
	3705 II BASE FRAME								
DESIGN	TS	MAY76	SHT OF						
DETAIL									
CHECK	TS	MAY76	CLASSIFICATION	MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO	
APPRO	TS	MAY76						YZ033	

1750273	C

A-C POWER TO DISK



PRIMARY POWER BOX CONNECTION CHART

DISK LOCATION	CONNECT A-C 1 TO:	CONNECT A-C 2 TO:	CONNECT GND AND SHIELD TO:
60HZ MAIN FRAME (SEE YZ003)	K2-T2	K2-T3	FRAME GND (K2 MOUNTING BRKT)
60HZ EXPANSION FRAME (SEE YZ005)	K1-T1	K1-T3	FRAME GND (G1)
50HZ WT MAIN FRAME (SEE YZ014)	K2-T1	TB1-1	FRAME GND (K2 MOUNTING BRKT)
50HZ WT EXPANSION FRAME (SEE YZ015)	K1-T2	TB1-2	FRAME GND (G4)
200V 60HZ JAPAN MAIN FRAME (SEE YZ023)	K2-T2	K2-T3	FRAME GND (K2 MOUNTING BRKT)
200V 60HZ JAPAN EXPANSION FRAME (SEE YZ025)	K1-T1	K1-T3	FRAME GND (G1)
50HZ JAPAN MAIN FRAME (SEE YZ033)	K2-T2	K2-T3	FRAME GND (K2 MOUNTING BRKT)
50HZ JAPAN EXPANSION FRAME (SEE YZ035)	K1-T1	K1-T3	FRAME GND (G1)

NOTES

1. PART OF PS1 INTERNAL WIRING. REFER TO YZ081 AND YZ083.

IBM

NAME	A-C POWER TO DISK			
DESIGN	DD	AUG 76	SHT	OF
DETAIL				
CHECK	WJK	AUG 76	CLASSIFICATION	
APPRO				

DATE	CHANGE NO	DATE	CHANGE NO
AUG 76	315058		
JUL 77	316710		

MUST CONFORM TO ENG SPEC | DEVELOPMENT NO | LOGIC PG NO YZ037

1757864 C

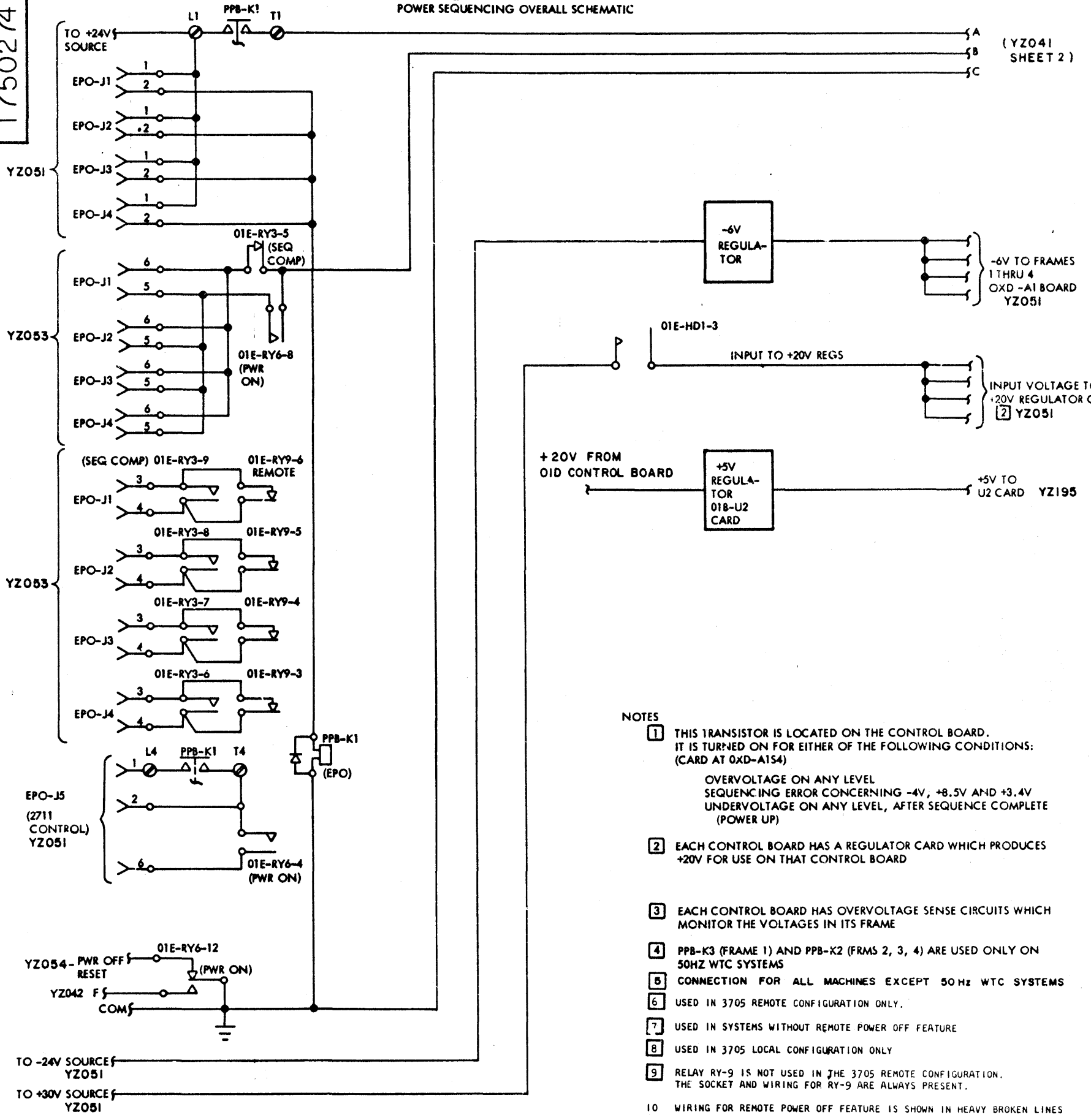
VERTICAL ELECTRICAL FORMAT

C

1750274

PART NO 1750274 | LOGIC PG NO YZ041

3705 II BASE FRAME
POWER SEQUENCING OVERALL SCHEMATIC



NOTES

[1] THIS TRANSISTOR IS LOCATED ON THE CONTROL BOARD. IT IS TURNED ON FOR EITHER OF THE FOLLOWING CONDITIONS: (CARD AT 0XD-A1S4)

OVERVOLTAGE ON ANY LEVEL
SEQUENCING ERROR CONCERNING -4V, +8.5V AND +3.4V
UNDERVOLTAGE ON ANY LEVEL, AFTER SEQUENCE COMPLETE (POWER UP)

[2] EACH CONTROL BOARD HAS A REGULATOR CARD WHICH PRODUCES +20V FOR USE ON THAT CONTROL BOARD

[3] EACH CONTROL BOARD HAS OVERVOLTAGE SENSE CIRCUITS WHICH MONITOR THE VOLTAGES IN ITS FRAME

[4] PPB-K3 (FRAME 1) AND PPB-K2 (FRMS 2, 3, 4) ARE USED ONLY ON 50HZ WTC SYSTEMS

[5] CONNECTION FOR ALL MACHINES EXCEPT 50 Hz WTC SYSTEMS

[6] USED IN 3705 REMOTE CONFIGURATION ONLY.

[7] USED IN SYSTEMS WITHOUT REMOTE POWER OFF FEATURE

[8] USED IN 3705 LOCAL CONFIGURATION ONLY

[9] RELAY RY-9 IS NOT USED IN THE 3705 REMOTE CONFIGURATION. THE SOCKET AND WIRING FOR RY-9 ARE ALWAYS PRESENT.

10 WIRING FOR REMOTE POWER OFF FEATURE IS SHOWN IN HEAVY BROKEN LINES

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	POWER SEQUENCING SCHEMATIC				MAY76	314419			
3705 II BASE FRAME					JUL 76	315605			
DESIGN	TES	MAY76	SHT 1 OF 2		NOV76	315621			
DETAIL									
CHECK	TES	MAY76	CLASSIFICATION		MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO		
APPRO	TES	MAY76					YZ041		

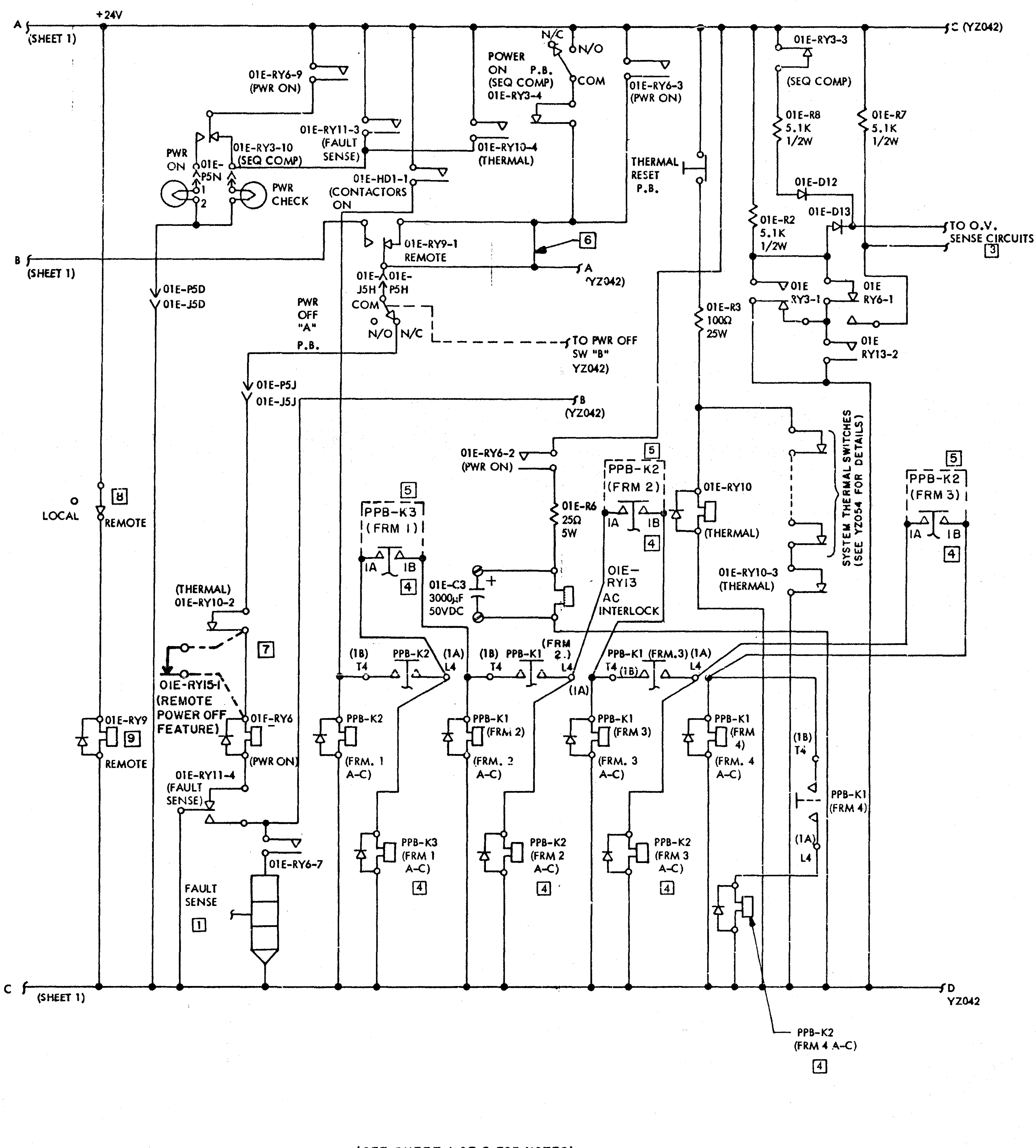
1750274 C

PART NO	LOGIC PG NO
1750274	YZ041

1750274 C

3705 II BASE FRAME

POWER SEQUENCING OVERALL SCHEMATIC



(SEE SHEET I OF 2 FOR NOTES)

IBM

NAME	POWER SEQUENCING SCHEMATIC		
	3705 II BASE FRAME		
DESIGN	TES	MAY76	SHT 2 OF 2
DETAIL			
CHECK	TES	MAY76	CLASSIFICATION
APPRO	TES	MAY76	

	DATE	CHANGE NO		DATE	CHANGE NO
	MAY76	314419			
	JUL76	315605			
	NOV76	315621			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ041

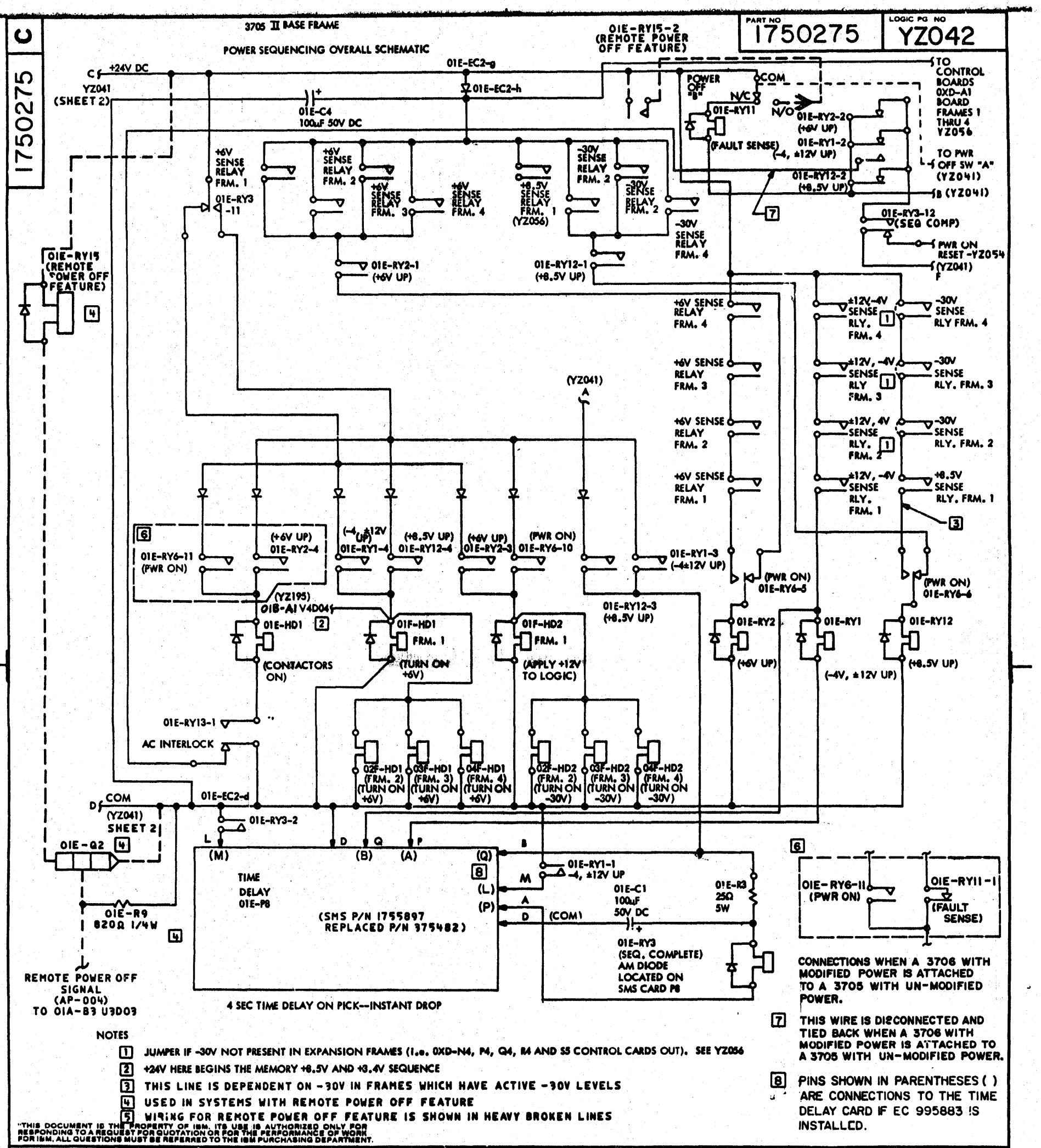
1750274 C

1750275 C

3705 II BASE FRAME

POWER SEQUENCING OVERALL SCHEMATIC

PART NO 1750275 | LOGIC PG NO YZ042



NOTES

1. JUMPER IF -30V NOT PRESENT IN EXPANSION FRAMES (i.e. 0XD-N4, P4, Q4, R4 AND S5 CONTROL CARDS OUT). SEE YZ056
2. +24V HERE BEGINS THE MEMORY +8.5V AND +3.4V SEQUENCE
3. THIS LINE IS DEPENDENT ON -30V IN FRAMES WHICH HAVE ACTIVE -30V LEVELS
4. USED IN SYSTEMS WITH REMOTE POWER OFF FEATURE
5. WIRING FOR REMOTE POWER OFF FEATURE IS SHOWN IN HEAVY BROKEN LINES

CONNECTIONS WHEN A 3706 WITH MODIFIED POWER IS ATTACHED TO A 3705 WITH UN-MODIFIED POWER.

7. THIS WIRE IS DISCONNECTED AND TIED BACK WHEN A 3706 WITH MODIFIED POWER IS ATTACHED TO A 3705 WITH UN-MODIFIED POWER.
8. PINS SHOWN IN PARENTHESES ( ) ARE CONNECTIONS TO THE TIME DELAY CARD IF EC 995883 IS INSTALLED.

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	POWER SEQUENCING SCHEMATIC				MAY 76	314419			
	3705 II BASE FRAME				DEC 76	315621			
DESIGN	TES	MAY76	SHT 1 OF 1		NOV80	344409			
DETAIL					FEB82	995883			
CHECK	TES	MAY76	CLASSIFICATION		MUST CONFORM TO ENG SPEC	DEVELOPMENT NO		LOGIC PG NO	
APPRO	TES	MAY76						YZ042	

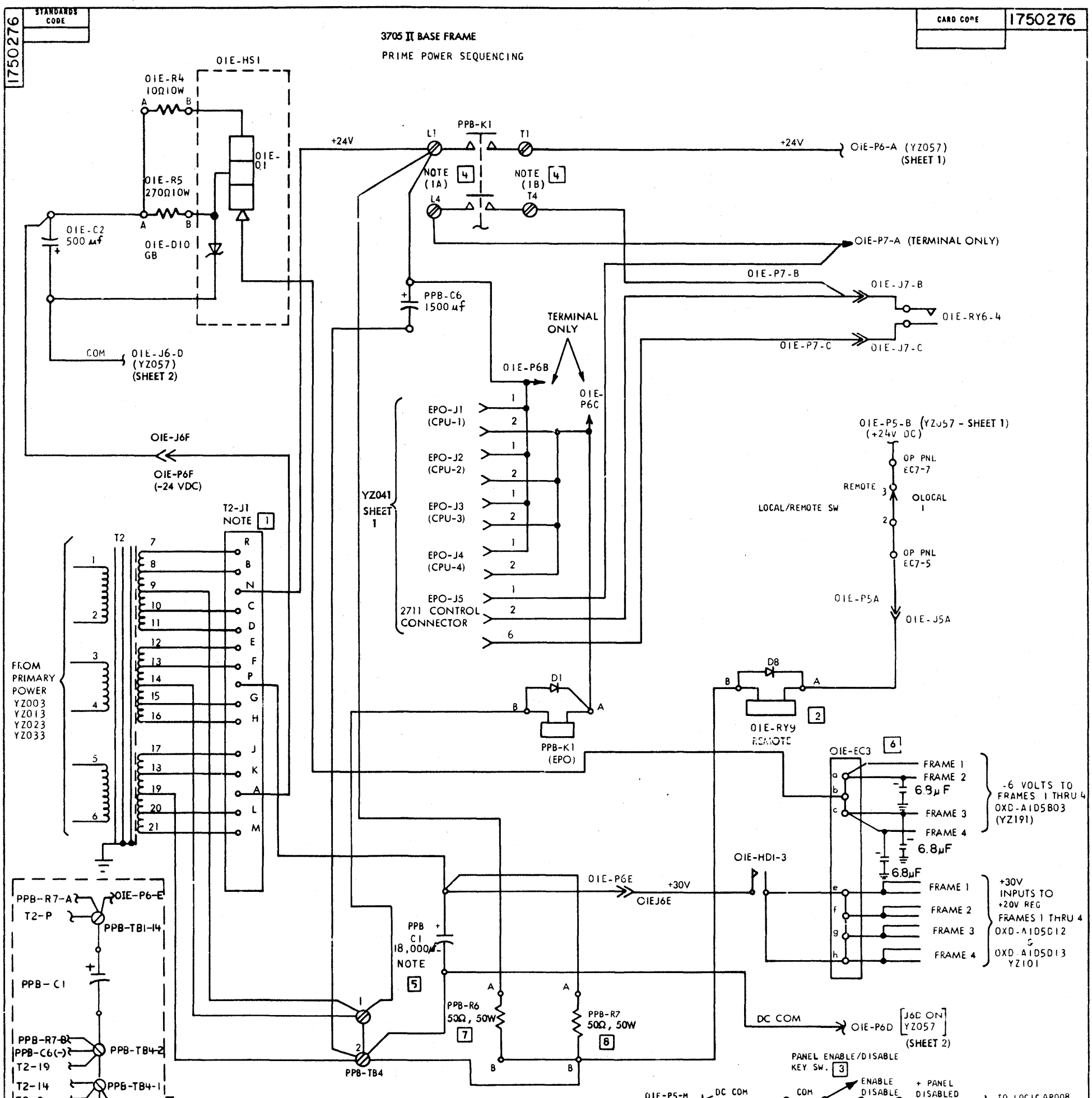
1750275 C

STANDARDS CODE 1750276

CARD CODE 1750276

3705 II BASE FRAME

PRIME POWER SEQUENCING



DETAIL A
WIRING OF PPB-C1 FOR MACHINE INSTALLED IN GERMANY

NOTES:

1. T2-J1 IS AN SMS SOCKET WHICH IS ATTACHED TO TRANSFORMER T2. CARD P/N 375504 IS USED IN THIS SOCKET.
2. RELAY RY9 IS NOT USED IN THE 3705 REMOTE CONFIGURATION. THE SOCKET AND WIRING FOR RY9 ARE ALWAYS PRESENT.
3. USED IN SYSTEMS WITH UNIT SECURITY FEATURE.
4. POINTS DESIGNATED 1A AND 1B ON 50 HZ WTC SYSTEMS ONLY.
5. CAPACITOR PPB-C1 WIRED AS SHOWN FOR ALL SYSTEMS EXCEPT THOSE INSTALLED IN GERMANY. SEE DETAIL A.
6. THESE CAPACITOR ASSEMBLIES ARE INSTALLED ONLY ON THE OXD-A1 BOARD END OF CABLE ASSEMBLIES P/N 5993288, 5993289 & 5993290 AT EC LEVEL 311051 OR LATER.

NOTES CONTINUED:

7. THIS RESISTOR IS USED IN SYSTEMS WITH ONE OR TWO FRAMES. IT IS REMOVED FOR THREE OR FOUR FRAME SYSTEMS.
8. THIS RESISTOR IS 50Ω 50W IN ONE OR TWO FRAME SYSTEMS. IT IS 250Ω 25W IN THREE OR FOUR FRAME SYSTEMS.

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.	
NAME	PRIME POWER SEQUENCING				MAY76	314419						1750276
	3705 II BASE FRAME				OCT78	318894						
DESIGN	TS	MAY76	MODEL									
DETAIL			SCALE									
CHECK	TS	MAY76	DRAW								YZ051	
APPRO	TS	MAY76	CHECK									

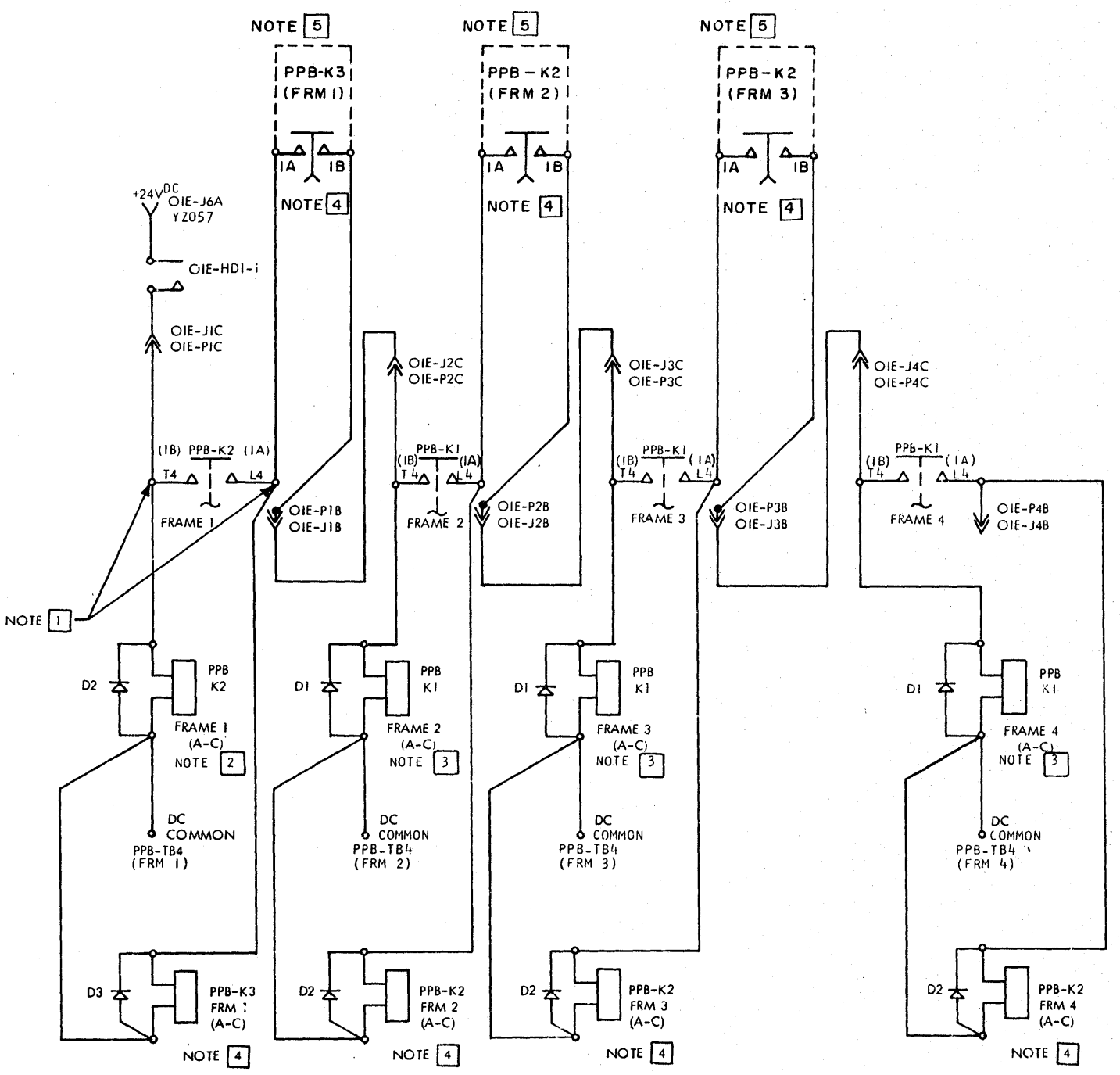
C

STANDARDS CODE

1770725

CARD CODE 1770725

PRIME POWER SEQUENCING



NOTES

1. POINTS DESIGNATED 1A & 1B ON 50HZ WTC SYSTEMS ONLY.
2. ADDITIONAL POINTS FOR K2 SHOWN ON YZ003, YZ013, YZ023 & YZ033 (MAIN FRAME POWER)
3. ADDITIONAL POINTS FOR K1 SHOWN ON YZ005, YZ015, YZ025 & YZ035 (EXAPNSION FRAME POWER)
4. PPB-K3 (FRM 1) AND PPB-K2 (FRMS 2,3,4) ARE USED ONLY ON 50HZ WTC SYSTEMS. ADDITIONAL POINTS FOR THESE CONTACTORS ARE SHOWN ON YZ013 AND YZ015
5. CONNECTION FOR ALL MACHINES EXCEPT 50HZ WTC SYSTEMS

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					
NAME	PRIME POWER SEQUENCING				
DESIGN	GJF	JUL71	MODEL		
DETAIL	VR	JUL71	SCALE		
CHECK			DRAW		
APPRO			CHECK		

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NOV71	309504					
FEB72	309508					
JUN72	309742					
JUL76	315605					YZ052

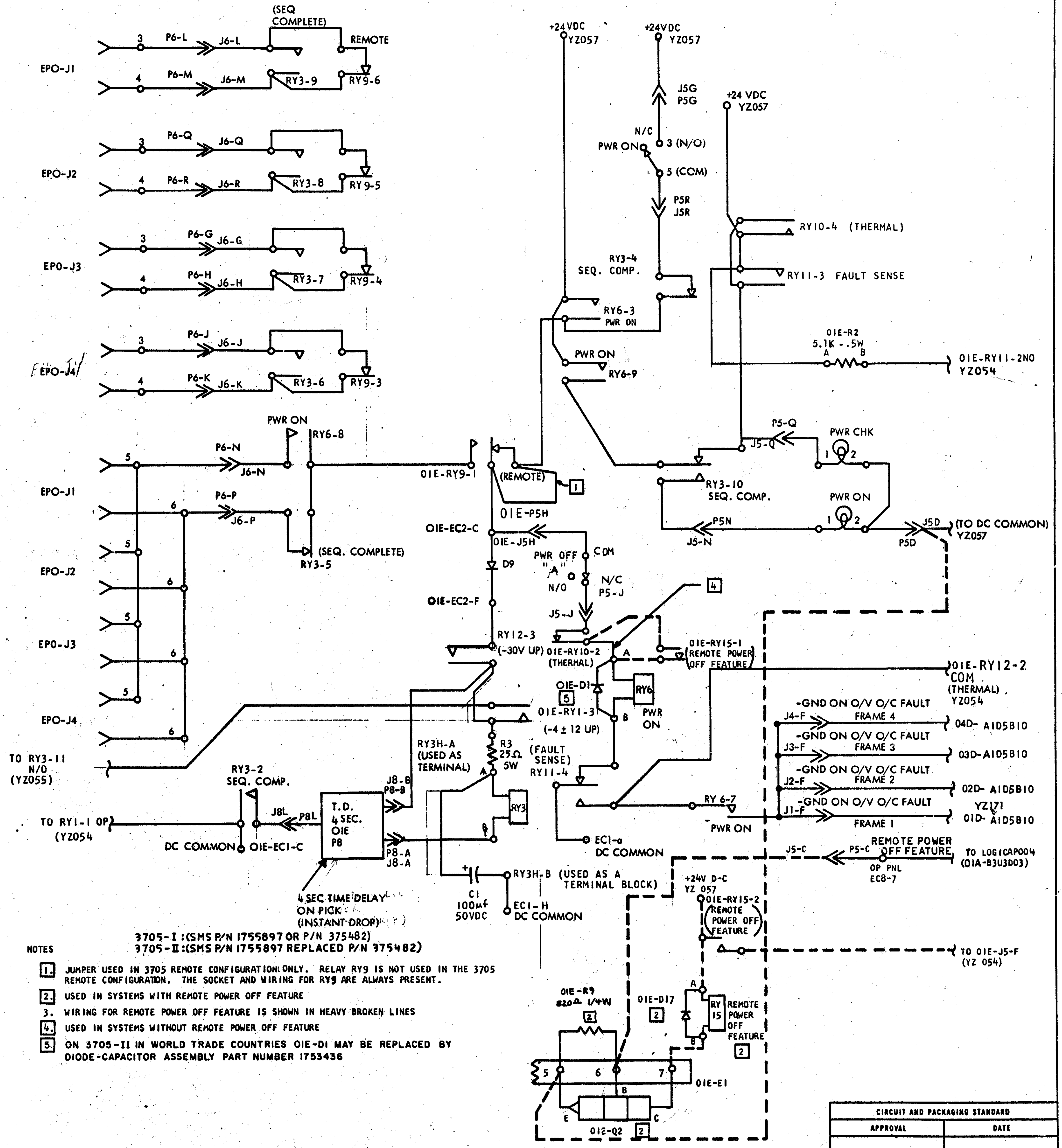
1770725

STANDARDS CODE

1770726

EPO

CARD CODE	1770726



3705-I :(SMS P/N 1755897 OR P/N 375482)
3705-II :(SMS P/N 1755897 REPLACED P/N 375482)

NOTES

1. JUMPER USED IN 3705 REMOTE CONFIGURATION ONLY. RELAY RY9 IS NOT USED IN THE 3705 REMOTE CONFIGURATION. THE SOCKET AND WIRING FOR RY9 ARE ALWAYS PRESENT.
2. USED IN SYSTEMS WITH REMOTE POWER OFF FEATURE
3. WIRING FOR REMOTE POWER OFF FEATURE IS SHOWN IN HEAVY BROKEN LINES
4. USED IN SYSTEMS WITHOUT REMOTE POWER OFF FEATURE
5. ON 3705-II IN WORLD TRADE COUNTRIES OIE-DI MAY BE REPLACED BY DIODE-CAPACITOR ASSEMBLY PART NUMBER 1753436

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

C

INTERNATIONAL BUSINESS MACHINES CORP.

NAME	EPO			
DESIGN	GJF	JUL71	MODEL	
DETAIL	VR	JUL71	SCALE	
CHECK			DRAW	
APPRO			CHECK	

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NOV71	309504		AUG72	309748		
DEC71	309506		FEB73	309916		
FEB72	309508		MAY73	311052		
MAR72	309733		DEC76	315621		YZ053
JUN72	309742		AUG77	313977		

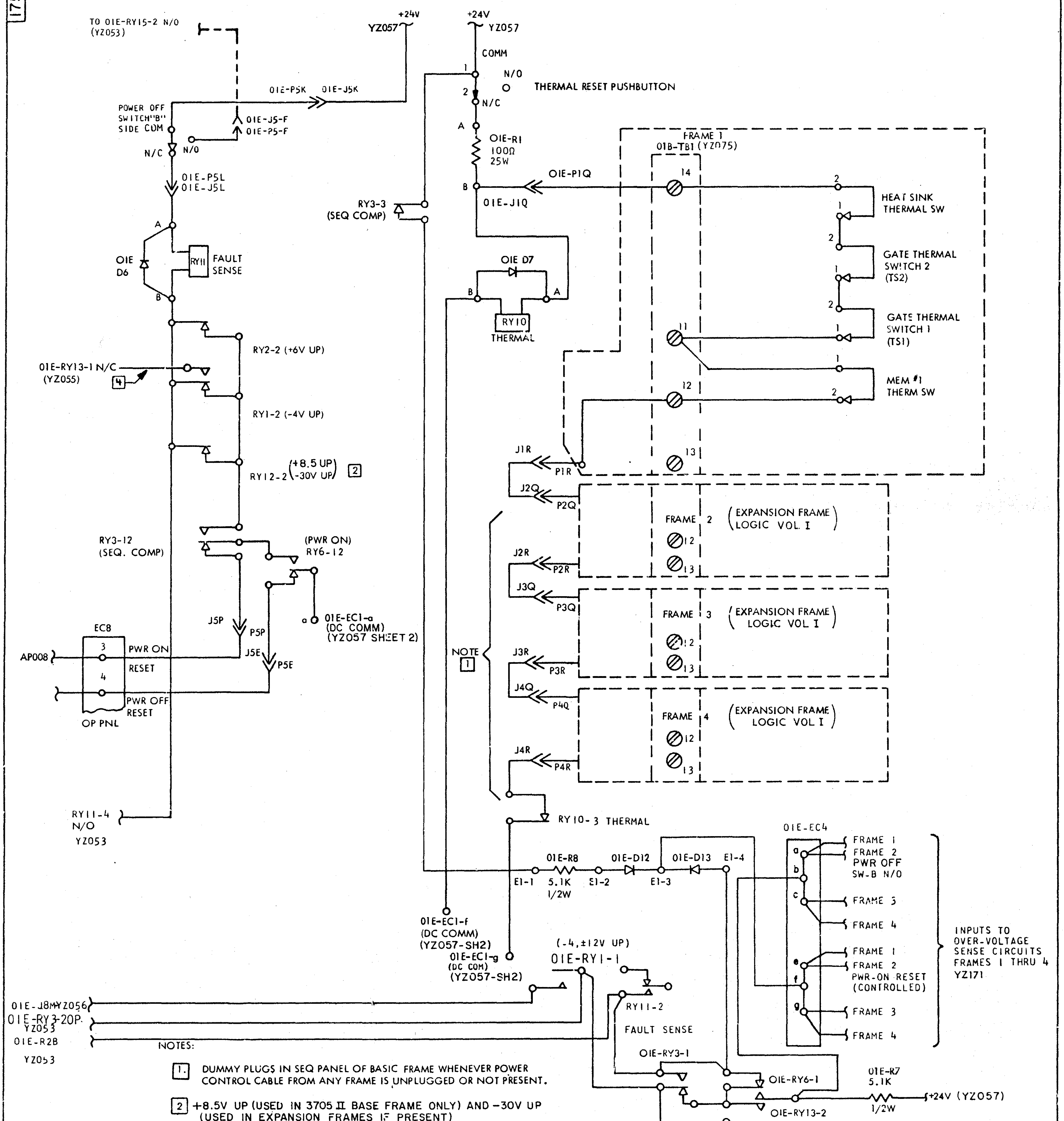
1770726

STANDARDS CODE

1750277

CARD CODE	1750277
	YZ054

THERMAL AND FAULT SENSE
3705 II BASE FRAME



NOTES:

1. DUMMY PLUGS IN SEQ PANEL OF BASIC FRAME WHENEVER POWER CONTROL CABLE FROM ANY FRAME IS UNPLUGGED OR NOT PRESENT.

2. +8.5V UP (USED IN 3705 II BASE FRAME ONLY) AND −30V UP (USED IN EXPANSION FRAMES IF PRESENT)

3. WIRING FOR REMOTE POWER OFF FEATURE IS SHOWN IN HEAVY BROKEN LINES

4. THIS WIRE IS DISCONNECTED AND TIED BACK WHEN A 3706 WITH MODIFIED POWER IS ATTACHED TO A 3705 WITH UNMODIFIED POWER.

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					
NAME	THERMAL AND FAULT SENSE				
	3705 II BASE FRAME				
DESIGN	TS	MAY76	MODEL		
DETAIL			SCALE		
CHECK	TS	MAY76	DRAW		
APPRO	TS	MAY76	CHECK		

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY76	314419					
NOV76	315621					
MAY81	344445					
						YZ054

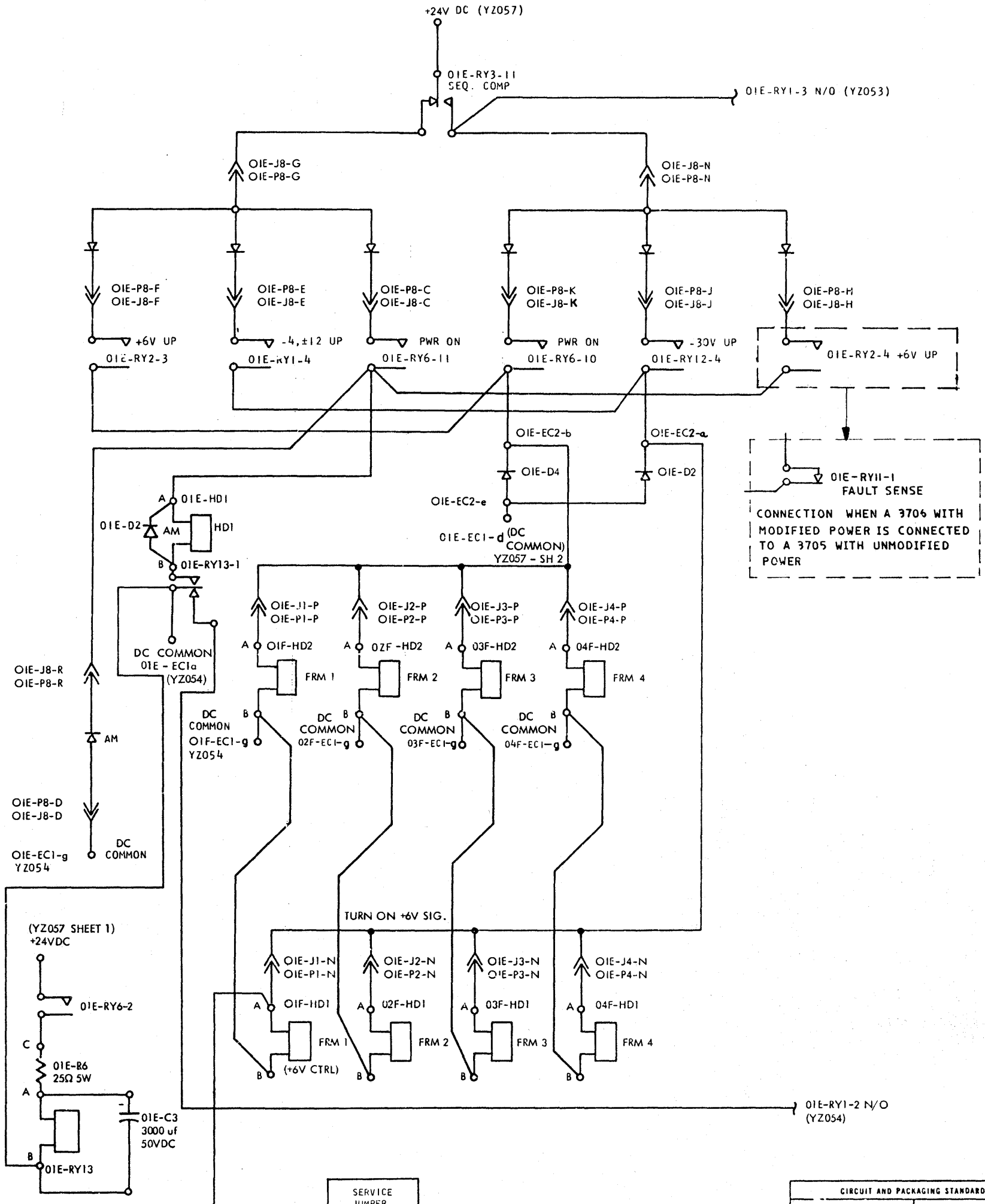
1750277

C

STANDARDS CODE 1750278

CARD CODE 1750278
YZ055

D. C. SEQUENCING
3705 II BASE FRAME



CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

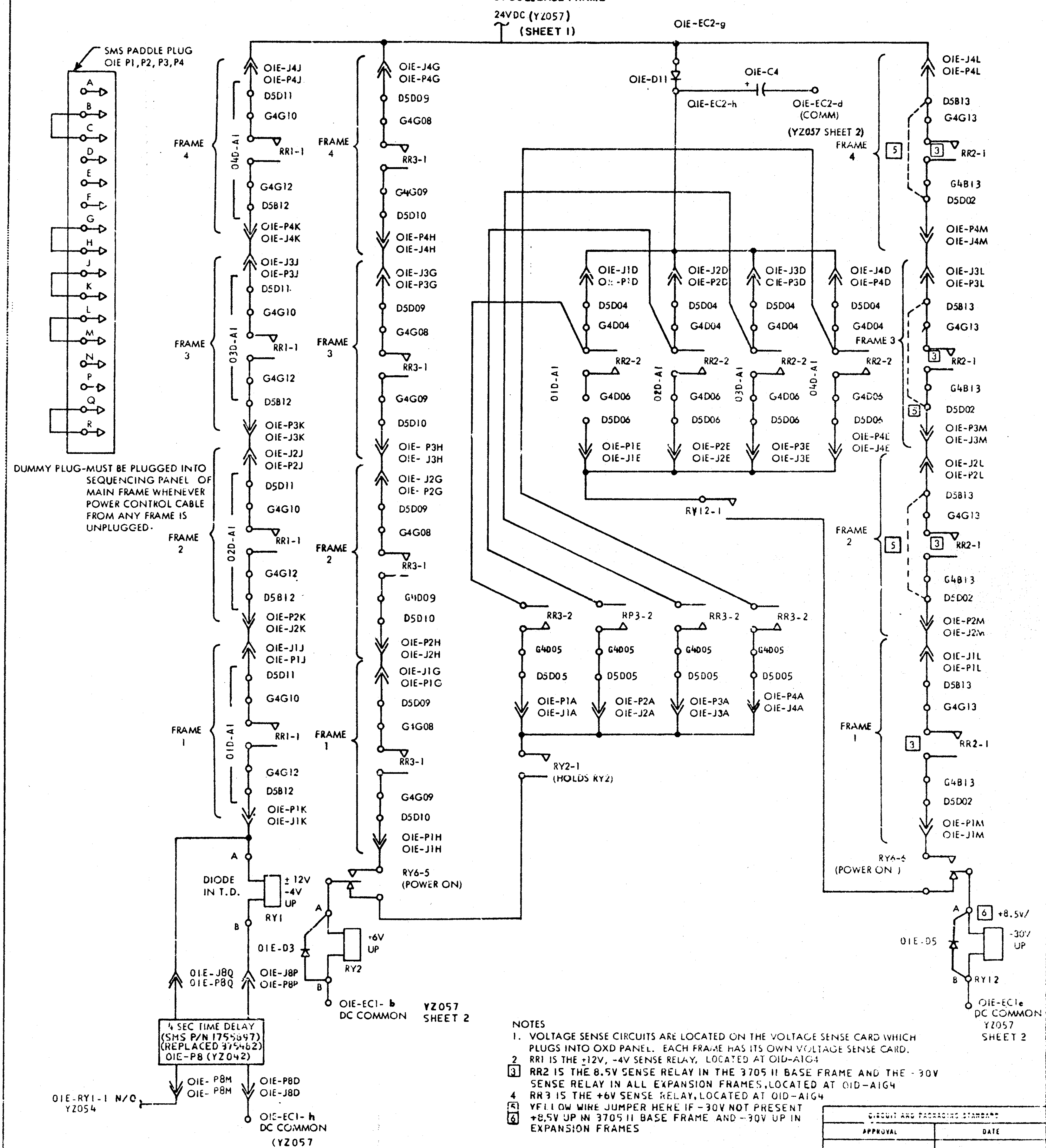
INTERNATIONAL BUSINESS MACHINES CORP.												
NAME	D. C. SEQUENCING											
	3705 II BASE FRAME											
DESIGN	TS	MAY76	MODEL									
DETAIL			SCALE									
CHECK	TS	MAY76	DRAW									
APPRO	TS	MAY76	CHECK									

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY76	314419					
NOV76	315621					
NOV76	315621					
MAY81	344445					YZ055

1750278

C

D.C. SEQUENCING
3705 II BASE FRAME


24VDC (YZ057) (SHEET 1)
OIE-EC2-g
OIE-D11
OIE-C4
OIE-EC2-h
OIE-EC2-d (COMM)
(YZ057 SHEET 2)
SMS PADDLE PLUG OIE P1, P2, P3, P4
A B C D E F G H J K L M N P Q R
DUMMY PLUG-MUST BE PLUGGED INTO SEQUENCING PANEL OF MAIN FRAME WHENEVER POWER CONTROL CABLE FROM ANY FRAME IS UNPLUGGED.
FRAME 4
04D-A1
OIE-J4J
OIE-P4J
D5D11
G4G10
RR1-1
G4G12
D5B12
OIE-P4K
OIE-J4K
FRAME 3
03D-A1
OIE-J3J
OIE-P3J
OIE-P3K
OIE-J3K
FRAME 2
02D-A1
OIE-J2J
OIE-P2J
OIE-P2K
OIE-J2K
FRAME 1
01D-A1
OIE-J1J
OIE-P1J
OIE-P1K
OIE-J1K
OIE-J4G
OIE-P4G
D5D09
G4G08
RR3-1
G4G09
D5D10
OIE-P4H
OIE-J4H
OIE-J3G
OIE-P3G
OIE-P3H
OIE-J3H
OIE-J2G
OIE-P2G
OIE-P2H
OIE-J2H
OIE-J1G
OIE-P1G
OIE-P1H
OIE-J1H
RY6-5 (POWER ON)
A
DIODE IN T.D.
± 12V -4V UP
RY1
B
OIE-D3
+6V UP
RY2
OIE-EC1-b DC COMMON
YZ057 SHEET 2
OIE-J8Q
OIE-P8Q
OIE-J8P
OIE-P8P
4 SEC TIME DELAY (SMS P/N 1755897) (REPLACED 375462) OIE-P8 (YZ042)
OIE-P8M
OIE-P8M
OIE-P8D
OIE-J8D
OIE-RY1-1 N/O YZ054
OIE-EC1-h DC COMMON (YZ057 SHEET 2)
OIE-J1D
OIE-P1D
OIE-J2D
OIE-P2D
OIE-J3D
OIE-P3D
OIE-J4D
OIE-P4D
D5D04
G4D04
RR2-2
G4D06
D5D06
OIE-P1E
OIE-J1E
OIE-P2E
OIE-J2E
OIE-P3E
OIE-J3E
OIE-P4E
OIE-J4E
RY12-1
RR3-2
G4D05
D5D05
OIE-P1A
OIE-J1A
OIE-P2A
OIE-J2A
OIE-P3A
OIE-J3A
OIE-P4A
OIE-J4A
RY2-1 (HOLDS RY2)
OIE-J4L
OIE-P4L
D5B13
G4G13
RR2-1
G4B13
D5D02
OIE-P4M
OIE-J4M
OIE-J3L
OIE-P3L
OIE-P3M
OIE-J3M
OIE-J2L
OIE-P2L
OIE-P2M
OIE-J2M
OIE-J1L
OIE-P1L
OIE-P1M
OIE-J1M
RY6-6 (POWER ON)
+8.5V/ -30V UP
OIE-D5
RY12
OIE-EC1e DC COMMON YZ057 SHEET 2

NOTES
1. VOLTAGE SENSE CIRCUITS ARE LOCATED ON THE VOLTAGE SENSE CARD WHICH PLUGS INTO OXD PANEL. EACH FRAME HAS ITS OWN VOLTAGE SENSE CARD.
2 RR1 IS THE ±12V, -4V SENSE RELAY, LOCATED AT OID-A1G4
[3] RR2 IS THE 8.5V SENSE RELAY IN THE 3705 II BASE FRAME AND THE -30V SENSE RELAY IN ALL EXPANSION FRAMES, LOCATED AT OID-A1G4
4 RR3 IS THE +6V SENSE RELAY, LOCATED AT OID-A1G4
[5] YELLOW WIRE JUMPER HERE IF -30V NOT PRESENT
[6] +8.5V UP IN 3705 II BASE FRAME AND -30V UP IN EXPANSION FRAMES

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.			
NAME	D.C. SEQUENCING 3705 II BASE FRAME		
DESIGN	TS	MAY76	MODEL
DETAIL			SCALE
CHECK	TS	MAY76	DRAW
APPRO	TS	MAY76	CHECK

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY 76	314419					
DEC 76	315621					
						YZ056

1750279

C

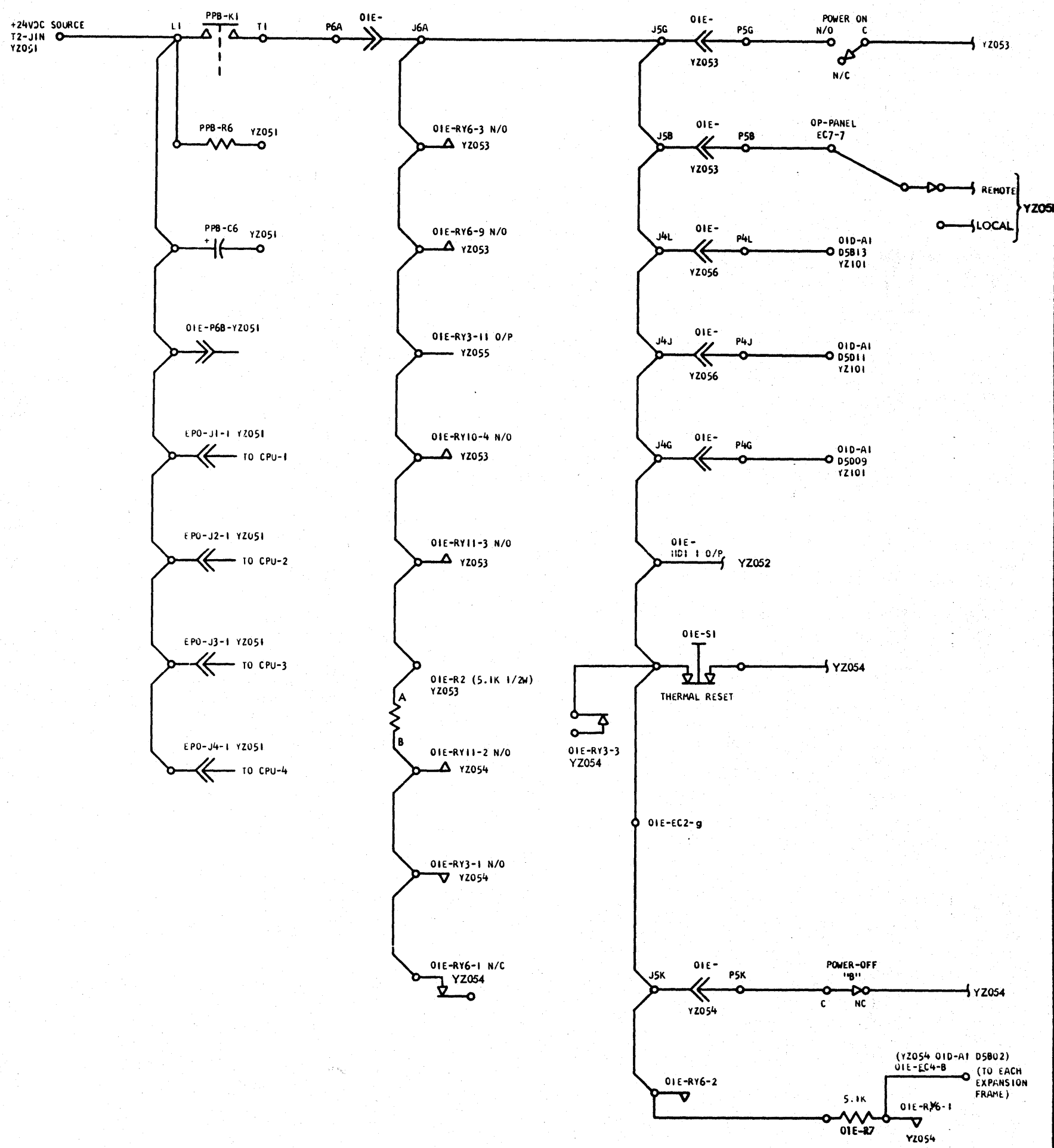
1750280 C

PART NO 1750280 | LOGIC PG NO YZ057

SHEET 1 OF 2

3705 II BASE FRAME

+24V.D.C. = POINT-TO-POINT WIRING



IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	+24 VDC AND COMMON DIST.				MAY76	314419			
3705 II BASE FRAME					AUG 76	315608			
DESIGN	TES	MAY76	SHT 1 OF 2						
DETAIL				RED					
CHECK	TES	MAY76	CLASSIFICATION	MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO	
APPRO	TES	MAY76						YZ057	

1750280 C

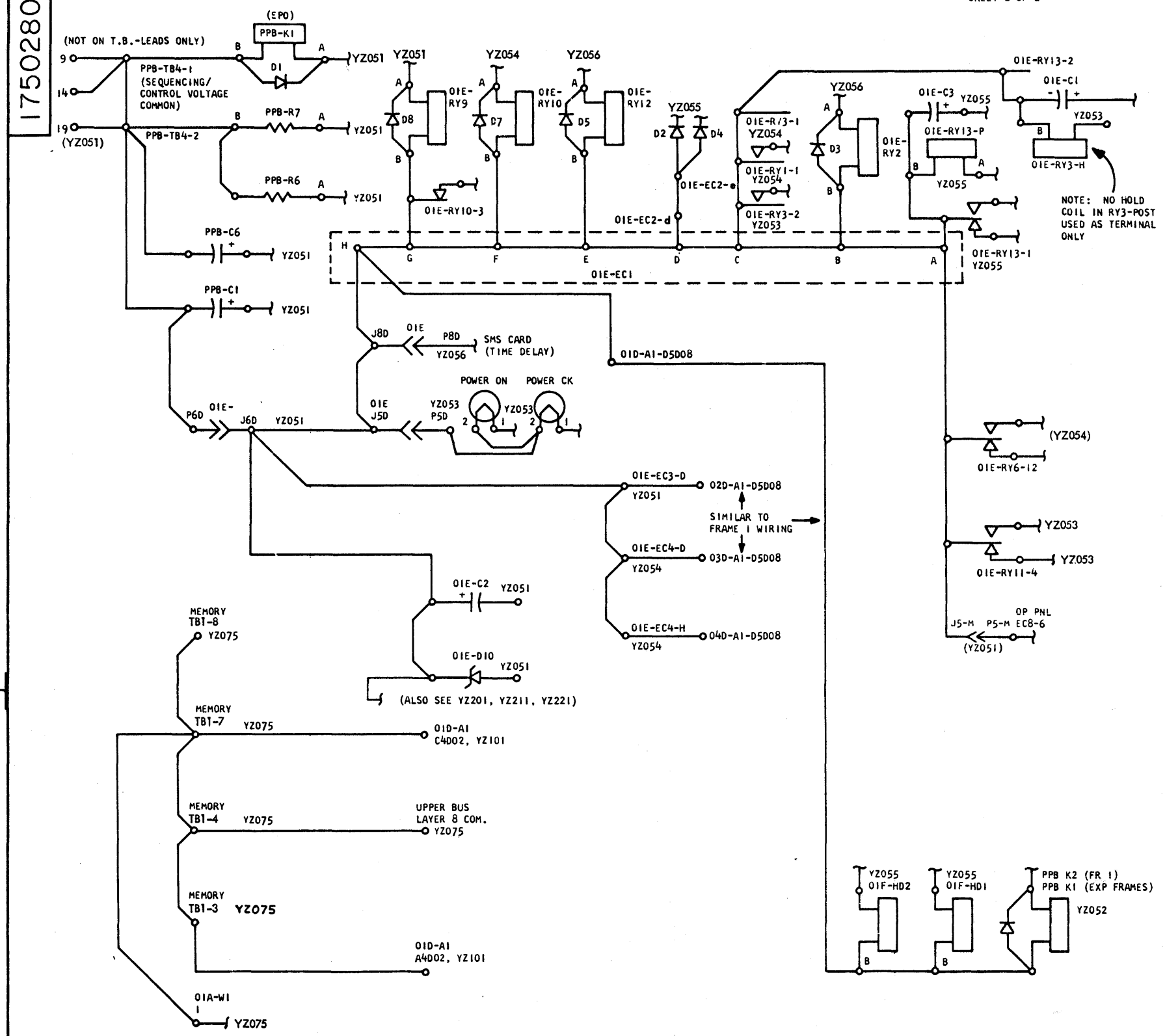
680 0134 1 MRO# 780922204 VERTICAL ELECTRICAL FORMAT

1750280 C

PART NO 1750280 | LOGIC PG NO YZ057

SHEET 2 OF 2

D.C. "COMMON" - POINT-TO-POINT WIRING



IBM									
NAME	+24 VDC AND COMMON DIST.								
3705 II BASE FRAME									
DESIGN	TES	MAY76	SHT 2 OF 2						
DETAIL									
CHECK	TES	MAY76	CLASSIFICATION		MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO
APPRO	TES	MAY76							YZ057

	DATE	CHANGE NO		DATE	CHANGE NO
	MAY76	314419			
	AUG76	315608			

1750280 C

620-0134-1 MROX 780522204 VERTICAL ELECTRICAL FORMAT ASTROCLOTH N690T

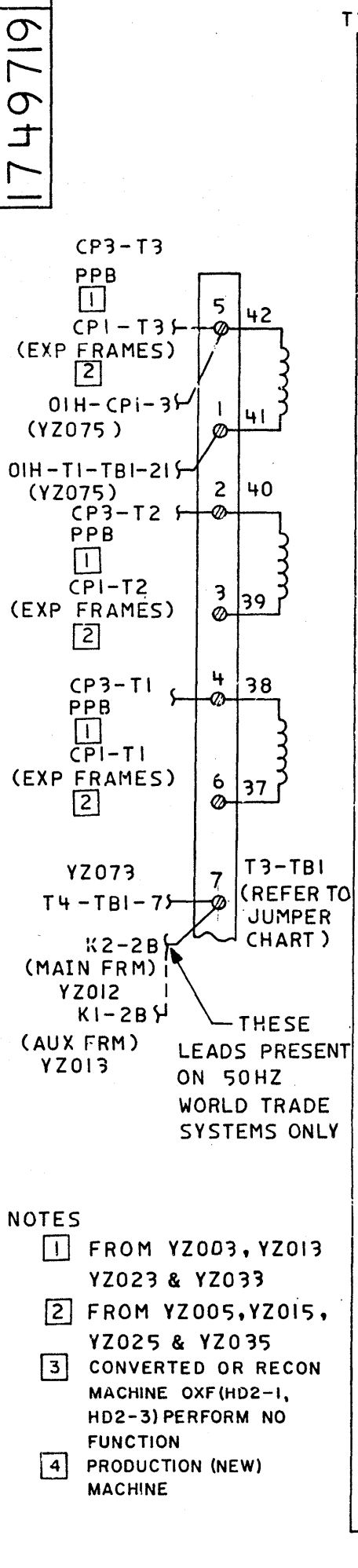
1749719 c

PART NO 1749719 | LOGIC PG NO YZ071

DUPLICATE MASTER

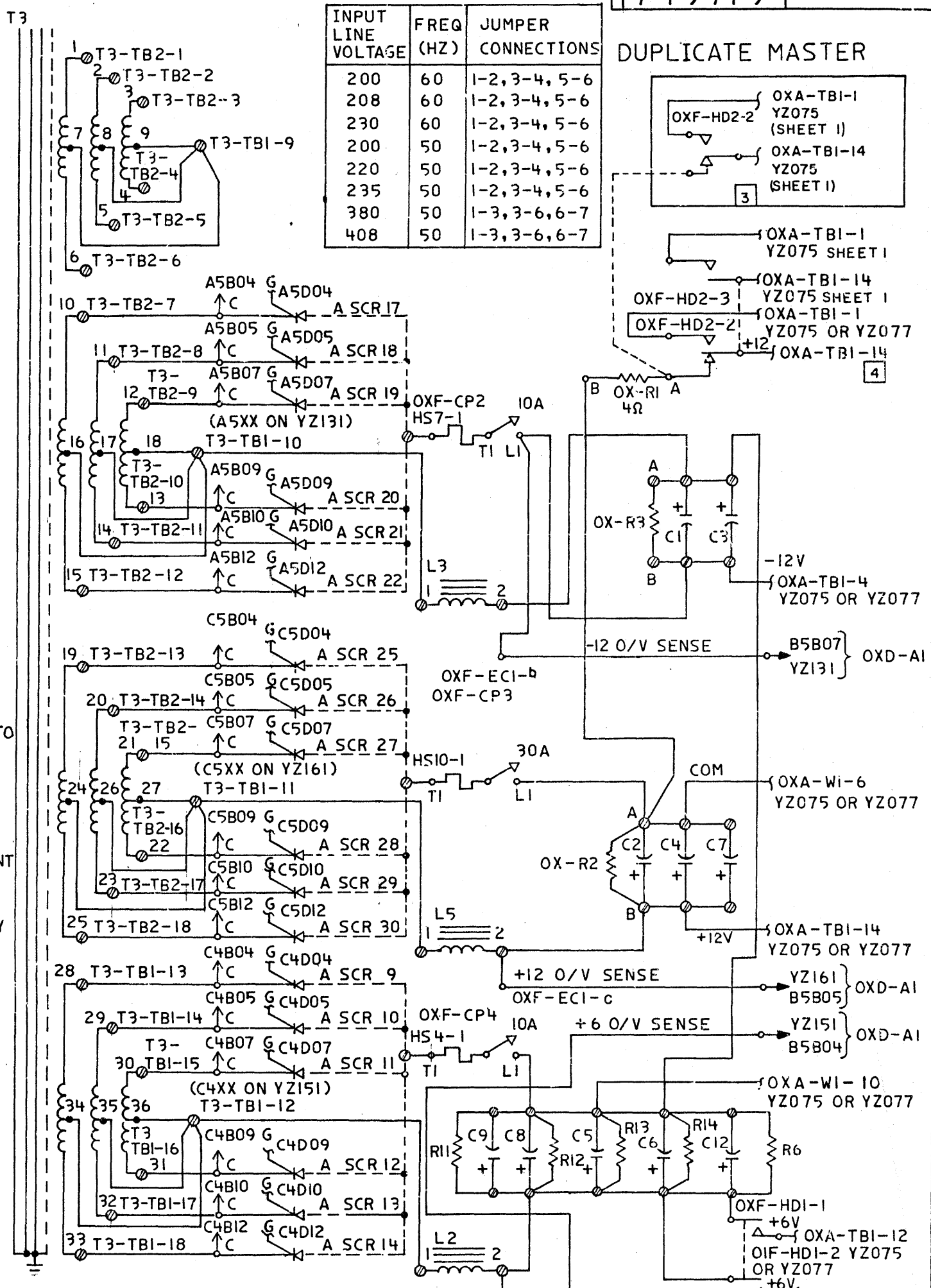
JUMPER CHART (T3)

INPUT LINE VOLTAGE	FREQ (HZ)	JUMPER CONNECTIONS
200	60	1-2, 3-4, 5-6
208	60	1-2, 3-4, 5-6
230	60	1-2, 3-4, 5-6
200	50	1-2, 3-4, 5-6
220	50	1-2, 3-4, 5-6
235	50	1-2, 3-4, 5-6
380	50	1-3, 3-6, 6-7
408	50	1-3, 3-6, 6-7



NOTES

1. FROM YZ003, YZ013 YZ023 & YZ033
2. FROM YZ005, YZ015, YZ025 & YZ035
3. CONVERTED OR RECON MACHINE OXF(HD2-1, HD2-3) PERFORM NO FUNCTION
4. PRODUCTION (NEW) MACHINE



IBM

NAME	D-C DISTRIBUTION			
	MAIN FRAME (3705 E,F,G,H)			
DESIGN			SHT	OF
DETAIL	TS	AUG76		
CHECK			CLASSIFICATION	
APPRO				

	DATE	CHANGE NO		DATE	CHANGE NO
RED	JAN76	312922		JUN77	313977
	JUN76	314419		MAR78	318043
RED	AUG76	315608			
	NOV76	315621			

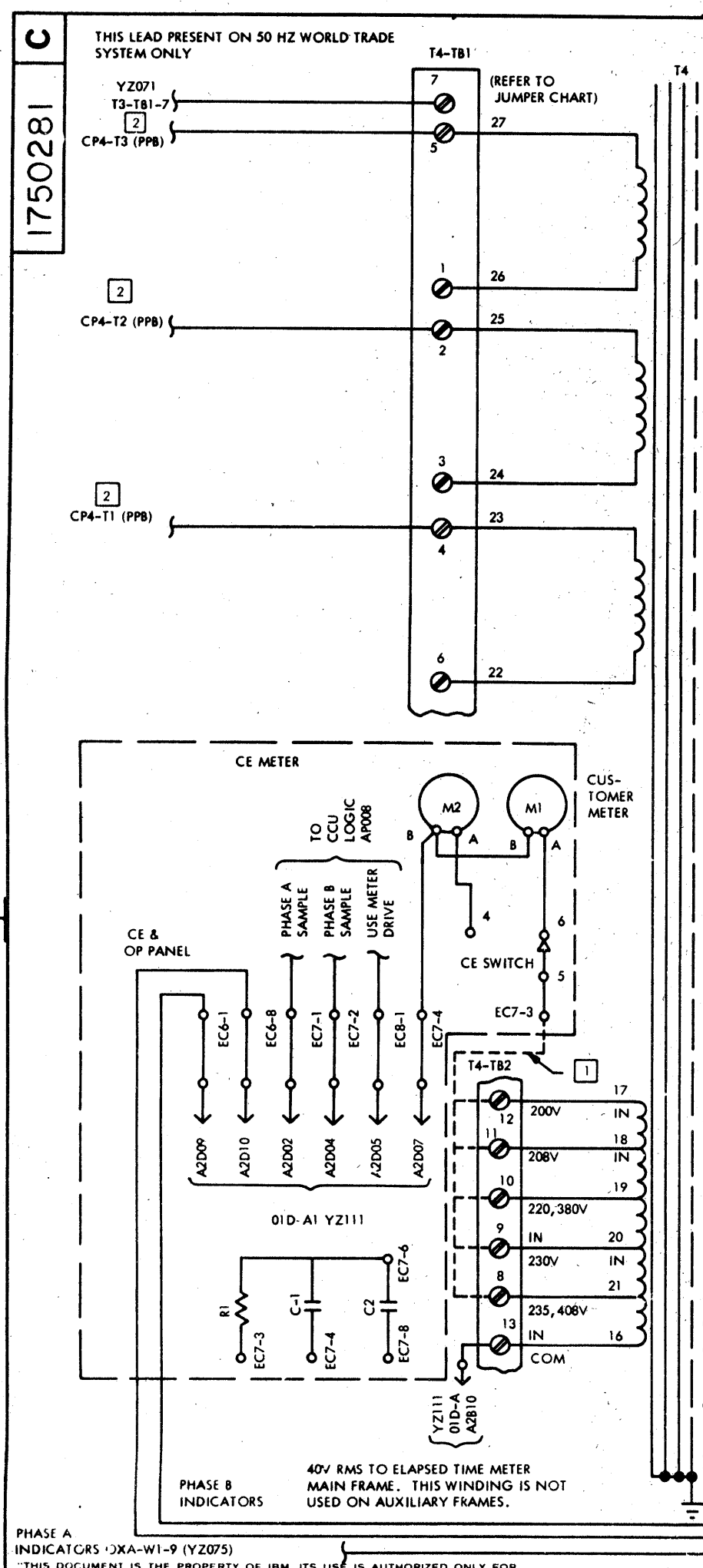
MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ071

1749719 c

620-0134-1 MRO# 7805222CS VERTICAL ELECTRICAL FORMAT ASTROCLOTH N6807

PART NO 1750281 | LOGIC PG NO YZ073

SHEET 1 OF 2



T4-TB1 JUMPER CHART

INPUT LINE VOLTAGE	FREQUENCY (HZ)	JUMPER CONNECTIONS
200	60	1-2, 3-4, 5-6
208	60	1-2, 3-4, 5-6
230	60	1-2, 3-4, 5-6
200	50	1-2, 3-4, 5-6
220	50	1-2, 3-4, 5-6
235	50	1-2, 3-4, 5-6
380	50	1-3, 3-6, 7-6
408	50	1-3, 3-6, 7-6

NOTES

[1] THIS LEAD TO BE CONNECTED TO PROPER TERMINAL CORRESPONDING TO INPUT VOLTAGE

[2] FROM YZ003, YZ013, YZ023 & YZ015

[3] THE REGEN GATE IS OPTIONAL. IT IS UNUSED AND MAY NOT BE ON YOUR MACHINE. SEE SHEET 2.

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	WIRING DIAGRAM				MAY76	314419			
	3705 II BASE FRAME								
DESIGN	TES	MAY76	SHT 1 OF 2						
DETAIL									
CHECK	TES	MAY76	CLASSIFICATION	MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO			
APPRO	TES	MAY76				YZ073			

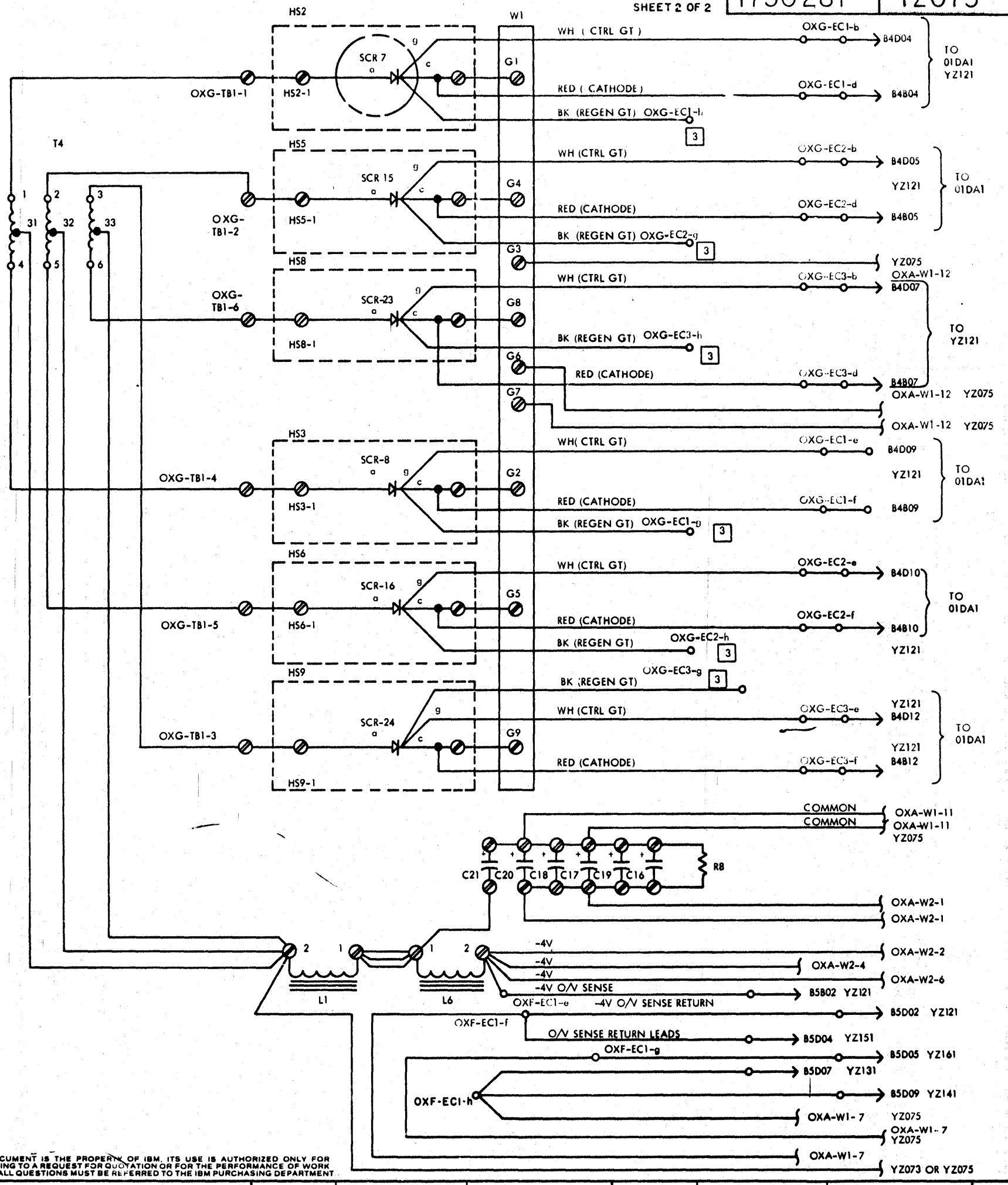
1750281 C

620-0134-1 MRO# 780522204 VERTICAL ELECTRICAL FORMAT ANSI/NUCLOTH N6501

1750281 C

PART NO 1750281 | LOGIC PG NO YZ073

SHEET 2 OF 2



IBM

					DATE	CHANGE NO		DATE	CHANGE NO
NAME	WIRING DIAGRAM				MAY76	314419			
	3705 II BASE FRAME								
DESIGN	TS	MAY76	SHT 2 OF 2						
DETAIL									
CHECK	TS	MAY76	CLASSIFICATION	MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO	
APPRO	TS	MAY76						YZ073	

1750281 C

630 0134-1 MROR 780882204 VERTICAL ELECTRICAL FORMAT ASTROCLOTH NO581

1749720 C

PART NO 1749720 | LOGIC PG NO YZ075

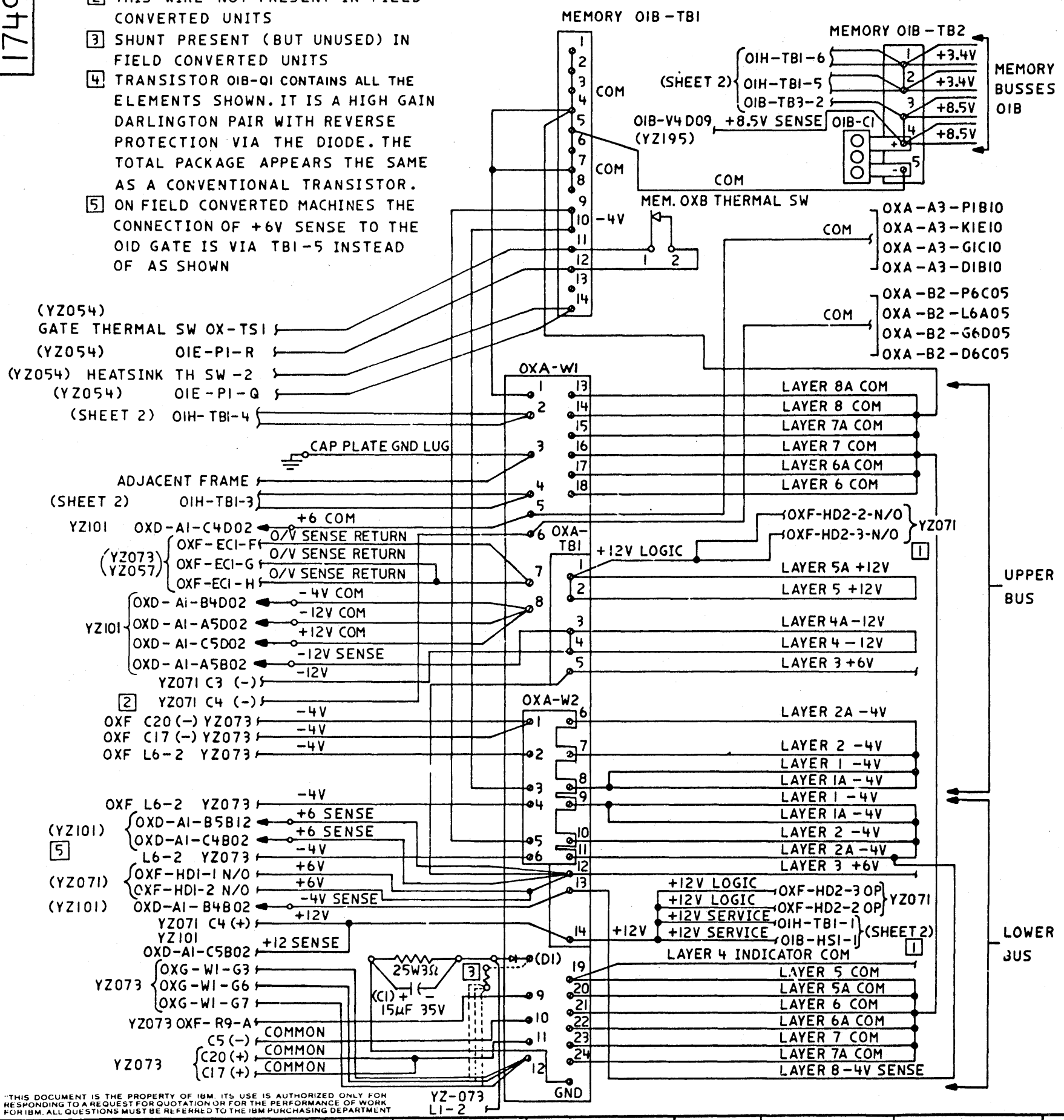
SHEET 1 OF 2

DUPLICATE MASTER

D-C DISTRIBUTION - MAIN FRAME

NOTES

1. ONLY HD2-2 WIRE PRESENT IN FIELD CONVERTED UNITS
2. THIS WIRE NOT PRESENT IN FIELD CONVERTED UNITS
3. SHUNT PRESENT (BUT UNUSED) IN FIELD CONVERTED UNITS
4. TRANSISTOR 01B-Q1 CONTAINS ALL THE ELEMENTS SHOWN. IT IS A HIGH GAIN DARLINGTON PAIR WITH REVERSE PROTECTION VIA THE DIODE. THE TOTAL PACKAGE APPEARS THE SAME AS A CONVENTIONAL TRANSISTOR.
5. ON FIELD CONVERTED MACHINES THE CONNECTION OF +6V SENSE TO THE 01D GATE IS VIA TB1-5 INSTEAD OF AS SHOWN



IBM

NAME	D-C DISTRIBUTION			
MAIN FRAME (3705-E,F,G,H)				
DESIGN	TES	DEC75	SHT 1 OF 2	
DETAIL	TS	AUG76		
CHECK	TES	DEC75	CLASSIFICATION	
APPRO	TES	DEC75	TES	DEC75

	DATE	CHANGE NO		DATE	CHANGE NO
RED	JAN 76	312922		FEB 77	313974
	JUN 76	314419		JUN 77	313977
	AUG 76	315608			
	NOV 76	315621			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ075

1749720 C

1749720 C

PART NO 1749720 | LOGIC PG NO YZ075

SHEET 2 OF 2

DUPLICATE MASTER

PC
200/50HZ JAPAN

CP1(2.0A)

T3-TBI-5

AC VOLTAGE
(YZ071)

T3-TBI-1

F1

TBI

T1

TB2

A
C4
B

(SHEET 1)
01A-TBI-14

01B-AI V4B13
YZ195

01B-TF.2-3
(SHEET 1)

01B(+8.5V POWER SUPPLY)
MAIN FRAME ONLY
WIRING DISTRIBUTION

HSI

HSI-1

C2

Q1

01B-TB3

TI-TBI

CP1(1.5A)

NOTE DOTTED LINE
FOR 208/200V 60HZ
DOMESTIC/WTC/JAPAN,

SOLID LINES
FOR 230V
DOM AND
WTC

60HZ DOMESTIC
/WTC 230V

01H-HDI-B COIL

01H
MAIN FRAME ONLY
WIRING DISTRIBUTION
(3.4V POWER SUPPLY)

01H-HSI

D1 D2 D3 D4

C1 C2

R5 R6

Q1 Q2 Q3 Q4

R1 R2 R3 R4

01H-C3

01H-HDI-A COIL

01H-PC2

01H-PC1

CHART A

01H-PC3

(SHEET 1)
01A-WI-4
01A-WI-2
(SHEET 1)
01B-TB2-2
(SHEET 1)
01B-TB2-1
(SHEET 1)

PC
220/380V 50HZ WTC

CP1 (2.0A)

NOTE- DOTTED LINE
FOR 235/408V 50HZ WTC

HD2 - A COIL

D5 D7 D6 D8

AC AC

HD2

HD2-
B COIL

CHART A

BI	
FROM	TO
01H-BI-1	01H-TBI-4
-2	——
-3	01B-AI V4D13
-4	01B-AI V4D11
-5	01H-TBI 5
-6	01H GND
-7	01B-AI V4D10
-8	——

HDI - 70P
HDI - 4 N/O
HD2 - 70P
HD2 - 4 N/O
HDI - 6 N/O

IBM								
NAME	D-C DISTRIBUTION							
MAIN FRAME (3705-E,F,G,H,)								
DESIGN	TES	DEC75	SHT 2 OF 2					
DETAIL	TS	AUG76						
CHECK	TES	DEC75	CLASSIFICATION					
APPRO	TES	DEC75	TES	DEC75				

	DATE	CHANGE NO		DATE	CHANGE NO
	JAN76	312922		FEB77	313974
	JUN76	314419		JUN77	313977
	AUG76	315608			
	NOV76	315621			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ075

1749720 C

C

1757863

D-C POWER AND SIGNAL WIRING TO DISK

PART NO 1757863

LOGIC PG NO YZ078

TO D-C POWER SOURCE

OXF-HD2-1

OXA-WI-8 COM

OXA-WI-8 COM

OXA-TBI-5 +6V

OXA-WI-7 COM

OXA-W2-5 -4V

OXA-WI-7 COM

+24V

COM

DISK ECI

A +24V SEQUENCED

C +6V

E -4V

DISK GND BUS

REFER TO YZ081 (60HZ) AND YZ083 (50HZ) FOR PSI WIRING DIAGRAM

P2

+24V SEQUENCED B10

+6V D11

-4V D06

COM B08

+ACCESS 1 D03

+ERASE GATE B04

+ACCESS 2 D04

+WRITE GATE B05

+ACCESS 3 D05

+LOW CURRENT B06

+HEAD ENGAGE D10

+INDEX D13

+ACCESS 0 D02

+WRITE DATA B02

D07

+FILE DATA

NOTE [1]

TO DISK POWER AND SIGNAL CONNECTOR

P1

D09

B04

D06

B05

D05

D11

D10

D13

D02

B02

D07

D08

TO 01A-BI V2 NOTE [2]

NOTES

[1] P2 IS PLUGGED INTO THE 33FD DISK FOR FURTHER INFORMATION SEE THE 33FD FFTMM AND TM020 IN VOL 17

[2] P1 CONNECTION INFORMATION IS FOUND ON LOGIC PAGE GE030 IN VOL. 17

IBM

NAME	D-C POWER AND SIGNAL WIRING TO DISK		
DESIGN	DD	AUG 76	SHT OF
DETAIL			
CHECK	WJK	AUG 76	CLASSIFICATION
APPRO			

	DATE	CHANGE NO		DATE	CHANGE NO
	AUG 76	315058			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ078

1757863 C

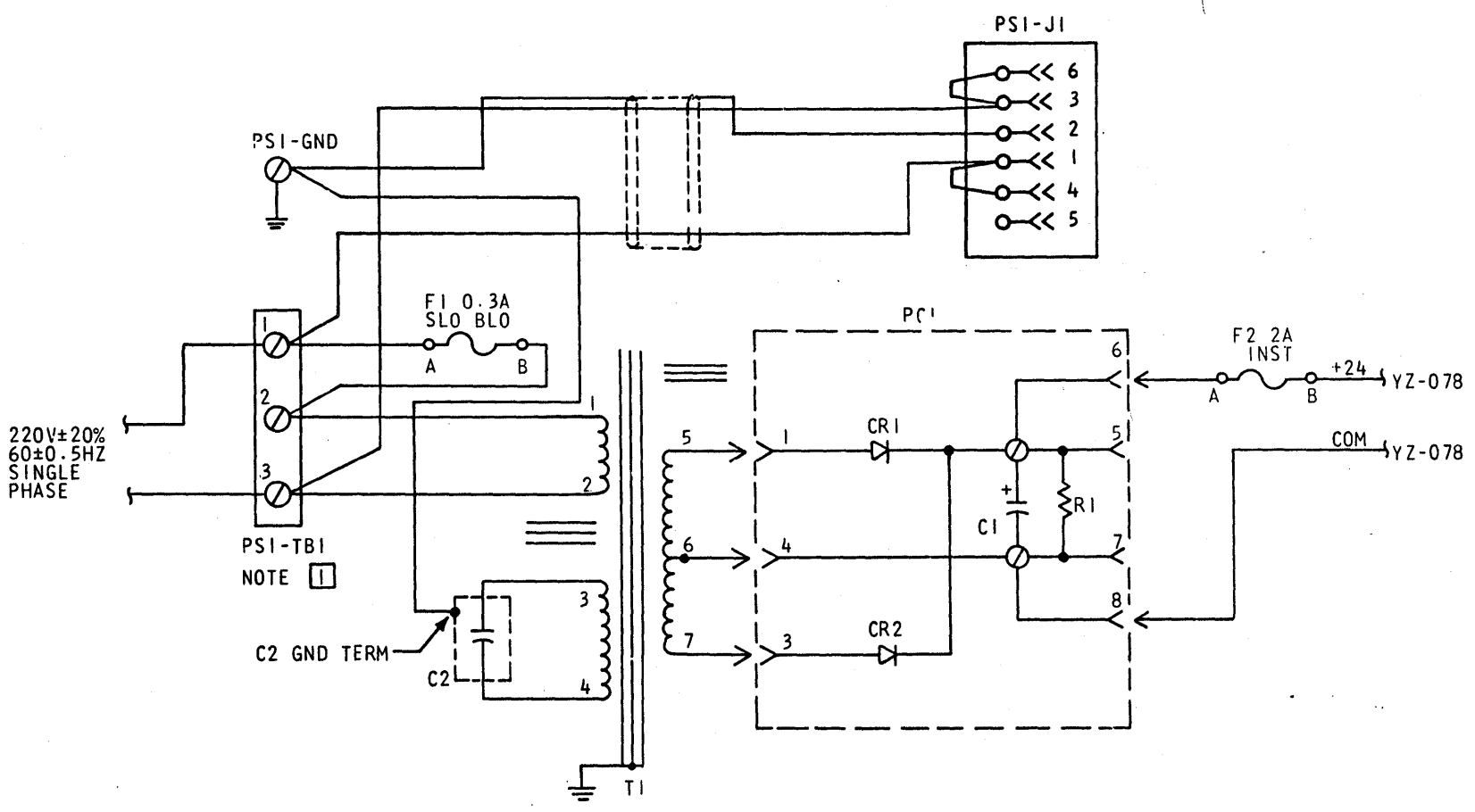
620 0134 1 MROF 7605222014 VERTICAL ELECTRICAL FORMAT ASTROCLOTH NOUT

C

1770745

PART NO 1770745 | LOGIC PG NO YZ081

PSI WIRING DIAGRAM 60HZ



NOTES 1. PSI-TB1 IS PART OF TRANSFORMER ASM (T1)

COMPONENT CHART

C1	5214366	CAPACITOR, 24000UF, 30V D-C
C2	5352837	CAPACITOR, 1.5 UF, 660V A-C
CR1, CR2	1149212	RECTIFIER, 3A
F1	78998	FUSE, 0.3A SLO BLO
F2	855231	FUSE, 2A INST
J1	725557	CONNECTOR, 3 POSITION
PC1	1851948	P C BOARD ASM
R1	303653	RESISTOR, 200Ω±5%, 10W
T1	1770779	FERRO ASM, 60 HZ, 24 VA

IBM										
NAME	PSI WIRING DIAGRAM 60HZ					DATE	CHANGE NO		DATE	CHANGE NO
						FEB73	309916			
						APR73	311051			
DESIGN	CD	OCT72	SHT OF			JUL 77	316710			
DETAIL	VR	OCT72								
CHECK			CLASSIFICATION		MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO	
APPRO									YZ081	

1770745 C

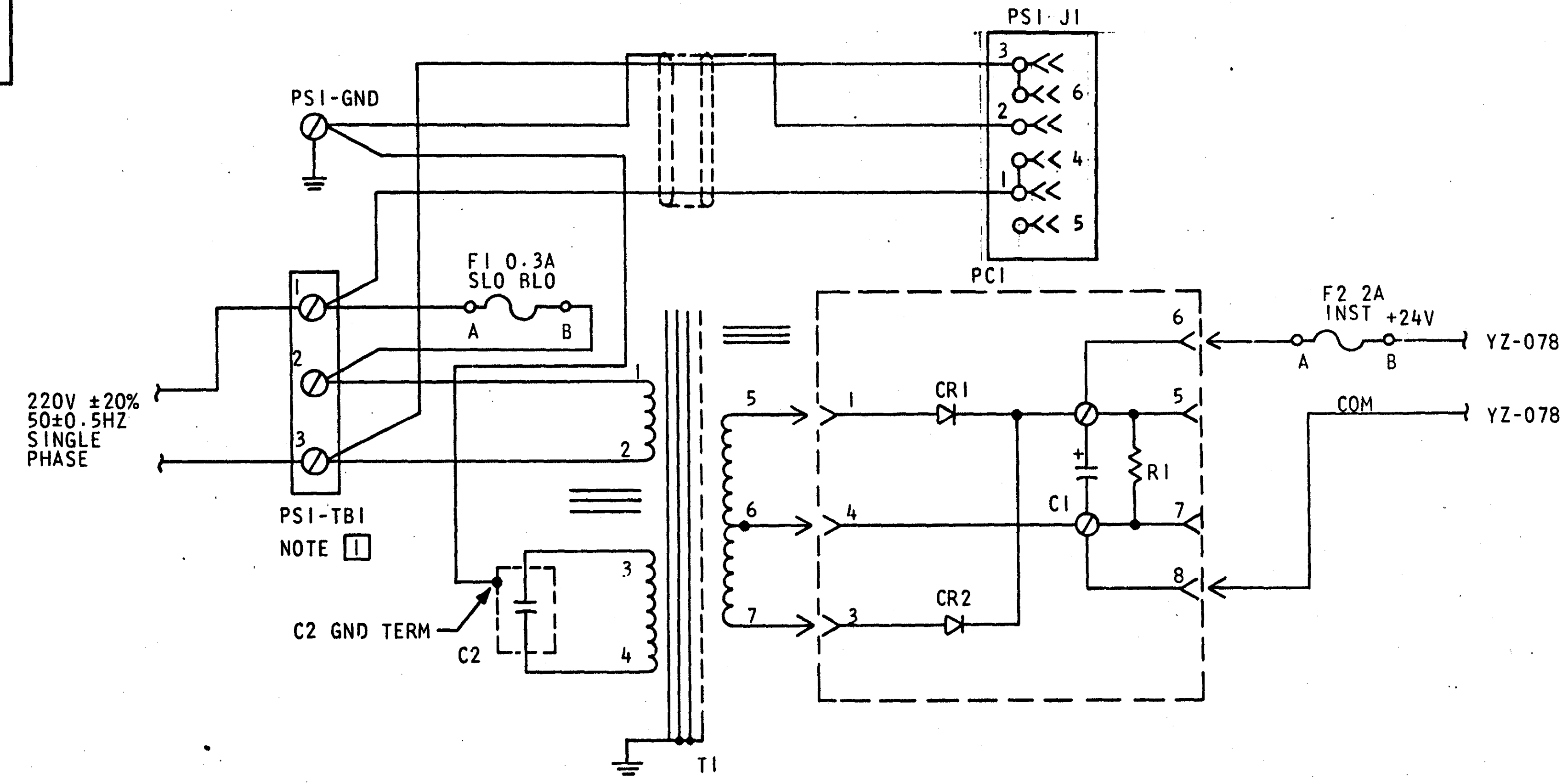
420-0134-1 MRO# 780822204 VERTICAL ELECTRICAL FORMAT ASTROCLOTH N880T

C

1770747

PART NO	LOGIC PG NO
1770747	YZ083

PSI WIRING DIAGRAM 50HZ



NOTES [1.] PSI-TBI IS PART OF TRANSFORMER ASM (TI)

COMPONENT CHART

CI	5214366	CAPACITOR, 24000UF, 30V D-C
C2	5252850	CAPACITOR, 2.0UF, 660V A-C
CRI, CR2	1149212	RECTIFIER, 3A
FI	78998	FUSE, 0.3A SLO BLO
F2	855231	FUSE, 2A INST
JI	725557	CONNECTOR, 3 POSITION
PCI	1851948	PC BOARD ASM
RI	303653	RESISTOR, 200 Ω±5% 10W
TI	1770778	FERRO ASM, 50HZ, 24VA

IBM

NAME	PSI WIRING DIAGRAM 50 HZ		
DESIGN	CD	OCT72	SHT OF
DETAIL	VR	OCT72	
CHECK			CLASSIFICATION
APPRO			

DATE	CHANGE NO		DATE	CHANGE NO
FEB73	309916			
APR73	311051			
JUL77	316710			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ083

1770747

C

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V
1																				
2	CONN X [4]	5863427 N868X	5863427 N868X	5863427 N868X	5862617 N617X [1]	5862617 N617X [1]	5862617 N617X [1]	5863952 X	5862617 N617X [1]	5862617 N617X [1]	5862617 N617X [1]	5863404 N855X		5862617 N617X [1]	5862617 N617X [1]	5862617 N617X [1]	5863411 N855X		5862866 N866X	
3							5		5	5	5	5					5	8	5	
4		CONN X [4]	CONN X [4]				5862867 N867X [2]		5862617 N617X [1]	5862617 N617X [1]	5862617 N617X [1]	5863406 N854X					5863418 N871X	8234916587X S [3]	5863442 N872X	
5	CONN X [4]	CONN X [4]	CONN X [4]	CONN X [4]	CONN X [4]															
6																				

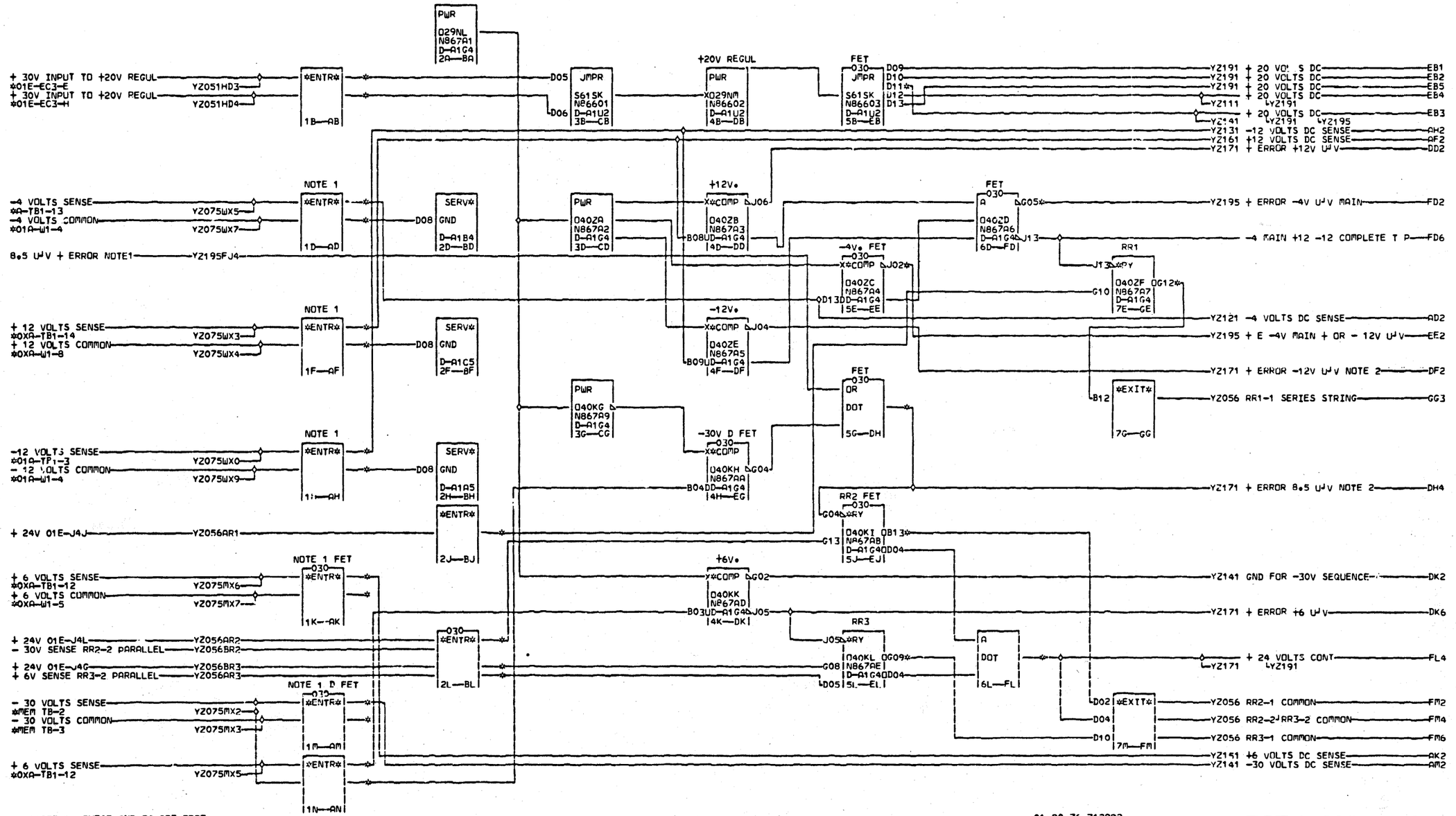
NOTE	PART NO.	SUBPART NO.	TYPE	SOCKETS	TOTAL
[1]	5862617	5863962	N617	E2 F2 G2 J2 J4 K2 K4 L2 L4 P2 Q2 R2	12
[2]	5862867	5863963	N867	G4	01
[3]	8231681	8235406	4957	T4	01
	5863427		N868	B2 C2 D2	03
	5863952		N852	H2	01
	5863404		N856	M2	01
	5863406		N854	M4	01
	5863411		N855	S2	01
	5863418		N871	S4	01
	5862866		N866	U2	01
	5863442		N872	U4	01
[4]	SEE ALSO YZ321		CONN	A2 A5 B4 B5 C4 C5 D5 E5	08

SUBSTITUTE PN'S ARE IMPROVED CARDS, AND ARE INTERCHANGEABLE WITH STANDARD PN'S SHOWN ABOVE, AND MAY BE SHIPPED BY PARTS CENTER IN RESPONSE TO ORDERS FOR STANDARD PN'S.

SOCKET LISTING
MACH. 3705 II
BOARD 01D-A1
PREV. ENGR. MAY76 314419
PRES. ENGR. DEC76 315621

IBM CORP. SCD PN 1750283

YZ099A



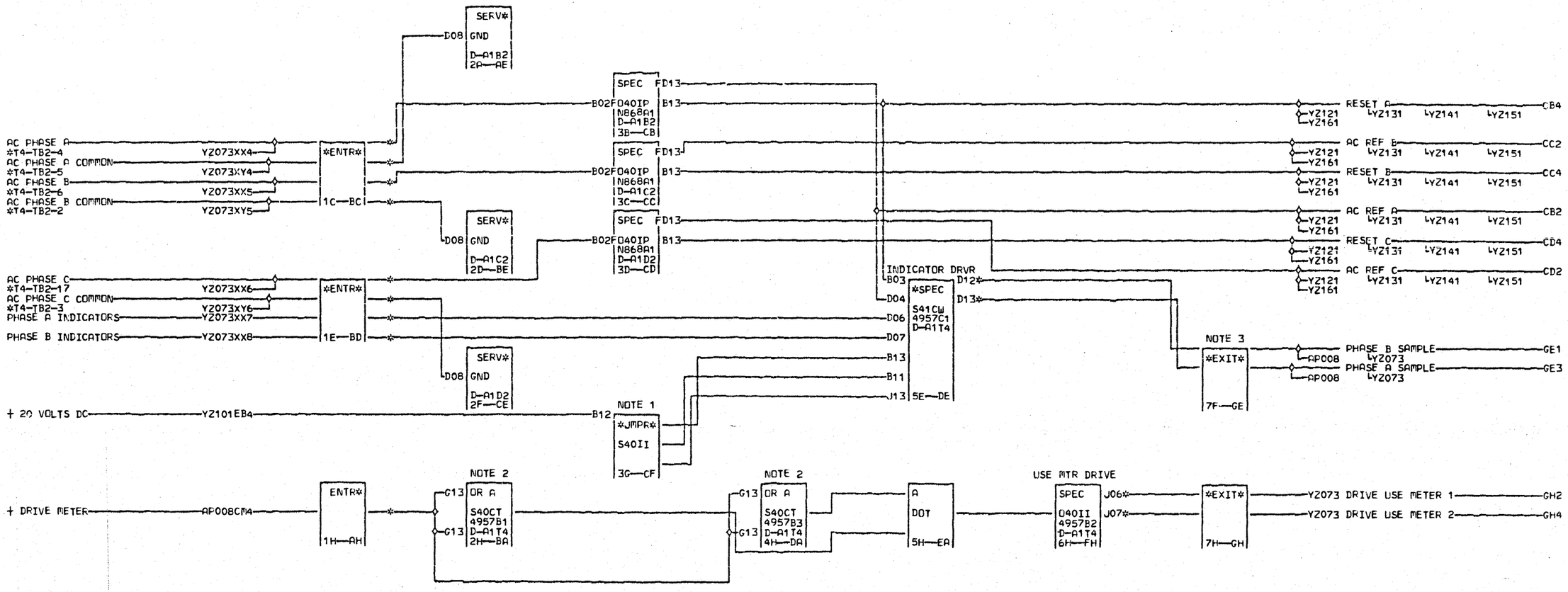
*NOTE 1 THESE INPUTS ARE FROM *YZ075 FOR MAIN FRAME OR FROM *YZ077 FOR EXPANSION FRAME.
*ALL TWISTED PAIRS.
NOTE 2 + IS 20V
- IS ZERO VOLTS.

030
SIM TO PN 1770735 EC 311273

AB2 D-A1D5D12 AB4 D-A1D5D13 AD2 D-A1B4B02 AD4 D-A1B4D02 AF2 D-A1C5B02 AF4 D-A1C5D02 AH2 D-A1A5B02 AH4 D-A1A5D02 AK2 D-A1C4B02 AK4 D-A1C4D02 AM2 D-A1G4B02 AM4 D-A1G4J02 BL2 D-A1D5B13 BL5 D-A1D5D09 BL6 D-A1D5D05 DH4 D-A1E5D09 EB3 D-A1E5B03 EE2 D-A1E5B06 FD2 D-A1E5D10 FL4 D-A1D5D04 GE4 D-A1D5B12 01B-A1V2D09 01B-A1V2D10 01B-A1V2B03 01B-A1V2B06

01-20-76 312922
05-28-76 314419

CONTROL VOLTAGE REGULATOR J	Y
POWER SEQUENCE J U/V DETECT.	Z
DATE 05-28-76 MACH. 27RNB	1
LOG 666 FRAME 01	0
3705 II ONLY P.N. 1750113	1
IBM CORP. RA BLK. SA	030



*NOTE 1 CONNECT JUMPER FROM
B12 TO B13 FOR 50HZ 200/235 OR 380/415 OR
Y B12 TO J13 FOR 50HZ 380/408 OR
2 *B12 TO B11 FOR 60HZ OPERATION
1 *YELLOW WIRE BACKPANEL
1 *NOTE 2 MST TO SLD LEVEL
1 *CONVERTER MODULE.
*NOTE 3 CABLE TO CE/OPR PANEL
030
SIM TO PN 1770736 EC 310268

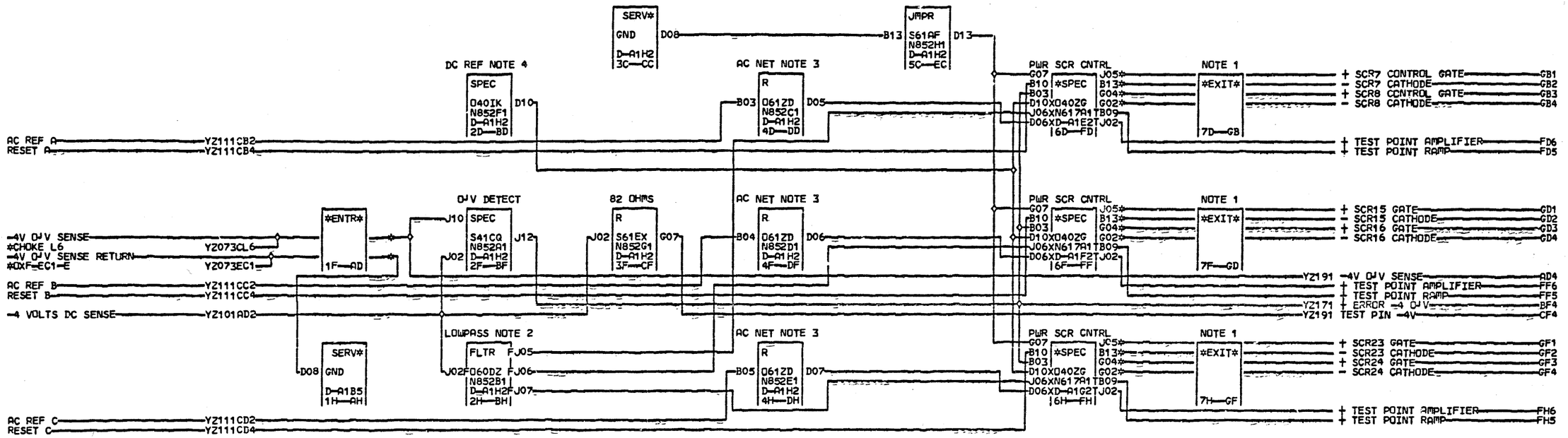
AH4 D-A1A2D05 DE1 D-A1A2D04
BC1 D-A1A2B02 DE3 D-A1A2D02
BC3 D-A1A2B03 FH2 D-A1A2B10
BC5 D-A1A2B07 FH4 D-A1A2D07
BC7 D-A1A2B08
BD1 D-A1A2D11
BD3 D-A1A2D12
BD5 D-A1A2D10
BD7 D-A1A2D09

01-20-76 312922

REF/RESET + CP PNL INDICATORS
USE METER DRIVER
DATE 01-26-76 MACH. 27RNB
LOG 897 FRAME 01
3705 II ONLY P.N. 1750114
IBM CORP. RA BLK. SA

Y
Z
1
1
1
030

030 YZ121



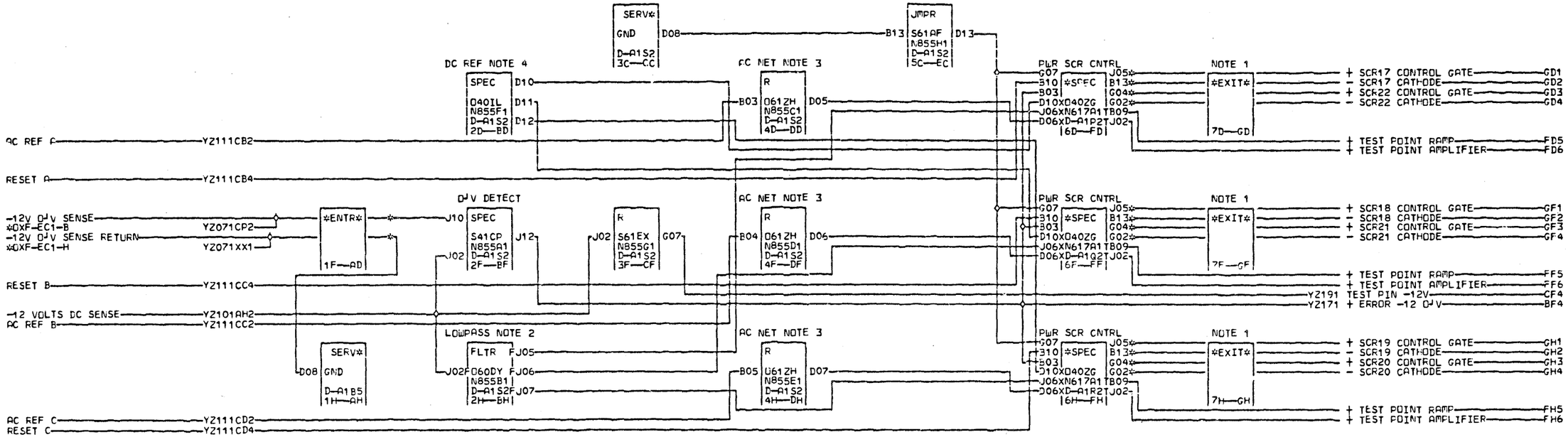
#NOTE 1 CABLE CONNECTS TO
#HEAT SINK GATE 01-G GN YZ073. AD4 D-A1B5B02 FF4 D-A1B4B10
Y #NOTE 2 OUTPUT VOLTAGE AD6 D-A1B5D02 FH1 D-A1B4D07
2 #APPROXIMATELY 0.68 VOLTS DC. FD1 D-A1B4D04 FH2 D-A1B4B07
1 #NOTE 3 INPUT APPROX 8VAC FD2 D-A1B4B04 FH3 D-A1B4D12
2 #OUTPUT APPROX 110MVPK VARIES FD3 D-A1B4D09 FH4 D-A1B4B12
1 #WITH AC LINE VOLTAGE FD4 D-A1B4B09
#NOTE 4 OUTPUT VOLTAGE FF1 D-A1B4D05
030#APPROXIMATELY 1.4 VOLTS DC. FF2 D-A1B4B05
SIM TO PN 1770737 EC 318043 FF3 D-A1B4D10

01-20-76 312922
04-14-78 318043

MINUS 4 VOLT POWER SCR
CONTROLS AND OJV DETECT
DATE 04-24-78 MACH. 27RNB
LOG 563 FRAME 01
3705 II ONLY P.N. 1750115
IBM CORP. RA BLK. SA

Y Z 1 2 1 030

030 YZ131

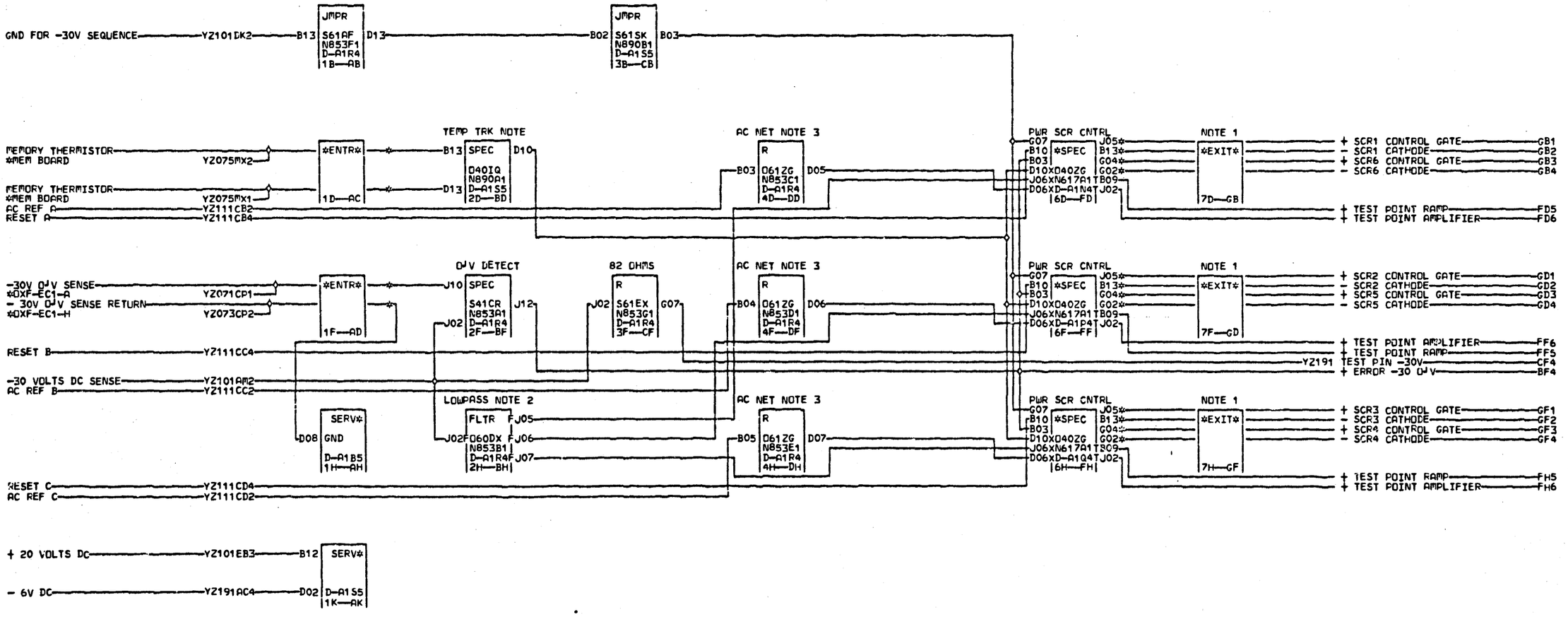


*NOTE 1 CABLE CONNECTS TO
*HEAT SINK GATE 01-G ON YZ071 AD2 D-A1B5B07 FF4 D-A1A5B10
Y *NOTE 2 OUTPUT VOLTAGE AD4 D-A1B5D07 FH1 D-A1A5D07
Z *APPROXIMATELY 1.15 VOLTS DC. FD1 D-A1A5D04 FH2 D-A1A5B07
1 *NOTE 3 INPUT APPROX 8VAC FD2 D-A1A5B04 FH3 D-A1A5D09
3 *OUTPUT APPROX 340MVPK VARIES FD3 D-A1A5D12 FH4 D-A1A5B09
1 *WITH AC LINE VOLTAGE. FD4 D-A1A5B12
*NOTE 4 OUTPUT VOLTAGE FF1 D-A1A5D05
030*APPROXIMATELY 3.0 VOLTS DC. FF2 D-A1A5B05
SIM TO PN 1770738 EC 311273 FF3 D-A1A5D10

01-20-76 312922

MINUS 12 VOLT POWER SCR
CONTROLS AND DJV DETECT
DATE 01-26-76 MACH. 27RNB
LOG 897 FRAME 01
3705 II ONLY P.N. 1750116
IBM CORP. RA BLK. SA

Y 2 1 3 1 030



*NOTE 1 CABLE CONNECTS TO
*HEAT SINK GATE 01-G ON YZ071
Y *NOTE 2 OUTPUT VOLTAGE
Z *APPROXIMATELY 0.90 VOLTS DC.
1 *NOTE 3 INPUT APPROX 8VAC
4 *OUTPUT APPROX 350MVPK VARIES
1 *WITH AC LINE VOLTAGE.
*NOTE 4 OUTPUT VOLTAGE
030*APPROXIMATELY 2.5 VOLTS DC
SIM TO PN 1770739 EC 311273

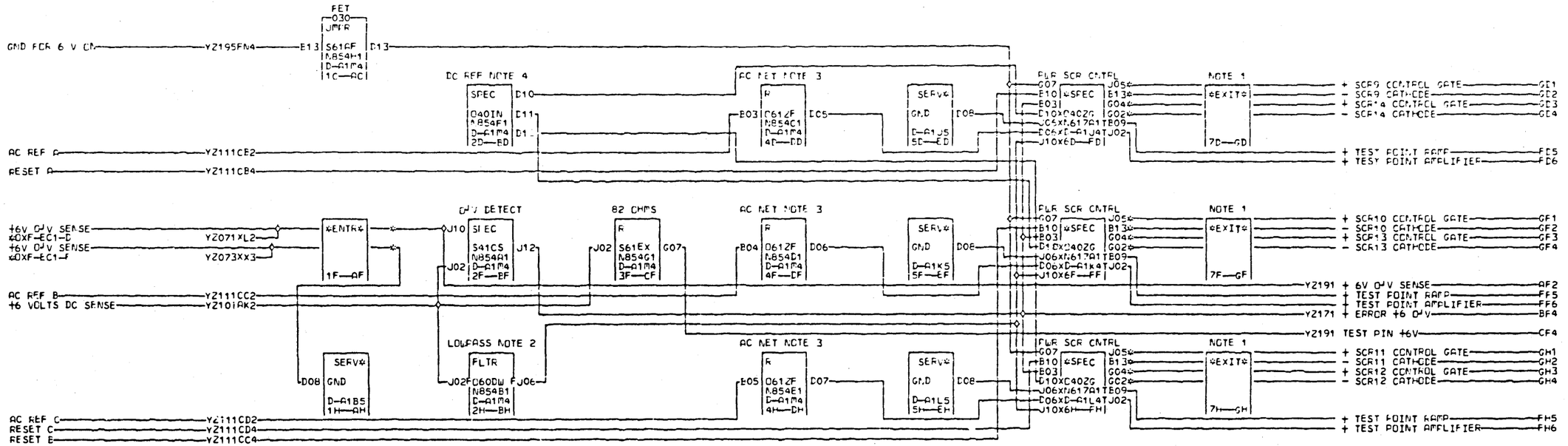
AC2	D-A1B5B10	FF2	D-A1A4B05
AC6	D-A1B5D10	FF3	D-A1A4D10
AD2	D-A1B5B09	FF4	D-A1A4B10
AD4	D-A1B5D09	FH1	D-A1A4D07
FD1	D-A1A4D04	FH2	D-A1A4B07
FD2	D-A1A4B04	FH3	D-A1A4D09
FD3	D-A1A4D12	FH4	D-A1A4B09
FD4	D-A1A4B12		
FF1	D-A1A4D05		

01-23-76 312922

-30 VOLT CARDS
REMOVED FOR FET
DATE 01-26-76 MACH. 27RAB
LOG 936 FRAME 01
3705 II ONLY P.N. 1750117
IBM CORP. RA BLK. SA

Y 2 1 4 1 030

030 YZ151

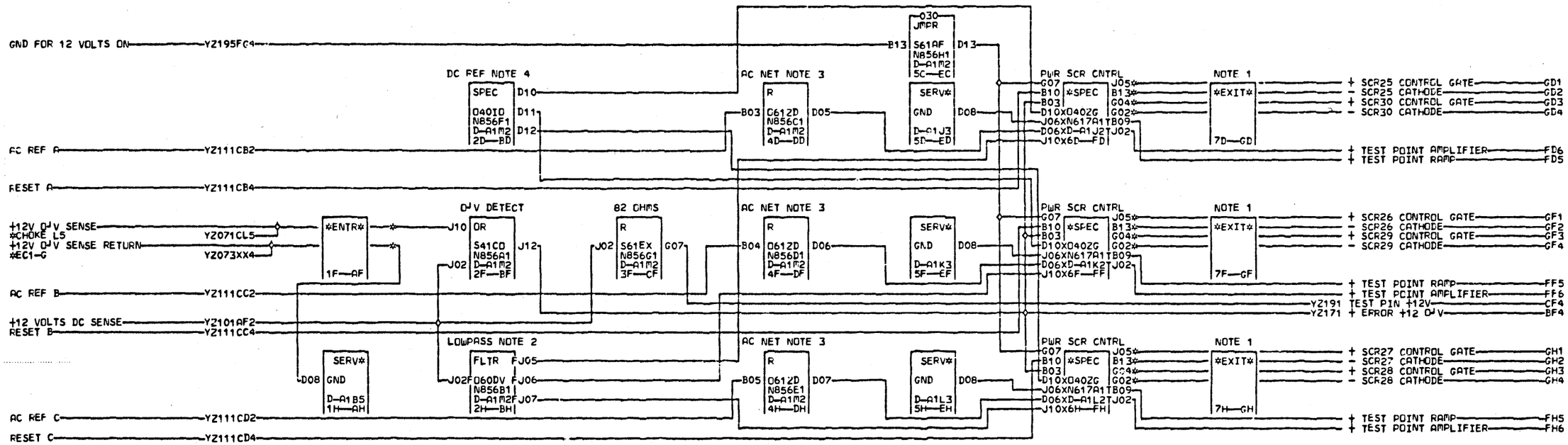


*NOTE 1 CABLE CONNECTS TO
*HEAT SINK GATE 01-G ON YZ071
Y *NOTE 2 OUTPUT VOLTAGE
Z *APPROXIMATELY 3.5 VOLTS DC.
1 *NOTE 3 INPUT APPROX 8VAC
5 *OUTPUT APPROX 50MVPK VARIES
1 *WITH AC LINE VOLTAGE.
*NOTE 4 OUTPUT VOLTAGE
030*APPROXIMATELY 1.75 VOLTS DC
SIM TO PN 1770740 EC 311273

AF2 D-A1B5B04 FF4 D-A1C4B10
AF4 D-A1B5D04 FH1 D-A1C4D07
FD1 D-A1C4D04 FH2 D-A1C4B07
FD2 D-A1C4B04 FH3 D-A1C4D09
FD3 D-A1C4D12 FH4 D-A1C4B09
FD4 D-A1C4B12
FF1 D-A1C4D05
FF2 D-A1C4B05
FF3 D-A1C4D10

01-20-76 312922

PLUS 6 VOLT POWER SCR CONTROLS AND O/V DETECT		Y
DATE 01-26-76 MACH. 27RNB		Z
		1
LCG 897 FRAME	01	5
		1
3705 II ONLY P.N. 1750118		030
IBM CORP. BLK.	SA	



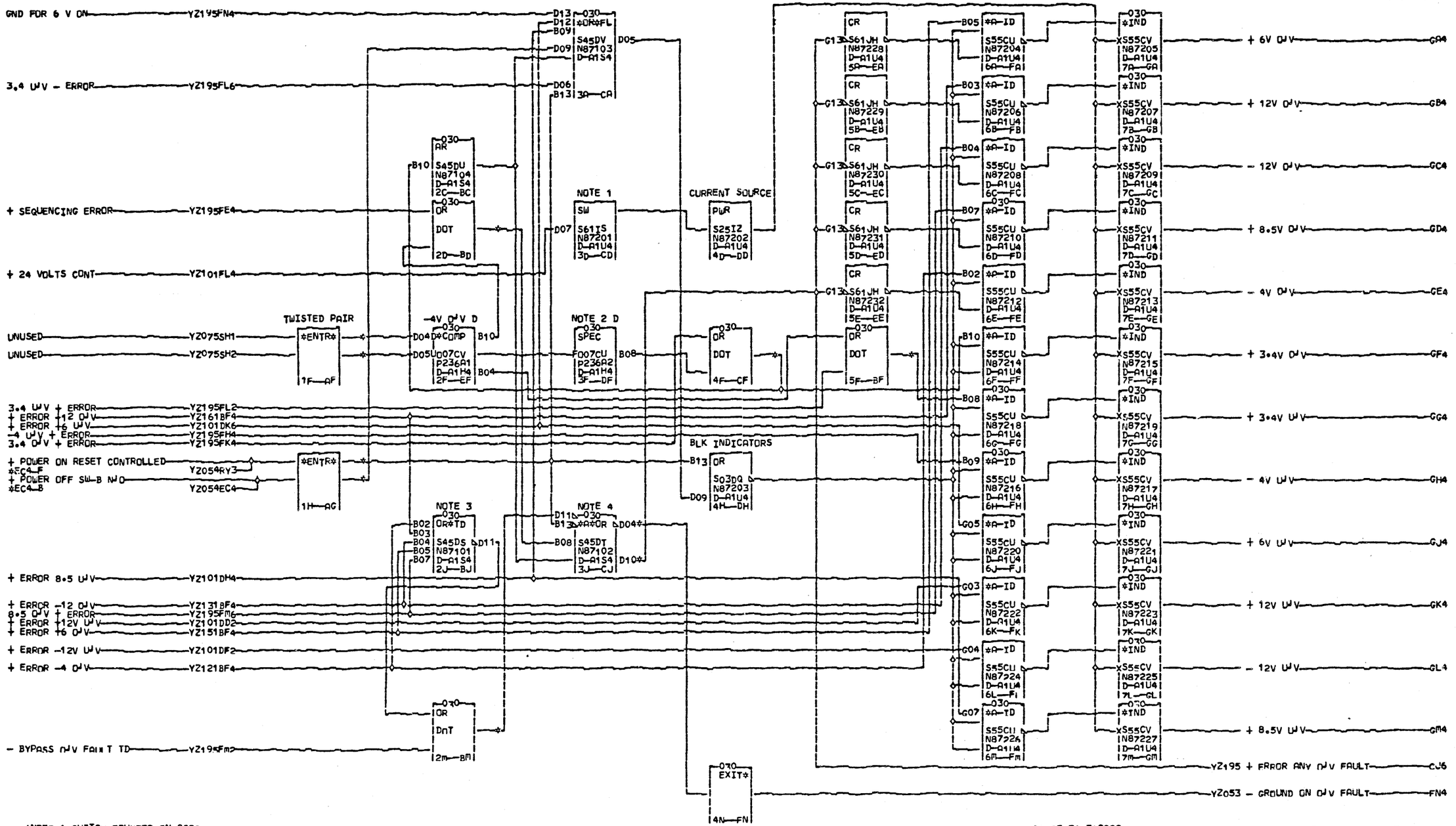
*NOTE 1 CABLE CONNECTS TO
*HEAT SINK GATE 01-G ON YZ071
Y *NOTE 2 OUTPUT VOLTAGE
Z *APPROXIMATELY 4.0VOLTS DC.
1 *NOTE 3 INPUT APPROX 8VAC
6 *OUTPUT APPROX 100MVPK VARIES
1 *WITH AC LINE VOLTAGE.
*NOTE 4 OUTPUT VOLTAGE
030*APPROXIMATELY 2.1 VOLTS DC
SIM TO PN 1770741 EC 311273

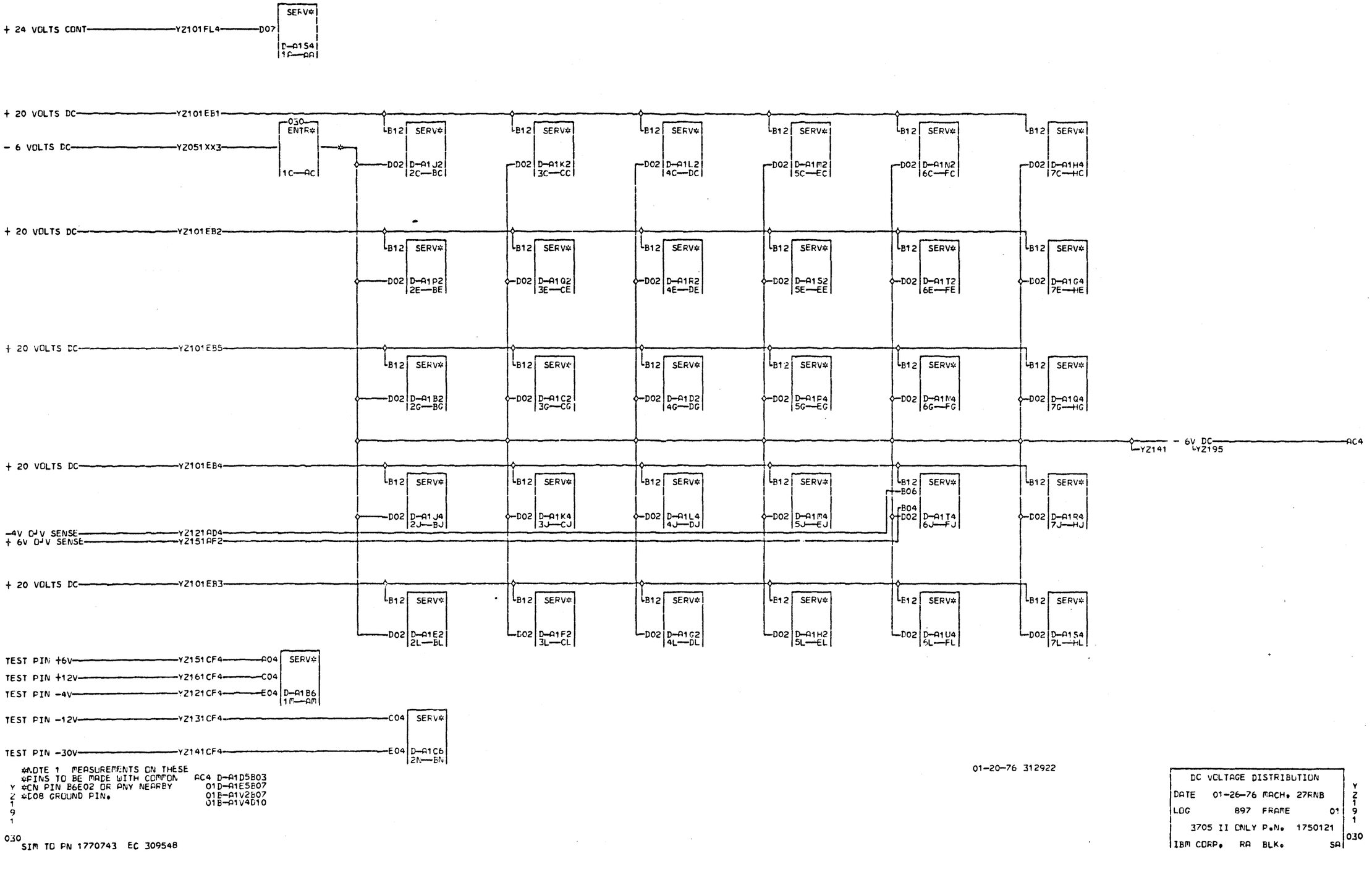
AF2 D-A1B5B05 FF4 D-A1C5B10
AF4 D-A1B5D05 FH1 D-A1C5D07
FD1 D-A1C5D04 FH2 D-A1C5B07
FD2 D-A1C5B04 FH3 D-A1C5D09
FD3 D-A1C5D12 FH4 D-A1C5B09
FD4 D-A1C5B12
FF1 D-A1C5D05
FF2 D-A1C5B05
FF3 D-A1C5D10

01-21-76 312923

PLUS 12 VOLT POWER SCR
CONTROLS AND OVER VOLT DETECT
DATE 01-26-76 MACH. 27RNB
LOG 913 FRAME 01
3705 II ONLY P.N. 1750119
IBM CORP. RA BLK. SA

Y Z 1 6 1 030


030 YZ171
GND FOR 6 V ON
YZ195FN4
3.4 UV - ERROR
YZ195FL6
+ SEQUENCING ERROR
YZ195FE4
+ 24 VOLTS CONT
YZ101FL4
UNUSED
YZ075SH1
UNUSED
YZ075SH2
3.4 UV + ERROR
YZ195FL2
+ ERROR +12 UV
YZ161BF4
+ ERROR +6 UV
YZ101DK6
-4 UV + ERROR
YZ195FH4
3.4 UV + ERROR
YZ195FK4
+ POWER ON RESET CONTROLLED
*EC4-F
YZ054RY3
+ POWER OFF SW-B N/O
*EC4-B
YZ054EC4
+ ERROR 8.5 UV
YZ101DH4
+ ERROR -12 UV
YZ131BF4
8.5 UV + ERROR
YZ195FM6
+ ERROR +12V UV
YZ101DD2
+ ERROR +6 UV
YZ151BF4
+ ERROR -12V UV
YZ101DF2
+ ERROR -4 UV
YZ121BF4
- BYPASS UV FAULT TD
YZ195FM2
TWISTED PAIR
-4V UV D
NOTE 1
NOTE 2 D
CURRENT SOURCE
BLK INDICATORS
NOTE 3
NOTE 4
+ 6V UV
YZ195 + ERROR ANY UV FAULT
YZ053 - GROUND ON UV FAULT
*NOTE 1 SWITCH MOUNTED ON CARD
*DEPRESS SWITCH TO PUT OUT IND
*NOTE 2 OPEN SCR DETECTOR -4V
TURNS ON INDICATOR. SEE FETMM.
NOTE 3 AN INPUT WILL CAUSE
OUTPUT TO GO POS FOR 200 MS.
NOTE 4 PICK RY11. D11 AND B13
ACTIVATE BLOCK ONLY IF INPUT
030 IS STILL PRESENT ON BLOCK BJ.
SIM TO PN 1770742 EC 311263
01-23-76 312922
02-28-77 316665
POWER FAULT INDICATORS AND
FAULT RELAY PICK CONTROL
DATE 08-17-77 MACH. 27RNB
LOG 631 FRAME 01
3705 II ONLY P.N. 1750120
IBM CORP. RA BLK. SA



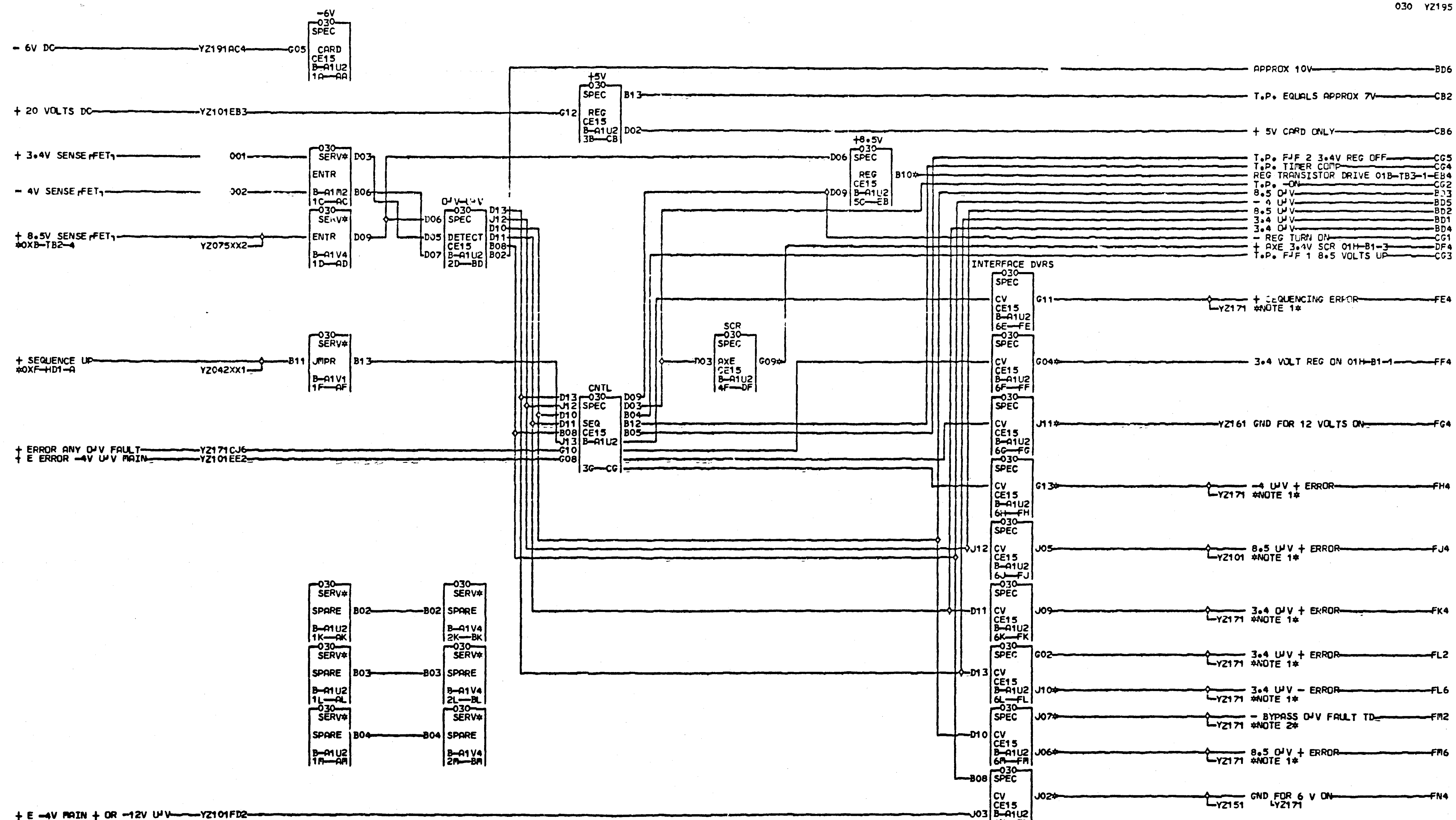
*NOTE 1 MEASUREMENTS ON THESE *PINS TO BE MADE WITH COMMON *CN PIN B6E02 OR ANY NEARBY *D08 GROUND PIN.

AC4 D-A1D5B03
01D-A1E5B07
01B-A1V2B07
01B-A1V4D10

030
SIM TO PN 1770743 EC 309548

01-20-76 312922

DC VOLTAGE DISTRIBUTION					
DATE	01-26-76	MACH. 27RNB			YZ191
LOG	897	FRAME	01		
3705 II ONLY P.N. 1750121					030
IBM CORP.	RA	BLK.		SA	



NOTE 1.
+ IS 10 TO 20 V
- IS 0V
NOTE 2.
THIS SIGNAL WILL BE APPROX
+0.4 FOR NORMAL OR 8.5 O/V
CONDITION AND +10 TO 20V
FOR 12V, 4V, OR 6V O/V
CONDITION

DF4 B-A1V4D13
EB4 B-A1V4B13
FF4 B-A1V4D11
FG4 B-A1V2D03
01D-A1E5D03
FH4 B-A1V2B02
01D-A1E5B02
FL6 B-A1V2D04
01D-A1E5D04
FM2 B-A1V2D06
01D-A1E5D06
FM6 B-A1V2D07
01D-A1E5D07
FN4 B-A1V2B09
01D-A1E5B09

01-21-76 312922
05-28-76 314419
11-30-76 315621
02-28-77 316665
04-14-78 318043

FET PWR CARD		
DATE 04-24-78	MACH. 27RNB	
LOG 564	FRAME	01
3705 II ONLY	P.N. 1750122	
IBM CORP.	BLK.	SA

YZ195 030

PART NO	LOGIC PG NO
5998397	YZ201

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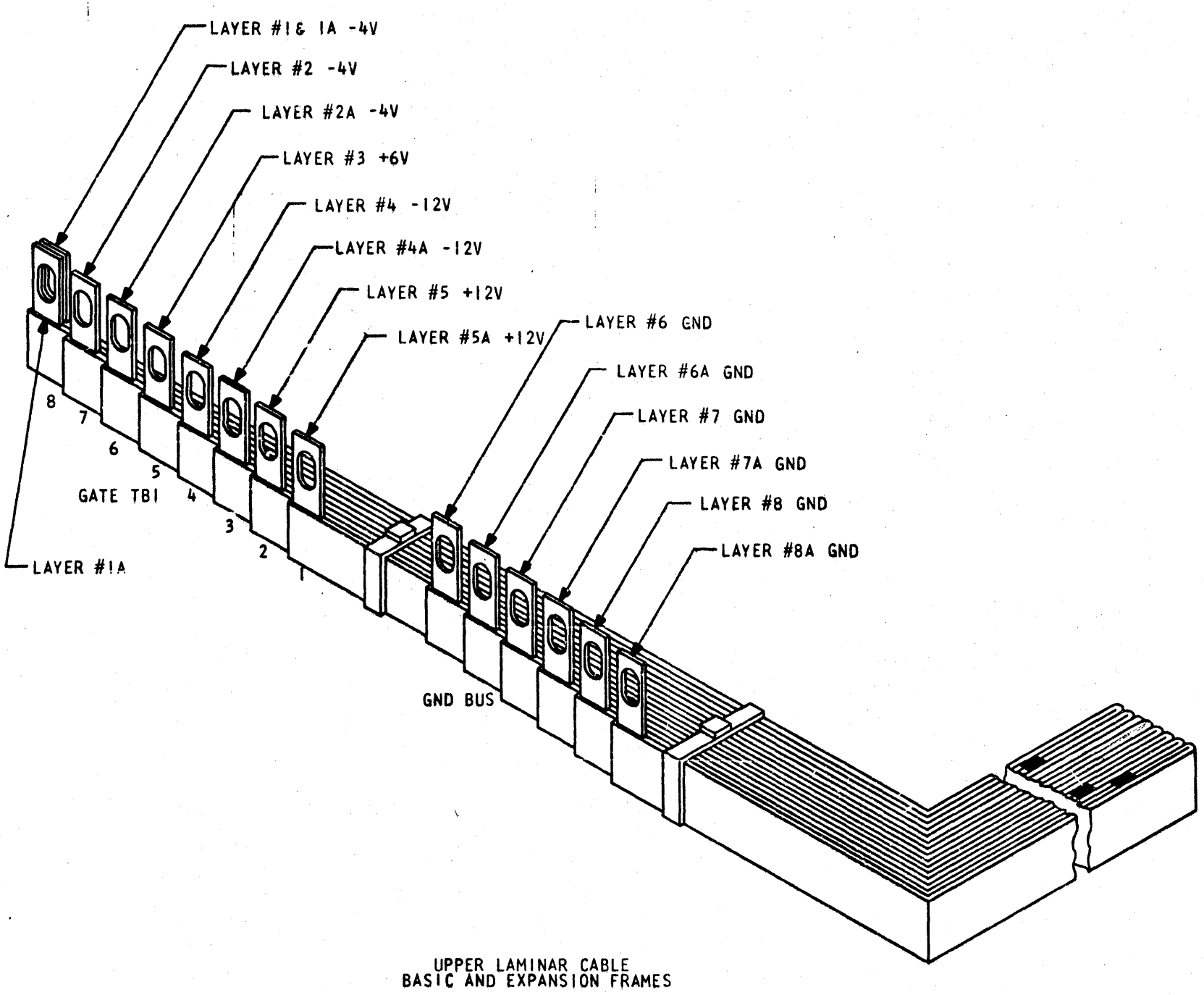
5998397



UPPER LAMINAR CABLE
BASIC AND EXPANSION FRAMES

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	LAMINAR BUS CABLE BASIC				SEP71	309504			
	FRAME UPPER				DEC71	309506			
DESIGN	NH	SEP71	SHT 1 OF 4		NCV76	315621			
DETAIL	VR	SEP71							
CHECK	AAM	SEP71	CLASSIFICATION		MUST CONFORM TO ENG SPEC	DEVELOPMENT NO		LOGIC PG NO	
APPRO	RS	SEP71						YZ201	

5998397

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5998397

PART NO	LOGIC PG NO
5998397	YZ201

LAMINAR PLUG CHART

LAYER NO.	TERM	WIRE NO.'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
1	1	1	A2	D1 B13	-4	WHITE	5182920
		1		D1 C10			
6	2	2	A2	D1 B10	GND	BLACK	5182916
		2		D1 C13			
2A	3	3	A1	D6 B05	-4	WHITE	5182920
		3		D6 C02			
8A	4	4	A1	D6 B02	GND	BLACK	5182916
		4		D6 C05			
1	5	5	A2	G1 C13	-4	WHITE	5182920
		5		G1 D10			
6	6	6	A2	G1 C10	GND	BLACK	5182916
		6		G1 D13			
2A	7	7	A1	G6 C05	-4	WHITE	5182920
		7		G6 D02			
8A	8	8	A1	G6 C02	GND	BLACK	5182916
		8		G6 D05			
1	9	9	A2	K1 E13	-4	WHITE	5182920
		9		L1 A10			
6	10	10	A2	K1 E10	GND	BLACK	5182916
		10		L1 A13			
2A	11	11	A1	K6 E05	-4	WHITE	5182920
		11		L6 A02			
8A	12	12	A1	K6 E02	GND	BLACK	5182916
		12		L6 A05			
3	13	13	A1	L6 D04	+6	ORANGE	5182917
		13	A2	L1 D11			
5	14	14	A2	M1 B11	+12	GRAY	5182919
		14		M1 C11			
5A	15	15	A1	M6 B04	+12	GRAY	5182919
		15		M6 C04			
4	16	16	A2	N1 C11	-12	VIOLET	5182918
		16		N1 E11			
5	17	17	A2	M1 D11	+12	GRAY	5182919
		17		N1 A11			
5A	18	18	A1	M6 E04	+12	GRAY	5182919
		18		N6 A04			
8A	19	19	A1	P6 B02	GND	BLACK	5182916
		19		P6 C05			
1	20	20	A2	P1 B13	-4	WHITE	5182920
		20		P1 C10			
4A	21	21	A1	N6 E04	-12	VIOLET	5182918
		21		N6 D04			
2A	22	22	A1	P6 B05	-4	WHITE	5182920
		22		P6 C02			
6	23	23	A2	P1 B10	GND	BLACK	5182916
		23		P1 C13			
1	24	24	A2	S1 C13	-4	WHITE	5182920
		24		S1 D10			

IBM									
NAME	LAMINAR BUS CABLE				DATE	CHANGE NO		DATE	CHANGE NO
	BASIC FRAME UPPER				SEP71	309504			
DESIGN	NH	SEP71	SHT 2 OF 4		DEC71	309506			
DETAIL	VR	SEP71			NOV76	315621			
CHECK	AAM	SEP71	CLASSIFICATION						
APPRO	RS	SEP71							

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ201

5998397

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PART NO	LOGIC PG NO
5998397	YZ201

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5998397

LAMINAR PLUG CHART

SHEET 3 OF 4

	LAYER NO.	TERM	WIRE NO'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
	6	25	25	A2	S1 C10	GND	BLACK	5182916
			25		S1 D13			
	2A	26	26	A1	S6 C05	-4	WHITE	5182920
			26		S6 D02			
	8A	27	27	A1	S6 C02	GND	BLACK	5182916
			27		S6 D05			
	1A	28	28	B2	D1 B13	-4	WHITE	5182920
			28		D1 C10			
	6A	29	29	B2	D1 B10	GND	BLACK	5182916
			29		D1 C13			
	2	30	30	B1	D6 B05	-4	WHITE	5182920
			30		D6 C02			
	8	31	31	B1	D6 B02	GND	BLACK	5182916
			31		D6 C05			
	1A	32	32	B2	G1 C13	-4	WHITE	5182920
			32		G1 D10			
	6A	33	33	B2	G1 C10	GND	BLACK	5182916
			33		G1 D13			
	2	34	34	B1	G6 C05	-4	WHITE	5182920
			34		G6 D02			
	8	35	35	B1	G6 C02	GND	BLACK	5182916
			35		G6 D05			
	1A	36	36	B2	K1 E13	-4	WHITE	5182920
			36		L1 A10			
	6A	37	37	B2	K1 E10	GND	BLACK	5182916
			37		L1 A13			
	2	38	38	B1	K6 E05	-4	WHITE	5182920
			38		L6 A02			
	8	39	39	B1	K6 E02	GND	BLACK	5182916
			39		L6 A05			
3 4	3	40	40	B1	L6 D04	+6	ORANGE	5182917
1	3	40	40	B2	L1 D11			
1	5	41	41	B2	M1 B11	+12	GRAY	5182919
			41		M1 C11			
2	5A	42	42	B1	M6 B04	+12	GRAY	5182919
			42		M6 C04			
1	5	43	43	B2	M1 D11	+12	GRAY	5182919
			43		N1 A11			
2	5A	44	44	B1	M6 E04	+12	GRAY	5182919
			44		N6 A04			
1	4	45	45	B2	N1 C11	-12	VIOLET	5182918
			45		N1 E11			
	8	46	46	B1	P6 B02	GND	BLACK	5182916
			46		P6 C05			
	1A	47	47	B2	P1 B13	-4	WHITE	5182920
			47		P1 C10			
2	4A	48	48	B1	N6 D04	-12	VIOLET	5182918
			48		N6 E04			

NOTES:

1. NOT USED FOR CS-3 FEATURE
2. NOT USED FOR CA4 OR RPL FEATURE
3. FOR CA4 FEATURE WIRE NO. 40 TERMINATES AT PIN LOCATION 01A-B1T4B11
4. FOR RPL FEATURE IN 01A-B1 LOCATION WIRE # 40 TERMINATES AT PIN LOCATION 01A-B1U2B11

IBM

NAME	LAMINAR BUS CABLE				
	BASIC FRAME UPPER				
DESIGN	NH	SEP71	SHT 3 OF 4		
DETAIL	VR	SEP71			
CHECK	AAM	SEP71	CLASSIFICATION		
APPRO	RS	SEP71			

DATE	CHANGE NO		DATE	CHANGE NO
SEP71	309504			
DEC71	309506			
NOV76	315621			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ201

5998397

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5998397

PART NO	LOGIC PG NO
5998397	YZ201

SHEET 4 OF 4

LAMINAR PLUG CHART

LAYER NO.	TERM	WIRE NO.'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
2	49	49	B1	P6 B05	-4	WHITE	5182920
		49		P6 C02			
6A	50	50	B2	P1 B10	GND	BLACK	5182916
		50		P1 C13			
1A	51	51	B2	S1 C13	-4	WHITE	5182920
		51		S1 D10			
6A	52	52	B2	S1 C10	GND	BLACK	5182916
		52		S1 D13			
2	53	53	B1	S6 C05	-4	WHITE	5182920
		53		S6 D02			
8	54	54	B1	S6 C02	GND	BLACK	5182916
		54		S6 D05			
3	55	55	A1	L6 D02	+6	ORANGE	5182917
		55	A2	L1 D13			
3	56	56	B1	L6 D02	+6	ORANGE	5182917
3	56	56	B2	L1 D13			

[2] [3] [1]

NOTES:

[1] NOT USED FOR CS-3 FEATURE

[2] FOR CA4 FEATURE WIRE NO. 56 TERMINATES AT PIN LOCATION 01A-B1Q2B11

[3] NOT USED FOR RPL FEATURE

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	LAMINAR BUS CABLE				SEP71	309504			
	BASIC FRAME UPPER				DEC71	309506			
DESIGN	NH	SEP71	SHT 4 OF 4		NOV76	315621			
DETAIL	VR	SEP71							
CHECK	AAM	SEP71	CLASSIFICATION		MUST CONFORM TO ENG SPEC	DEVELOPMENT NO		LOGIC PG NO	
APPRO	RS	SEP71						YZ201	

5998397

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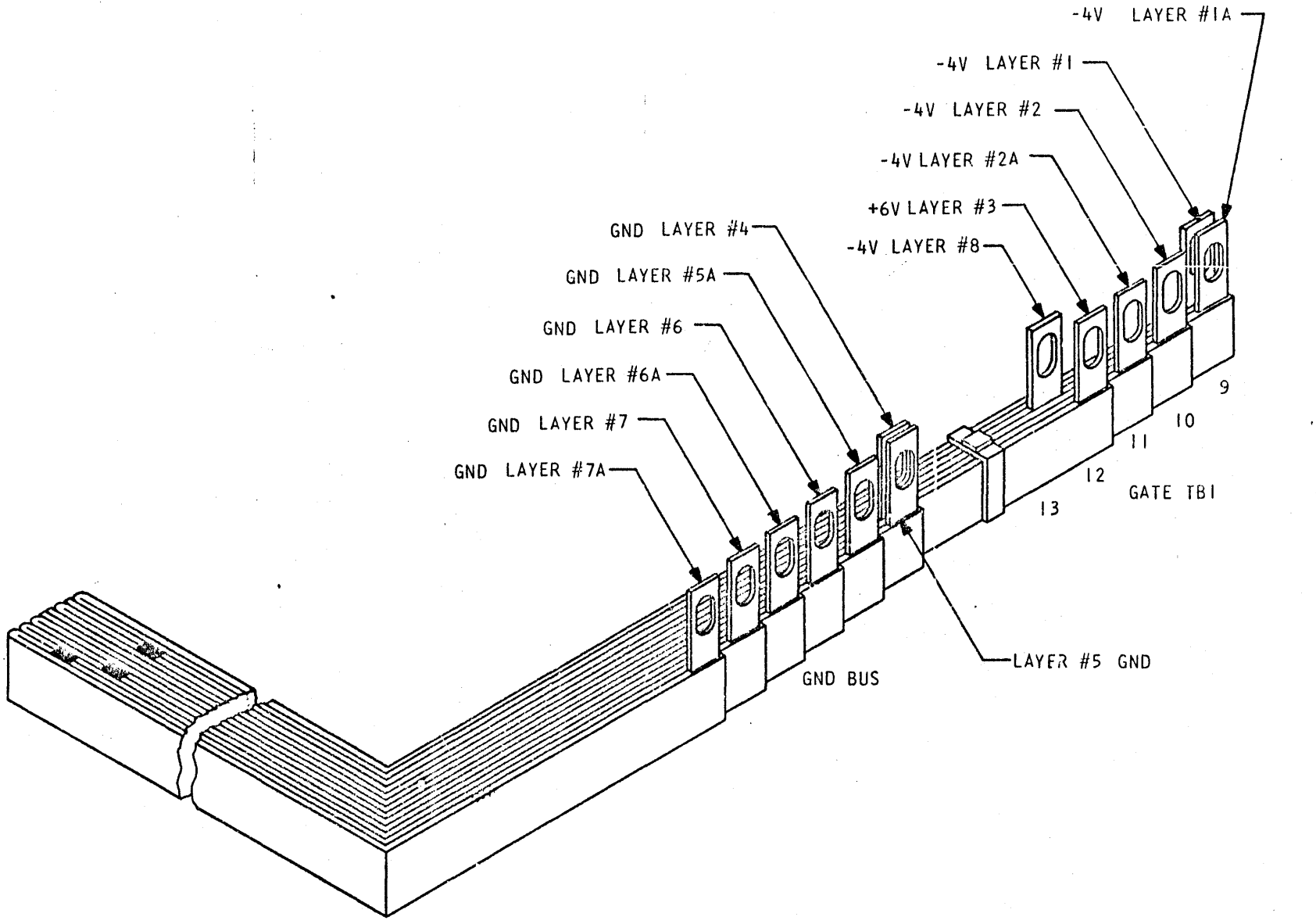
5998398

PART NO	LOGIC PG NO
5998398	YZ211



LOWER LAMINAR CABLE
MAIN FRAME

IBM								
NAME	LAMINAR BUS CABLE				DATE	CHANGE NO		DATE	CHANGE NO
	BASIC FRAME LOWER				SEP71	309504		MAY73	311052
DESIGN	NH	SEP71	SHT 1 OF 3		DEC71	309506		NOV73	310281
DETAIL	VR	SEP71			APR72	309737		JUN76	315618
CHECK	AAM	SEP71	CLASSIFICATION		OCT72	309944		NOV76	315621
APPRO	RS	SEP71			MUST CONFORM TO ENG SPEC	DEVELOPMENT NO		LOGIC PG NO	
								YZ211	

5998398

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5998398

PART NO	LOGIC PG NO
5998398	YZ211

SHEET 2 OF 3

LAMINAR PLUG CHART

LAYER NO.	TERM	WIRE NO.'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
7A	1	1	A4	D1 B10	GND	BLACK	5182916
		1		D1 C13			
2A	2	2	A4	D1 B13	-4	WHITE	5182920
		2		D1 C10			
5	3	3	A3	D6 B02	GND	BLACK	5182916
		3		D6 C05			
1	4	4	A3	D6 B05	-4	WHITE	5182920
		4		D6 C02			
7A	5	5	A4	G1 C10	GND	BLACK	5182916
		5		G1 D13			
2A	6	6	A4	G1 C13	-4	WHITE	5182920
		6		G1 D10			
5	7	7	A3	G6 C02	GND	BLACK	5182916
		7		G6 D05			
1	8	8	A3	G6 C05	-4	WHITE	5182920
		8		G6 D02			
7A	9	9	A4	K1 E10	GND	BLACK	5182916
		9		L1 A13			
2A	10	10	A4	K1 F13	-4	WHITE	5182920
		10		L1 A10			
5	11	11	A3	K6 E02	GND	BLACK	5182916
		11		L6 A05			
1	12	12	A3	K6 E05	-4	WHITE	5182920
		12		L6 A02			
7A	13	13	A4	P1 B10	GND	BLACK	5182916
		13		P1 C13			
2A	14	14	A4	P1 B13	-4	WHITE	5182920
		14		P1 C10			
5	15	15	A3	P6 B02	GND	BLACK	5182916
		15		P6 C05			
1	16	16	A3	P6 B05	-4	WHITE	5182920
		16		P6 C02			
7A	17	17	A4	S1 C10	GND	BLACK	5182916
		17		S1 D13			
3	18	18	A4	*	+6	ORANGE	1770761
		18					
5	19	19	A3	S6 C02	GND	BLACK	5182916
		19		S6 D05			
2A	20	20	A4	S1 C13	-4	WHITE	5182920
		20		S1 D10			
3	21	21	A4	*	+6	ORANGE	1770760
		21		*			
1	22	22	A3	S6 C05	-4	WHITE	5182920
		22		S6 D02			
7	23	23	B4	D1 B10	GND	BLACK	5182916
		23		D1 C13			
2	24	24	B4	D1 B13	-4	WHITE	5182920
		24		D1 C10			

* IF CA 1, CA 2, OR CA 3 OR CA 4

WIRE 18 TO Q2B11
WIRE 21 TO T4B11
WIRE 21 TO S2B11
RPL FEATURE IF IS IN OIA-A4 LOCATION

WIRE 21 TO U2B11
TIE BACK WIRE 18
TIE BACK WIRE 21

IBM

NAME	LAMINAR BUS CABLE		
	BASIC FRAME LOWER		
DESIGN	NH	SEP71	SHT 2 OF 3
DETAIL	VR	SEP71	
CHECK	AAM	SEP71	CLASSIFICATION
APPRO	RS	SEP71	

	DATE	CHANGE NO		DATE	CHANGE NO
	SEP71	309504		MAY73	311052
	DEC71	309506		NOV73	310281
	APR72	309737		JUN76	315618
	OCT72	309944		NOV76	315621

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ211

5998398

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5998398

PART NO	LOGIC PG NO
5998398	YZ211

SHEET 3 OF 3

LAMINAR PLUG CHART

LAYER NO.	TERM	WIRE NO.'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
5A	25	25	B3	D6 B02	GND	BLACK	5182916
		25		D6 C05			
1A	26	26	B3	D6 B05	-4	WHITE	5182920
		26		D6 C02			
7	27	27	B4	G1 C10	GND	BLACK	5182916
		27		G1 D13			
2	28	28	B4	G1 C13	-4	WHITE	5182920
		28		G1 D10			
5A	29	29	B3	G6 C02	GND	BLACK	5182916
		29		G6 D05			
1A	30	30	B3	G6 C05	-4	WHITE	5182920
		30		G6 D02			
7	31	31	B4	K1 E10	GND	BLACK	5182916
		31		L1 A13			
2	32	32	B4	K1 E13	-4	WHITE	5182920
		32		L1 A10			
5A	33	33	B3	K6 E02	GND	BLACK	5182916
		33		L6 A05			
1A	34	34	B3	K6 E05	-4	WHITE	5182920
		34		L6 A02			
7	35	35	B4	P1 B10	GND	BLACK	5182916
		35		P1 C13			
2	36	36	B4	P1 B13	-4	WHITE	5182920
		36		P1 C10			
5A	37	37	B3	P6 B02	GND	BLACK	5182916
		37		P6 C05			
1A	38	38	B3	P6 B05	-4	WHITE	5182920
		38		P6 C02			
7	39	39	B4	S1 C10	GND	BLACK	5182916
		39		S1 D13			
2	40	40	B4	S1 C13	-4	WHITE	5182920
		40		S1 D10			
5A	41	41	B3	S6 C02	GND	BLACK	5182916
		41		S6 D05			
1A	42	42	B3	S6 C05	-4	WHITE	5182920
		42		S6 D02			
4	43	43	B4	SPARE	GND	BLACK	5182926
		43		SPARE			
8	44	NONE	B4	NONE	-4	NONE	NONE
		NONE		NONE			
3	45	45	B4	U2 B12	+6	ORANGE	1770760
		45		U3 B12			
[1]		45	B3	C5 B12			1750347

NOTE

[1] ORANGE JUMPER FROM 01A-B4U2B12 TO 01A-B3C5B12 FOR REMOTE POWER OFF FEATURE ON MOD II ONLY

IBM

NAME	LAMINAR BUS CABLE		
	BASIC FRAME LOWER		
DESIGN	NH	SEP71	SHT 3 OF 3
DETAIL	VR	SEP71	
CHECK	AAM	SEP71	CLASSIFICATION
APPRO	RS	SEP71	

	DATE	CHANGE NO		DATE	CHANGE NO
	SEP71	309504		MAY73	311052
	DEC71	309506		NOV73	310281
	APR72	309737		JUN76	315618
	OCT72	309944		NOV76	315621

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ211

5998398

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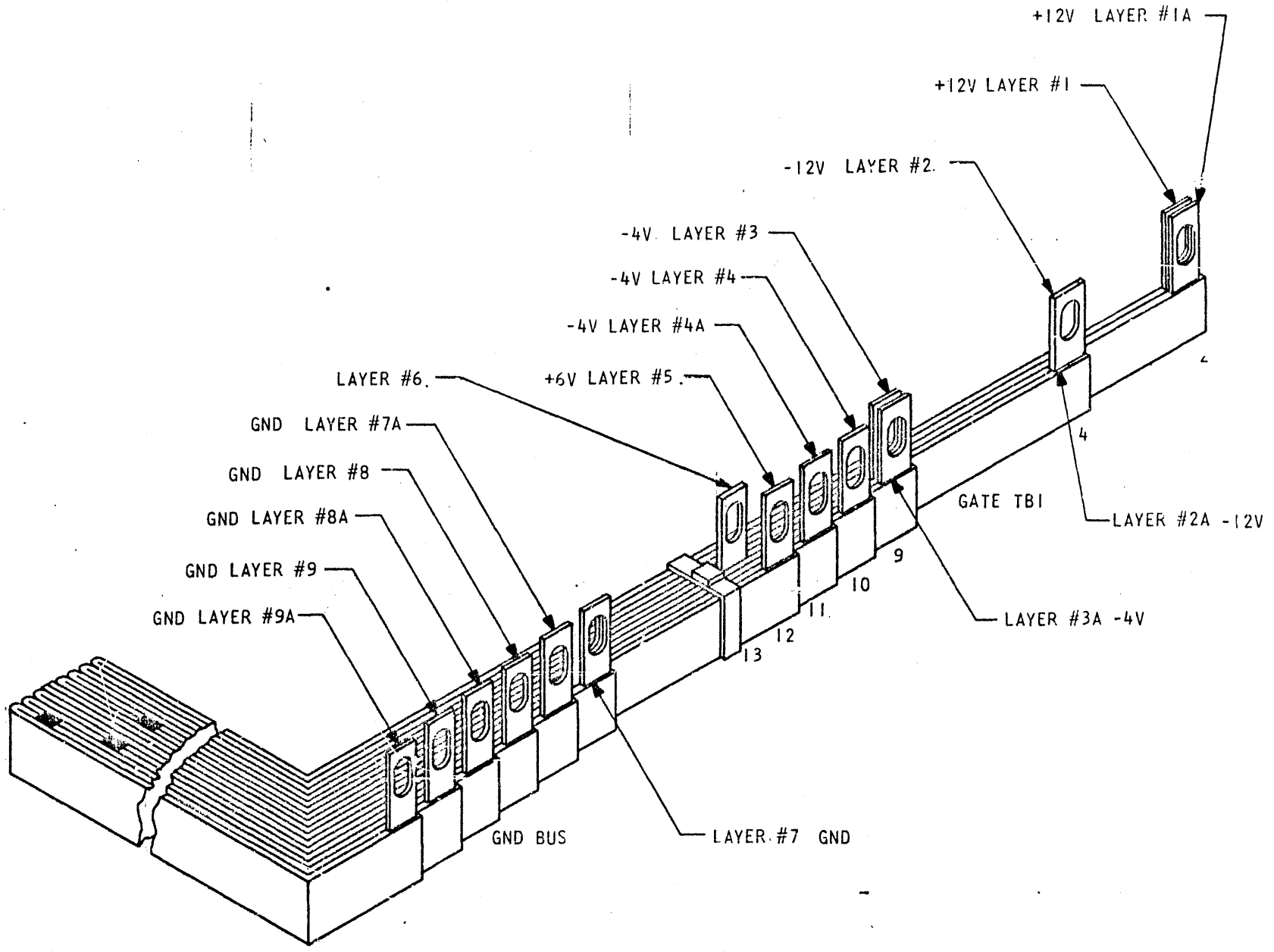
5998399

PART NO	LOGIC PG NO
5998399	YZ221



LOWER LAMINAR CABLE

EXPANSION FRAMES

IBM

NAME	LAMINAR BUS CABLE		
EXPANSION FRAMES LOWER			
DESIGN	NH	SEP71	SHT 1 OF 4
DETAIL	VR	SEP71	
CHECK	AAM	SEP71	CLASSIFICATION
APPRO	RS	SEP71	

	DATE	CHANGE NO		DATE	CHANGE NO
	SEP71	309504			
	DEC71	309506			
	NOV76	315621			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ221

5998399

C

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5998399

PART NO	LOGIC PG NO
5998399	YZ221

LAMINAR PLUG CHART

LAYER NO.	TERM	WIRE NO.'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
9A	1	1 1	A4	D1 B10 D1 C13	GND	BLACK	5182916
4A	2	2 2	A4	D1 B13 D1 C10	-4	WHITE	5182920
7	3	3 3	A3	D6 B02 D6 C05	GND	BLACK	5182916
3	4	4 4	A3	D6 B05 D6 C02	-4	WHITE	5182920
9A	5	5 5	A4	G1 C10 G1 D13	GND	BLACK	5182916
4A	6	6 6	A4	G1 C13 G1 D10	-4	WHITE	5182920
7	7	7 7	A3	G6 C02 G6 D05	GND	BLACK	5182916
3	8	8 8	A3	G6 C05 G6 D02	-4	WHITE	5182920
9A	9	9 9	A4	K1 E10 L1 A13	GND	BLACK	5182916
4A	10	10 10	A4	K1 E13 L1 A10	-4	WHITE	5182920
7	11	11 11	A3	K6 E02 L6 A05	GND	BLACK	5182916
3	12	12 12	A3	K6 E05 L6 A02	-4	WHITE	5182920
9A	13	13 13	A4	P1 B10 P1 C13	GND	BLACK	5182916
4A	14	14 14	A4	P1 B13 P1 C10	-4	WHITE	5182920
7	15	15 15	A3	P6 B02 P6 C05	GND	BLACK	5182916
3	16	16 16	A3	P6 B05 P6 C02	-4	WHITE	5182920
9A	17	17 17	A4	S1 C10 S1 D13	GND	BLACK	5182916
4A	18	18 18	A4	S1 C13 S1 D10	-4	WHITE	5182920
7	19	19 19	A3	S6 C02 S6 D05	GND	BLACK	5182916
3	20	20 20	A3	S6 C05 S6 D02	-4	WHITE	5182920
9	21	21 21	B4	D1 B10 D1 C13	GND	BLACK	5182916
4	22	22 22	B4	D1 B13 D1 C10	-4	WHITE	5182920
7A	23	23 23	B3	D6 B02 D6 C05	GND	BLACK	5182916
3A	24	24 24	B3	D6 B05 D6 C02	-4	WHITE	5182920

IBM

NAME	LAMINAR BUS CABLE		
	EXPANSION FRAMES LOWER		
DESIGN	NH	SEP71	SHT 2 OF 4
DETAIL	VR	SEP71	
CHECK	AAM	SEP71	CLASSIFICATION
APPRO	RS	SEP71	

	DATE	CHANGE NO		DATE	CHANGE NO
	SEP71	309504			
	DEC71	309506			
	NOV76	315621			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ221

5998399

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5998399

PART NO	LOGIC PG NO
5998399	YZ221

SHEET 3 OF 4

LAMINAR PLUG CHART

	LAYER NO.	TERM	WIRE NO.'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
	9	25	25	B4	G1 C10	GND	BLACK	5182916
			25		G1 D13			
	4	26	26	B4	G1 C13	-4	WHITE	5182920
			26		G1 D10			
	7A	27	27	B3	G6 C02	GND	BLACK	5182916
			27		G6 D05			
	3A	28	28	B3	G6 C05	-4	WHITE	5182920
			28		G6 D02			
	9	29	29	B4	K1 E10	GND	BLACK	5182916
			29		L1 A13			
	4	30	30	B4	K1 E13	-4	WHITE	5182920
			30		L1 A10			
	7A	31	31	B3	K6 E02	GND	BLACK	5182916
			31		L6 A05			
	3A	32	32	B3	K6 E05	-4	WHITE	5182920
			32		L6 A02			
	5	33	33	B3	L6 D04	+6	ORANGE	5182917
[2]	5	33	33	B4	L1 D11			
[1]	1A	34	34	B4	M1 B11	+12	GRAY	5182919
			34		M1 C11			
	1	35	35	B3	M6 B04	+12	GRAY	5182919
			35		M6 C04			
[1]	2A	36	36	B4	N1 C11	-12	VIOLET	5182918
			36		N1 E11			
	2	37	37	B3	N6 D04	-12	VIOLET	5182918
			37		N6 E04			
[1]	1A	38	38	B4	M1 D11	+12	GRAY	5182919
			38		N1 A11			
	1	39	39	B3	M6 E04	+12	GRAY	5182919
			39		N6 A04			
	9	40	40	B4	P1 B10	GND	BLACK	5182916
			40		P1 C13			
	4	41	41	B4	P1 B13	-4	WHITE	5182920
			41		P1 C10			
	7A	42	42	B3	P6 B02	GND	BLACK	5182916
			42		P6 C05			
	3A	43	43	B3	P6 B05	-4	WHITE	5182920
			43		P6 C02			
	9	44	44	B4	S1 C10	GND	BLACK	5182916
			44		S1 D13			
	4	45	45	B4	S1 C13	-4	WHITE	5182920
			45		S1 D10			
	7A	46	46	B3	S6 C02	GND	BLACK	5182916
			46		S6 D05			
	3A	47	47	B3	S6 C05	-4	WHITE	5182920
			47		S6 D02			
	5	48	48	B3	L6 D02	+6	ORANGE	5182917
[3]	5	48	48	B4	L1 D13			

NOTES:

[1] NOT USED FOR CA4 FEATURE

[2] FOR CA4 FEATURE WIRE NO. 33 TERMINATES AT PIN LOCATION 02A-B4Q2B11

[3] FOR CA4 FEATURE WIRE NO. 48 TERMINATES AT PIN LOCATION 02A-B4T4B11

IBM								
NAME	LAMINAR BUS CABLE				DATE	CHANGE NO		DATE	CHANGE NO
	EXPANSION FRAMES LOWER				SEP71	309504			
DESIGN	NH	SEP71	SHT 3 OF 4		DEC71	309506			
DETAIL	VR	SEP71			NOV76	315621			
CHECK	AAM	SEP71	CLASSIFICATION						
APPRO	RS	SEP71							

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ221

5998399

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5998399

PART NO	LOGIC PG NO
5998399	YZ221

LAMINAR PLUG CHART

LAYER NO.	TERM	WIRE NO.'S	BD	PIN LOC	VOLTAGE	COLOR	JUMPER ASM
6	49	NONE / NONE	B4	NONE / NONE	-4	NONE	NONE
5	50	50 / 50	A4	Q2 B11 /	+6	ORANGE	1770761
5	51	51 / 51	A4	S2 B11 / T4 B11	+6	ORANGE	1770760

IBM

NAME	LAMINAR BUS CABLE		
	EXPANSION FRAMES LOWER		
DESIGN	NH	SEP71	SHT 4 OF 4
DETAIL	VR	DEC71	
CHECK	AAM	SEP71	CLASSIFICATION
APPRO	RS	SEP71	

	DATE	CHANGE NO		DATE	CHANGE NO
	SEP71	309504			
	DEC71	309506			
	NOV76	31562!			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ221

5998399

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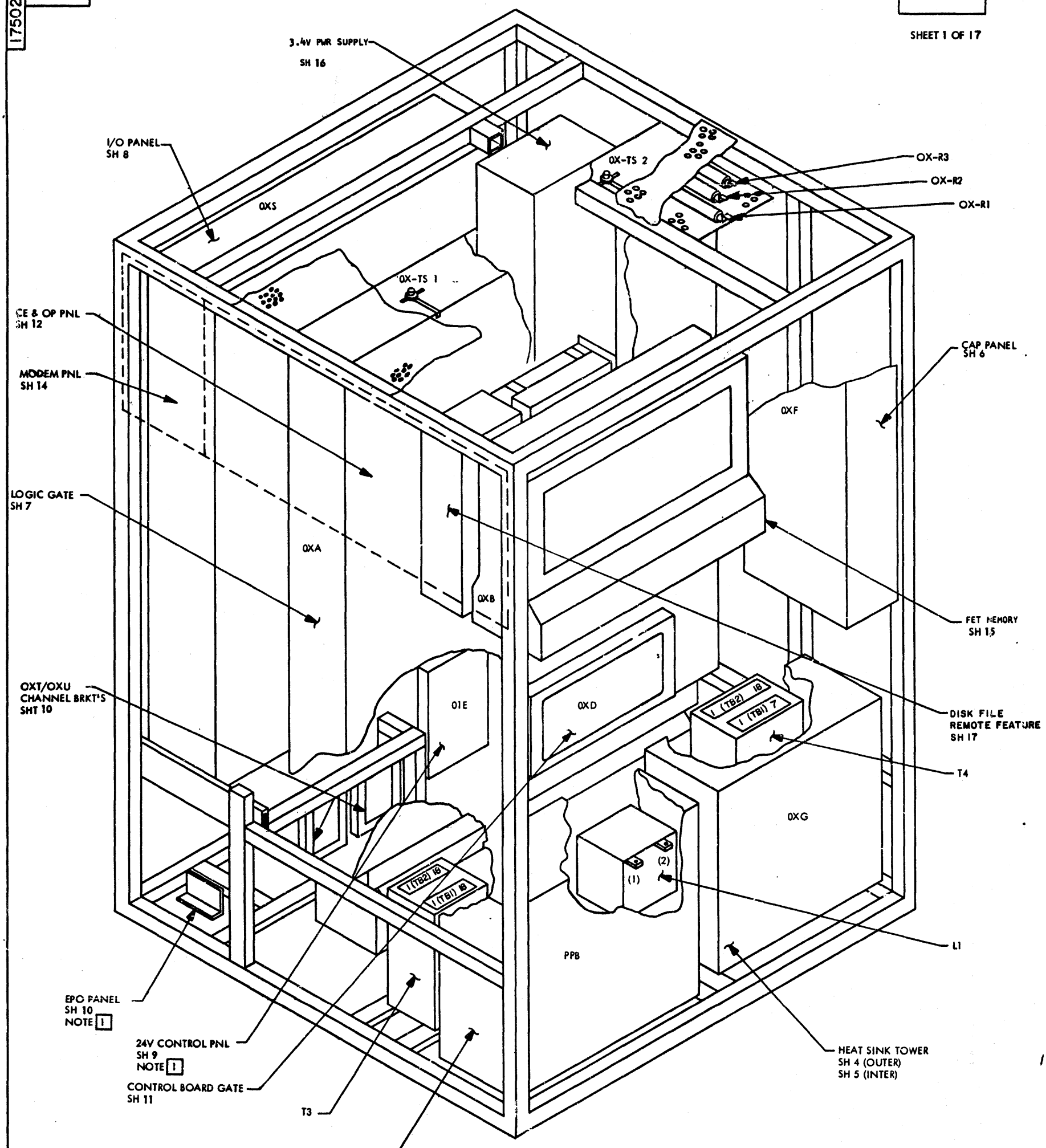
1750284 STANDARDS CODE

CARD CODE 1750284

SHEET 1 OF 17



NOTES

1. USED IN BASIC FRAME ONLY
2. USED IN EXPANSION FRAMES ONLY
3. GERMAN ONLY

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.				
NAME	SYSTEM DIAGRAM			
	COMPONENT LOCATION			
DESIGN	WJK	MAY76	MODEL	
DETAIL			SCALE	NONE
CHECK	WJK	MAY76	DRAW	
APPRO	TLS	MAY76	CHECK	

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY76	314419					
AUG76	315608					
NOV76	315621					
JUL77	316710					YZ301
JAN79	318589					

1750284

C

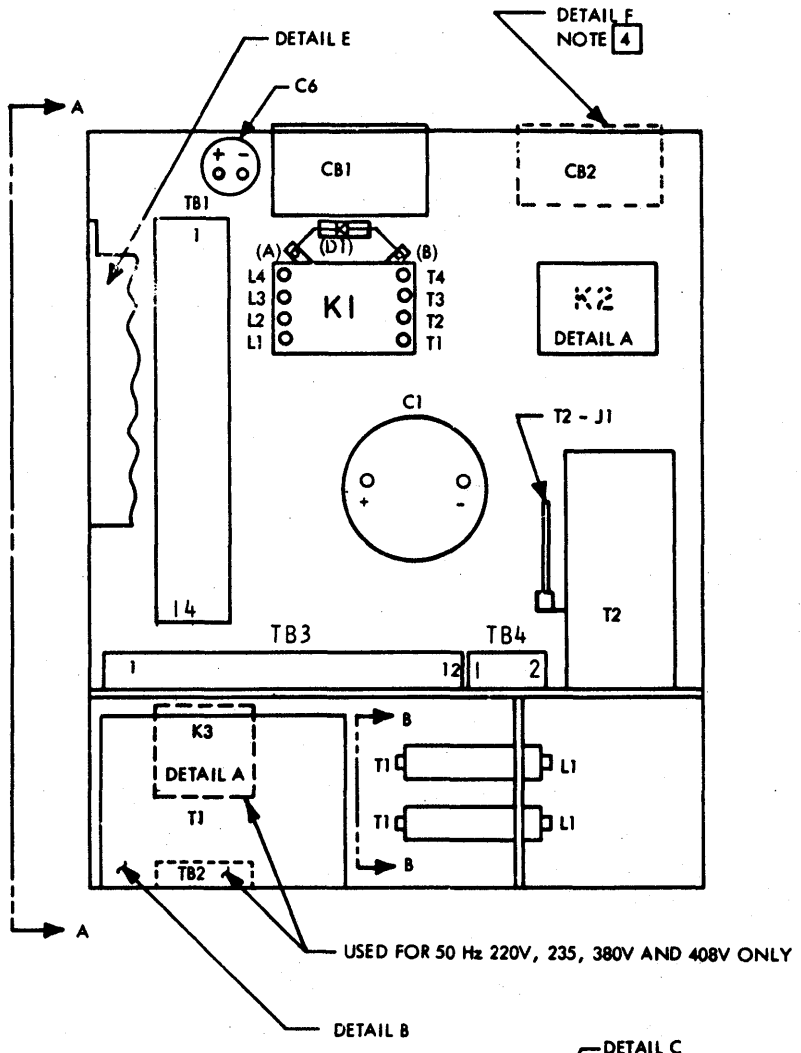
STANDARDS CODE 1750284

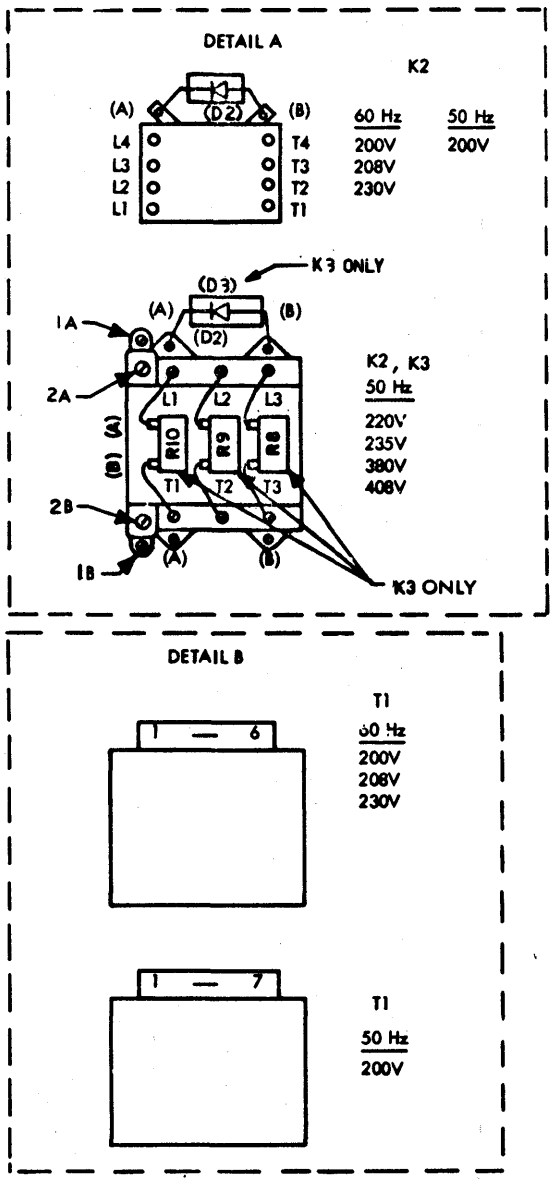
CARD CODE 1750284

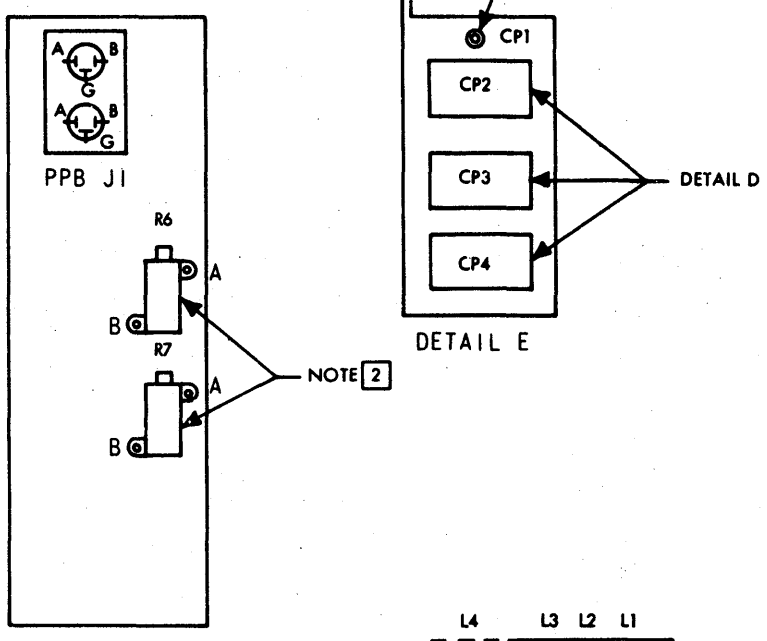
SHEET 2 OF 17

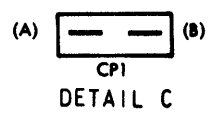
PRIME POWER BOX (PPB)

BASIC FRAME

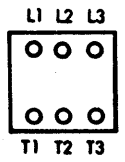








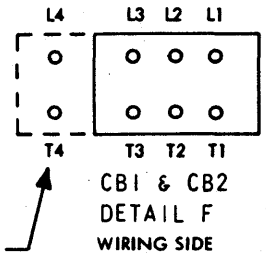
DETAIL C



CP2, 3, & 4

DETAIL D

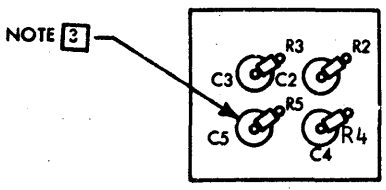
WIRING SIDE



CB1 & CB2

DETAIL F

WIRING SIDE



VIEW B-B

NOTES

1. PRESENT FOR 60 Hz 200V, 208V, 230V.
2. R6 & R7 ARE PRESENT WITH FRAMES 1 AND 2. R7 PRESENT ONLY WITH 3 OR MORE FRAMES.
3. USED ONLY FOR 50 Hz 380V AND 408V FRANCE
4. PRESENT WITH EXPANSION FRAMES ONLY.

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.													
NAME	SYSTEM DIAGRAM				DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.	1750284
	COMPONENT LOCATION				MAY76	314419						
DESIGN	WJK	MAY76	MODEL		AUG76	315608						
DETAIL			SCALE		NOV 76	315621						
CHECK	WJK	MAY76	DRAW		JUL77	316710					YZ301	
APPRO	TES	MAY76	CHECK		JAN 79	318589						

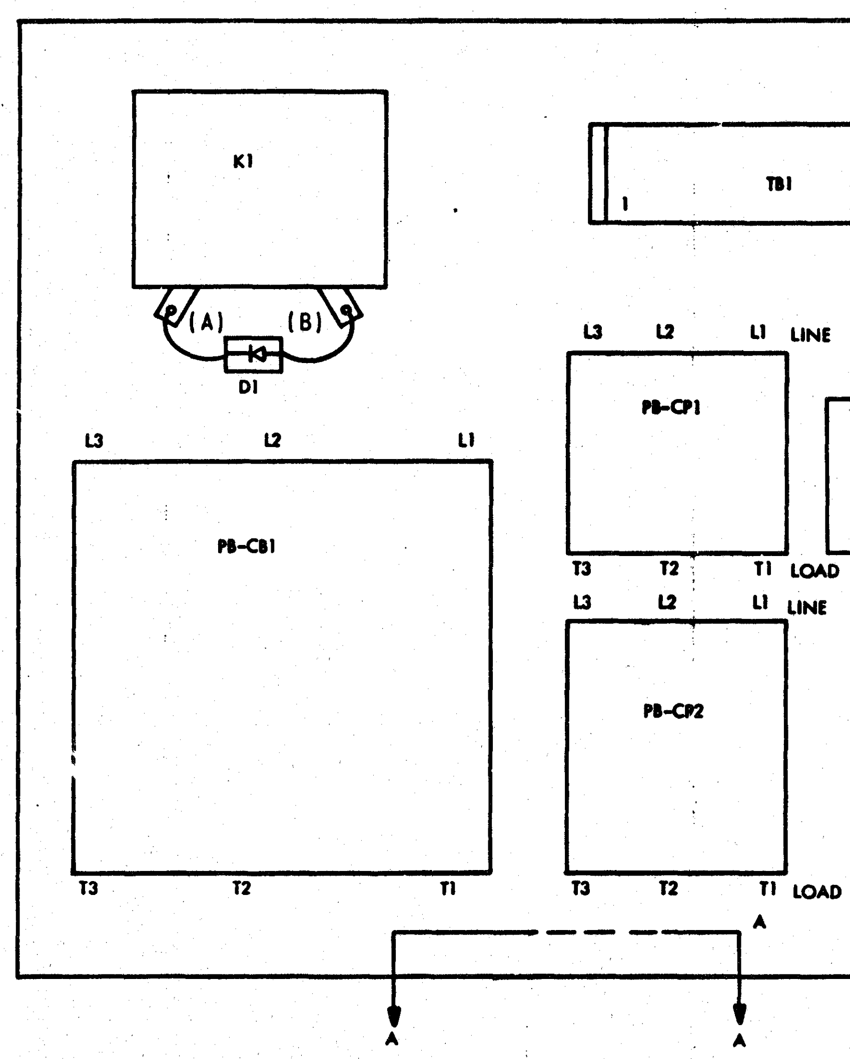
C

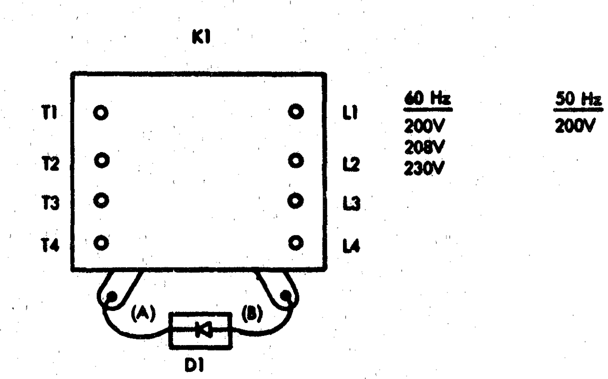
1750284

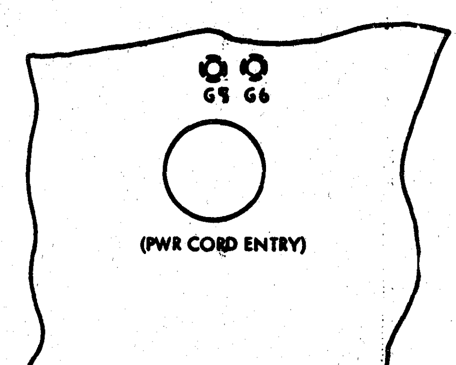
STANDARDS CODE

PRIME POWER BOX EXPANDED FRAME (PPB)

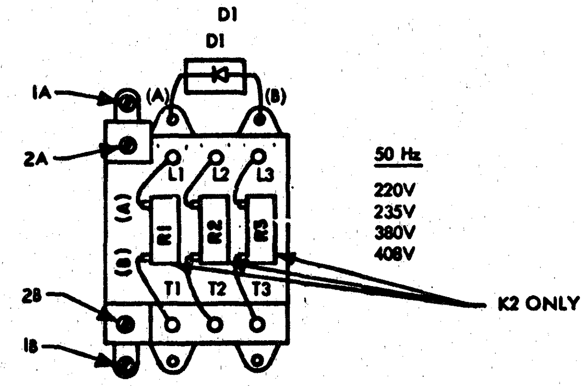
CARD CODE	1750284







VIEW A-A



K1, K2

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.				
NAME	SYSTEM DIAGRAM			
	COMPONENT LOCATION			
DESIGN	WJK	MAY76	MODEL	
DETAIL			SCALE	
CHECK	WJK	MAY76	DRAW	
APPRO	TES	MAY76	CHECK	

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY76	314419		JAN76	312922		
AUG76	315608					
NOV76	315621					
JUL77	316710					YZ301
JAN79	318589					

1750284

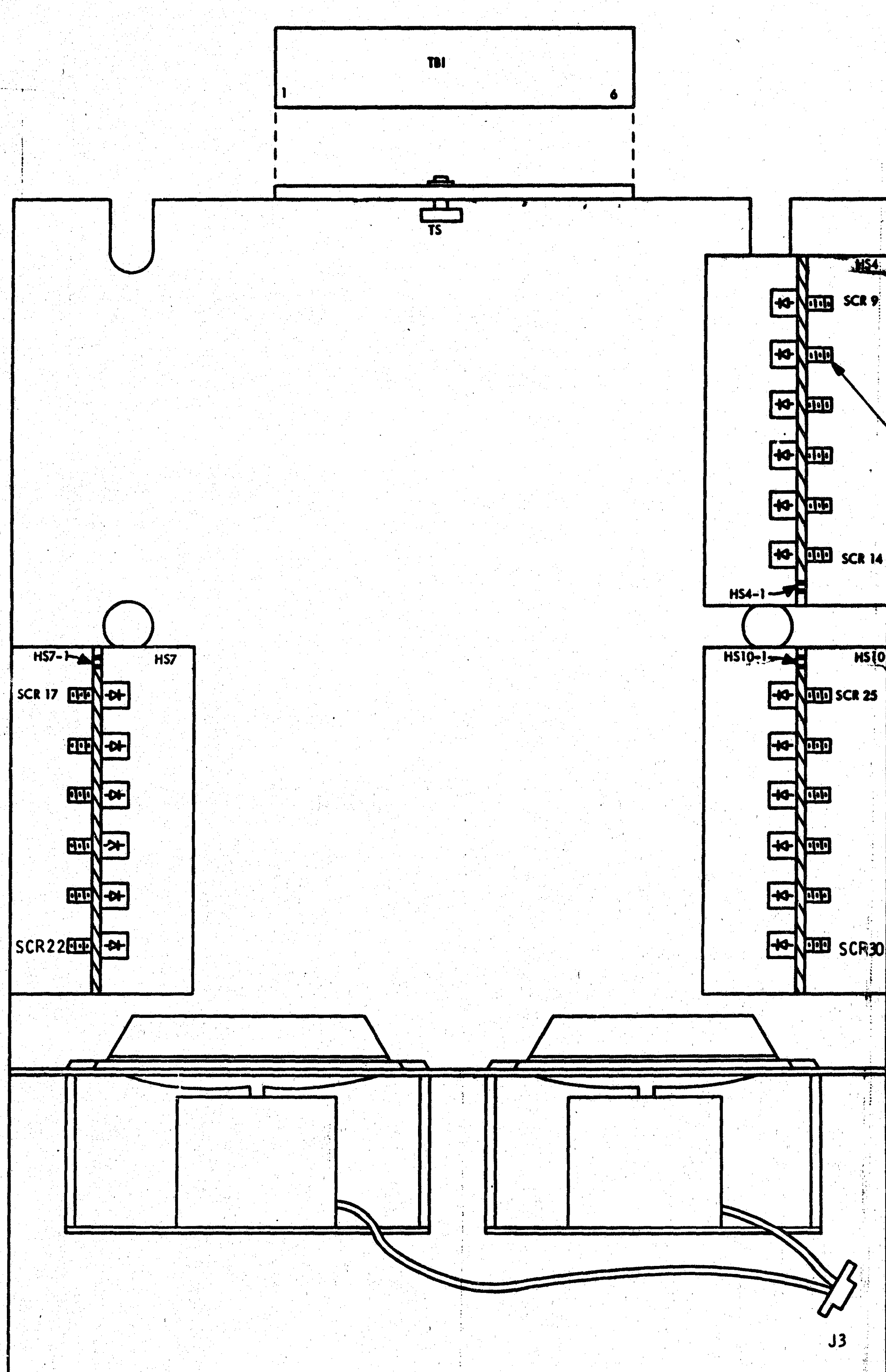
C

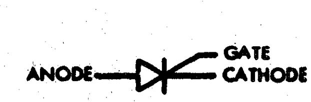
STANDARD CODE	1750284

CARD CODE	1750284

SHEET 4 OF 17

HEAT SINK TOWER (OUTER)
(0XG)





DETAIL A
(TYP)

NOTE

1. SCR = SILICON CONTROLLED RECTIFIER

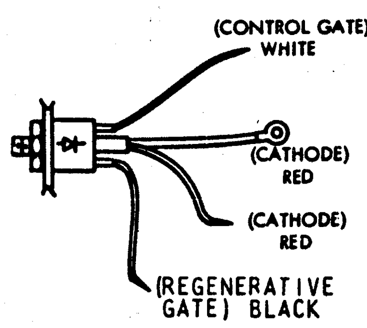
CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.						DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME	SYSTEM DIAGRAM					MAY76	314419					
	COMPONENT LOCATION					AUG76	315608					
DESIGN	WJK	MAY76	MODEL			NOV76	315621					
DETAIL			SCALE			JUL77	316710					YZ301
CHECK	WJK	MAY76	DRAW			JAN79	318589					
APPRO	TES	MAY76	CHECK									

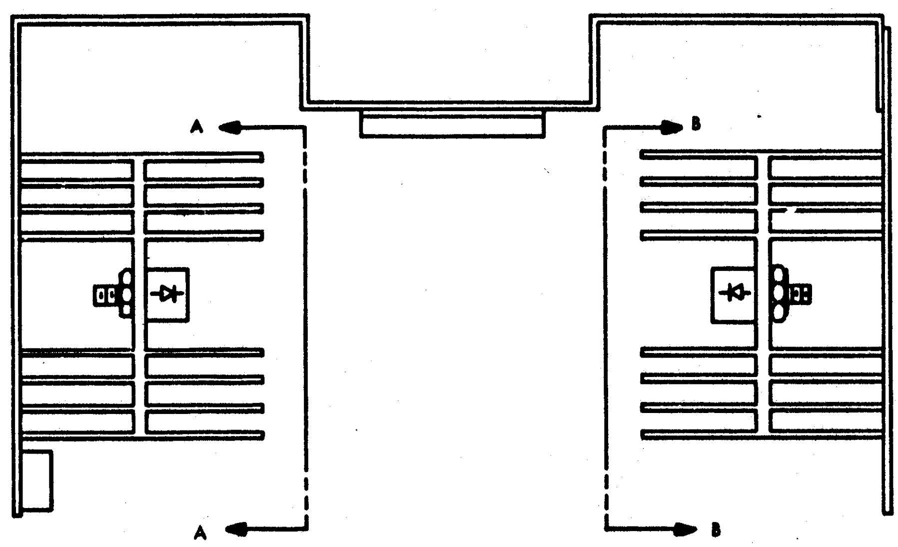
C

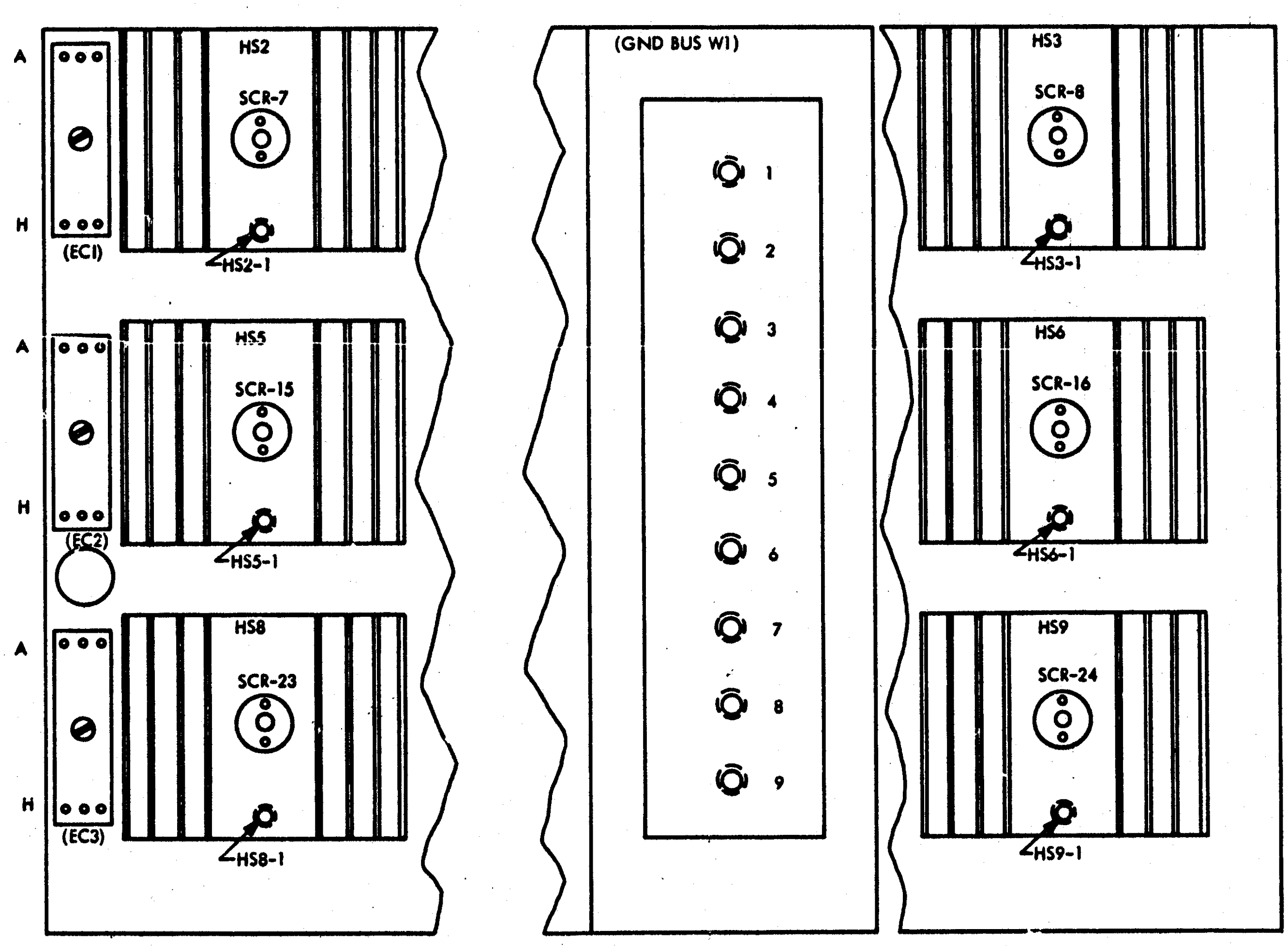
4070C/11

HEAT SINK TOWER (INNER)
(0XG)



TYPICAL
SCR-7,8,15,16,23,24





VIEW A-A

VIEW B-B

NOTE

1. SCR = SILICON CONTROLLED RECTIFIER

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.							
NAME	OXG-HEATSINK TWR (-4V)						
DESIGN	WJK	MAY76	MODEL				
DETAIL			SCALE				
CHECK	WJK	MAY76	DRAW				
APPRO	TES	MAY76	CHECK				

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY76	314419		JAN76	312922		
AUG76	315608					
NOV76	315621					
JUL77	316710					YZ301
JAN79	318589					

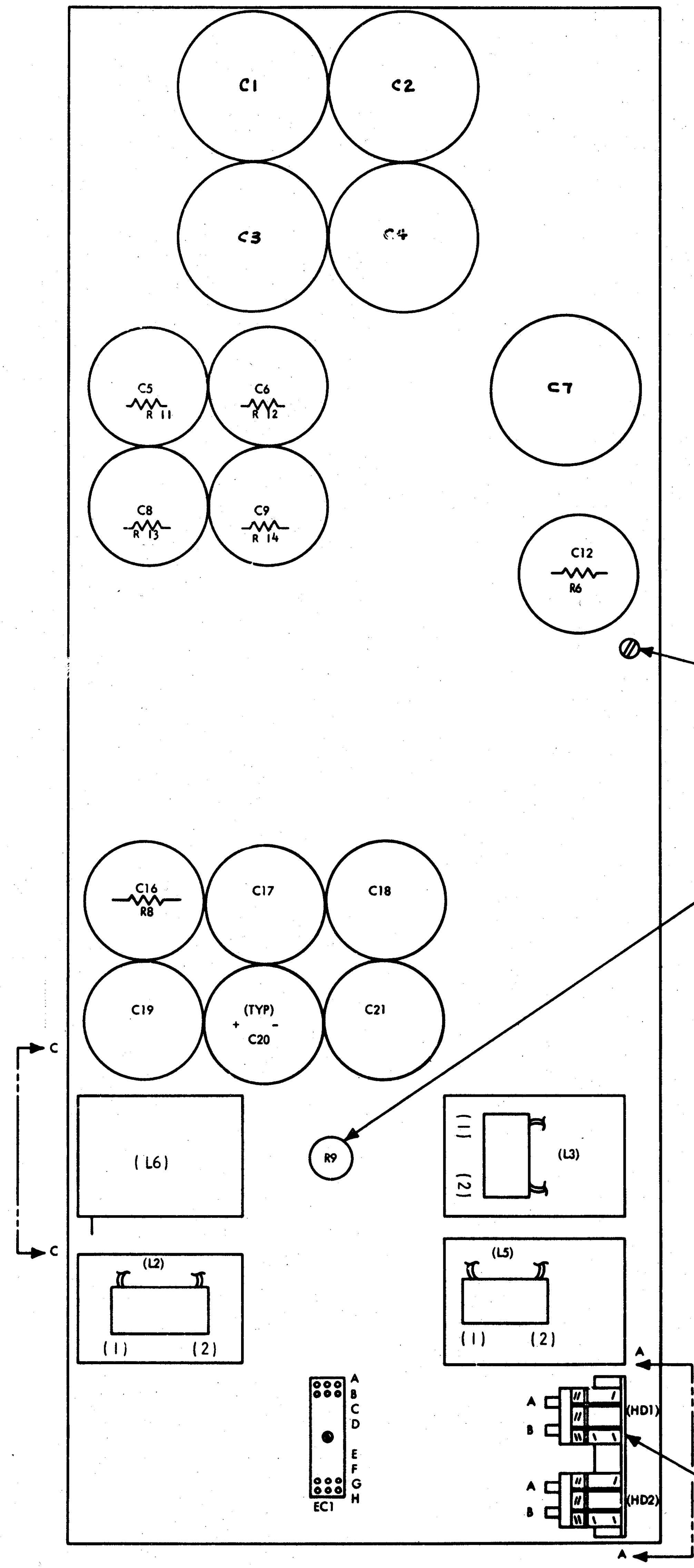
1750284

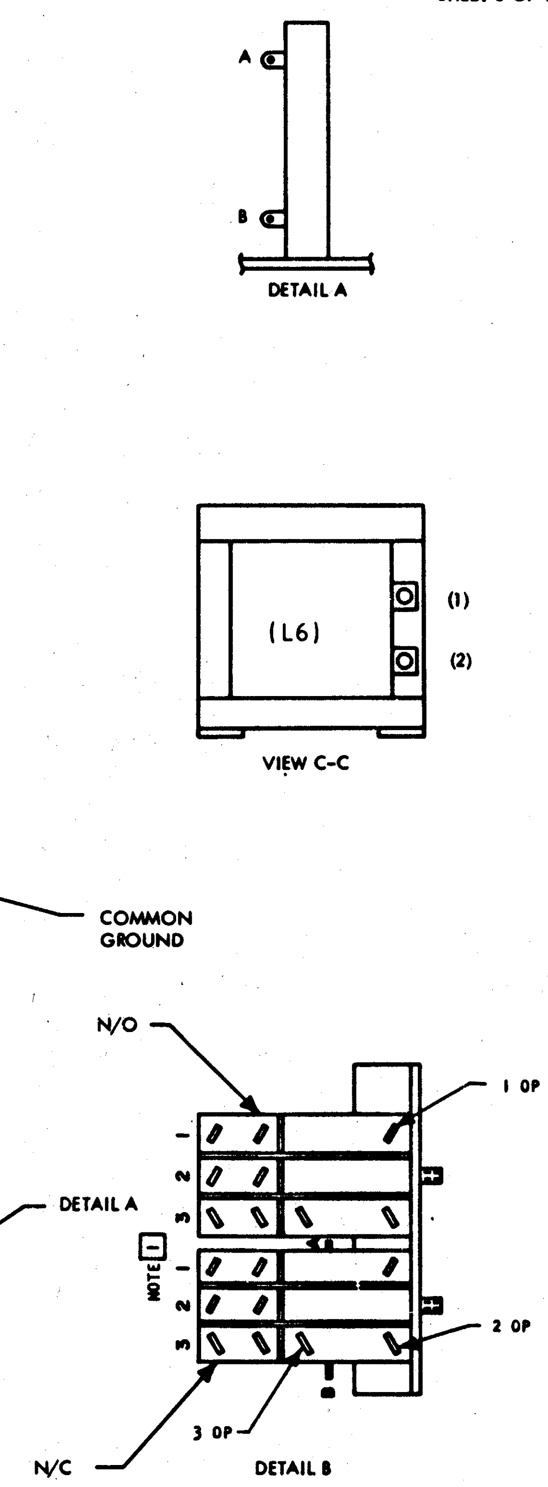
STANDARDS CODE

CARD CODE	1750284

SHEET 6 OF 17

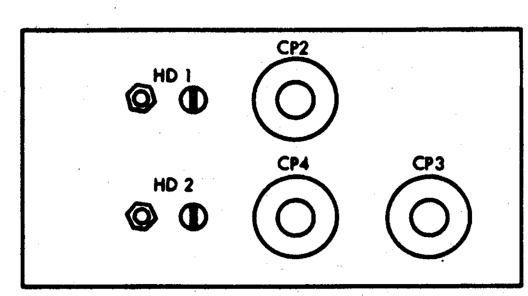
CAPACITOR BANK (OXF)





NOTES:

1. TERMINALS 1 AND 3 OF HD1 AND HD2 ARE REVERSED ON SOME MACHINES. TERMINAL 3 IS THE TERMINAL THAT HAS R9 (2Ω) ON HD1.



VIEW A-A

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					
NAME	SYSTEM DIAGRAM				
	COMPONENT LOCATION				
DESIGN	WJK	MAY76	MODEL		
DETAIL			SCALE		
CHECK	WJK	MAY76	DRAW		
APPRO	TES	MAY76	CHECK		

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY76	314419					
AUG76	315608					
NOV 76	315621					
JUL77	316710					YZ301
JAN79	318589					

1750284

C

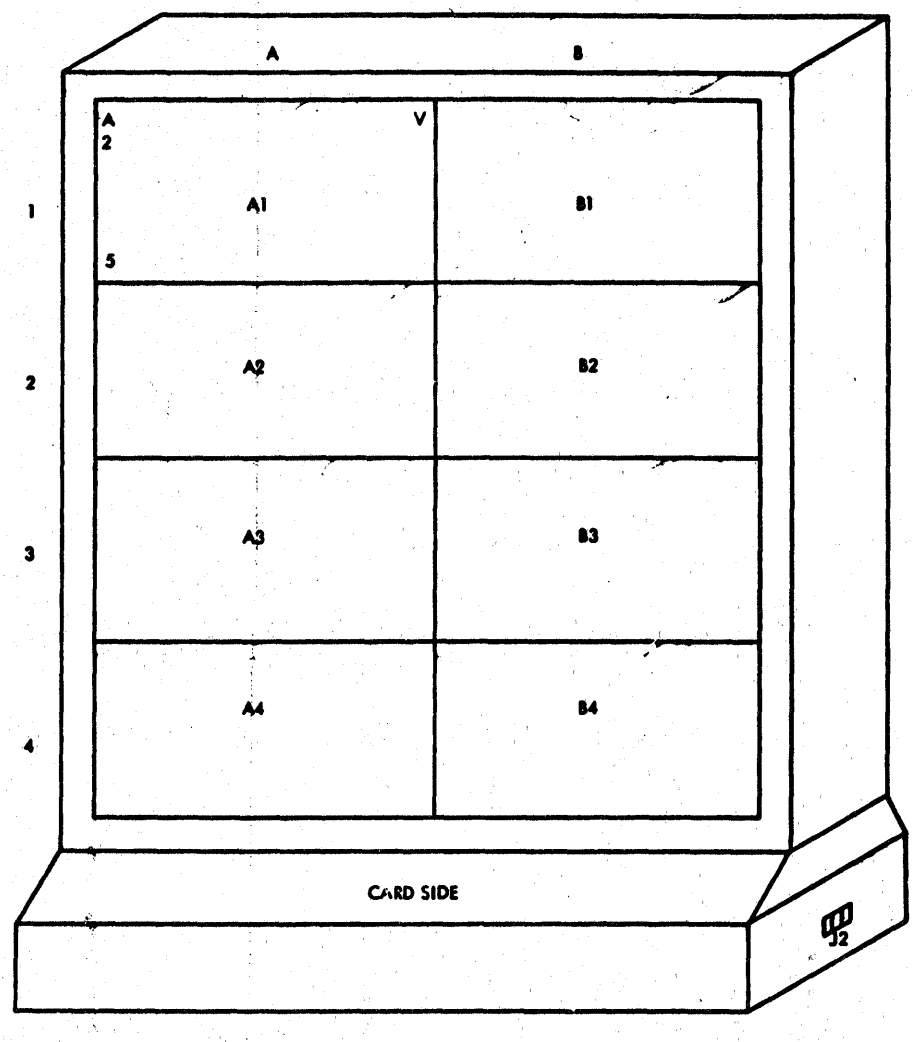
1750284

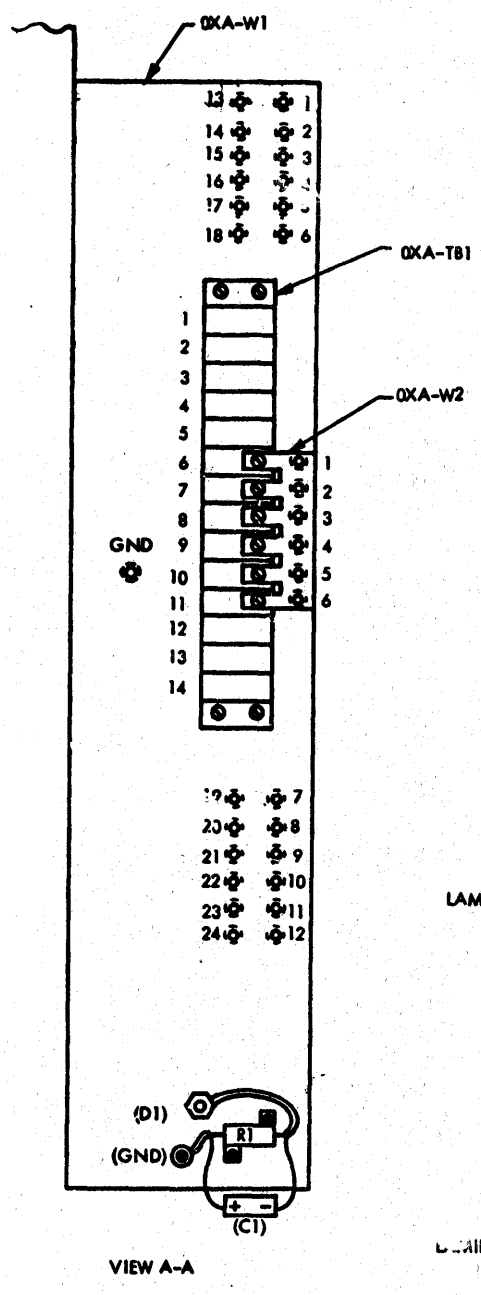
SYSTEM USE CODE

CARD CODE 1750284

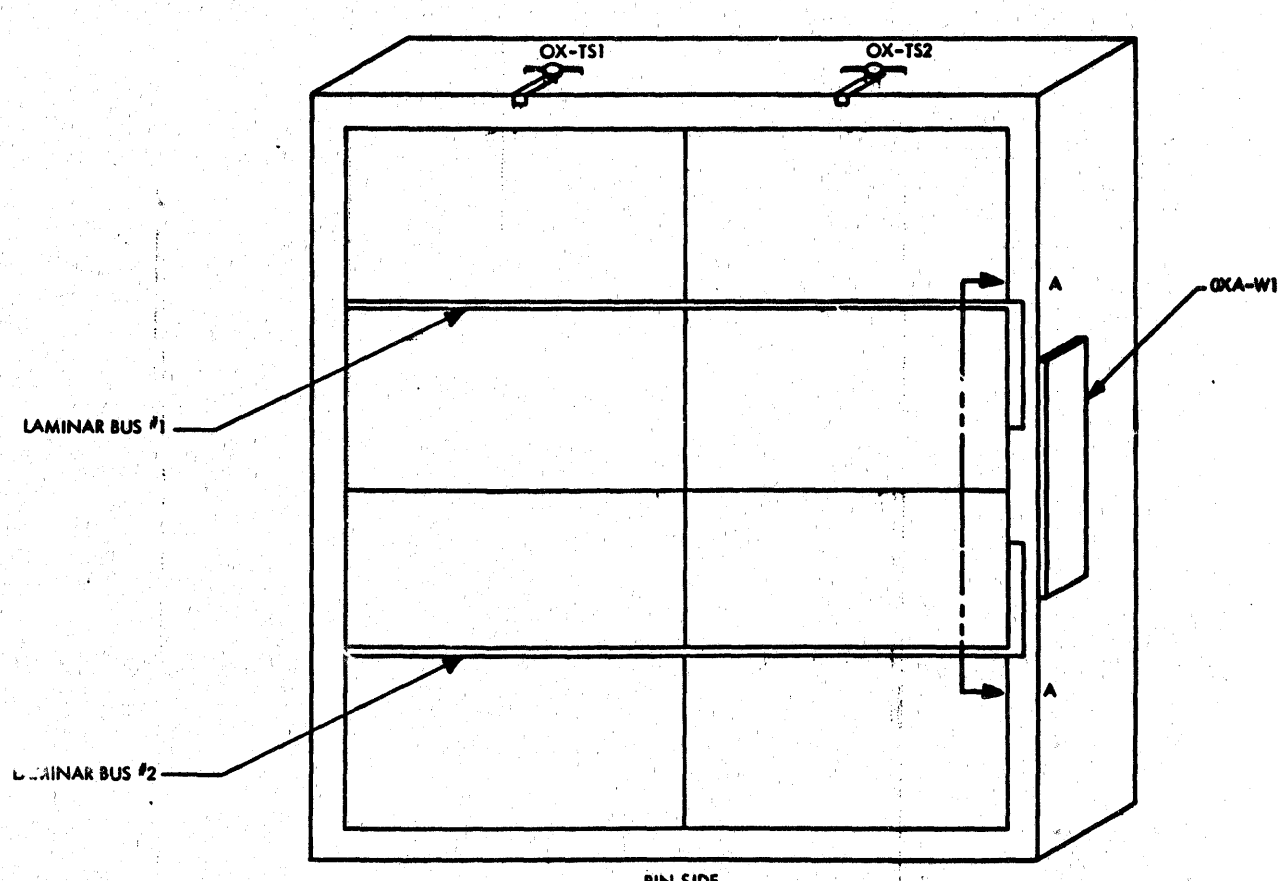
SHEET 7 OF 17

LOGIC GATE - 0XA





VIEW A-A



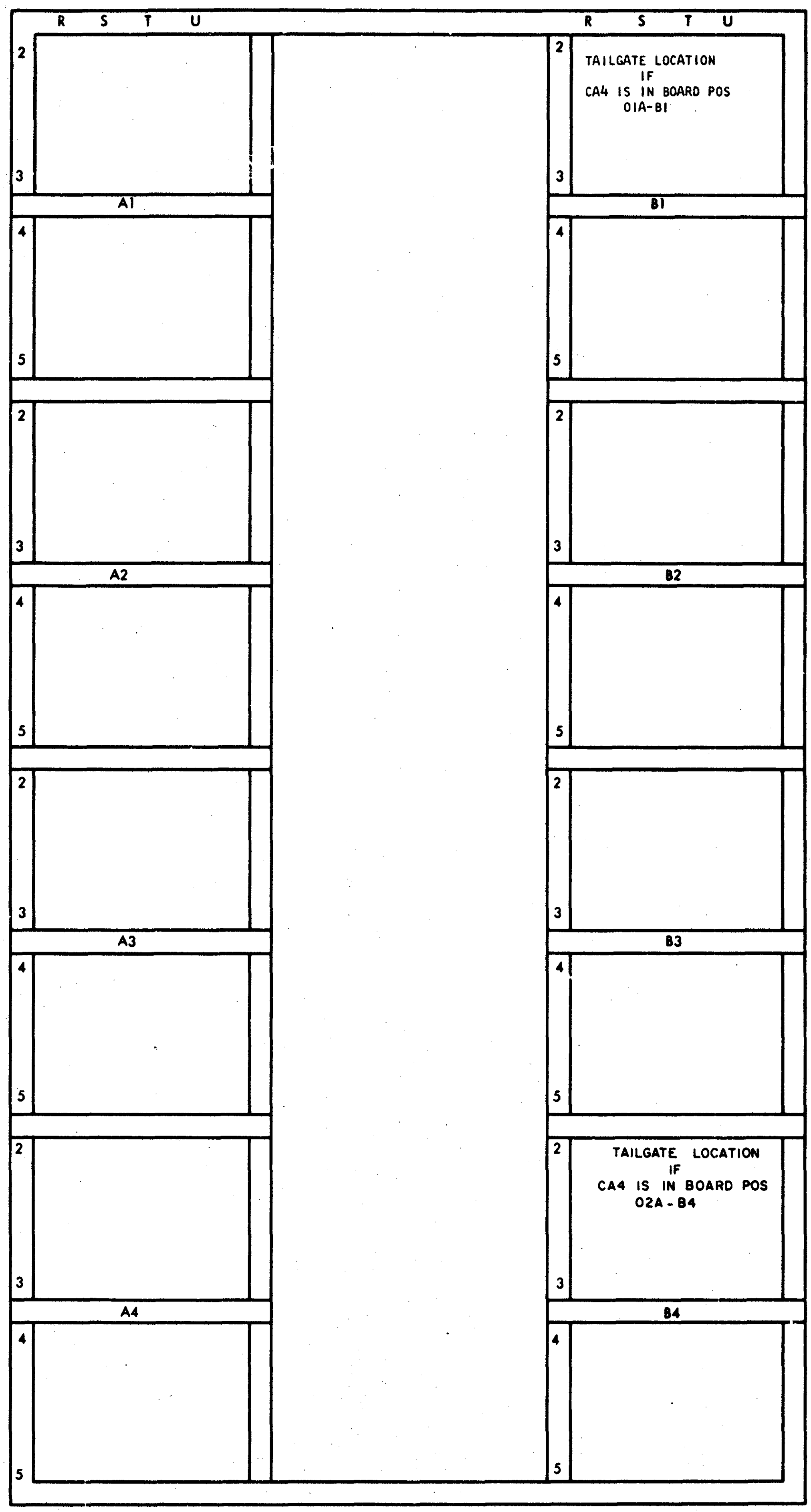
PIN SIDE

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME	SYSTEM DIAGRAM				MAY76	314419					
	COMPONENT LOCATION				AUG76	315608					
DESIGN	WJK	MAY76	MODEL		NOV76	315621					
DETAIL			SCALE		JUL77	316710					YZ301
CHECK	WJK	MAY76	DRAW		JAN79	318589					
APPRO	TES	MAY76	CHECK								

C

OXS (I/O PANEL)



VIEW FROM OUTSIDE MACHINE

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					
NAME	SYSTEM DIAGRAM				
	COMPONENT LOCATION				
DESIGN	WJK	MAY76	MODEL		
DETAIL			SCALE		
CHECK	WJK	MAY76	DRAW		
APPRO	TES	MAY76	CHECK		

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
MAY76	314419					
AUG76	315608					
NOV76	315621					
JUL77	316710					YZ301
JAN79	318589					

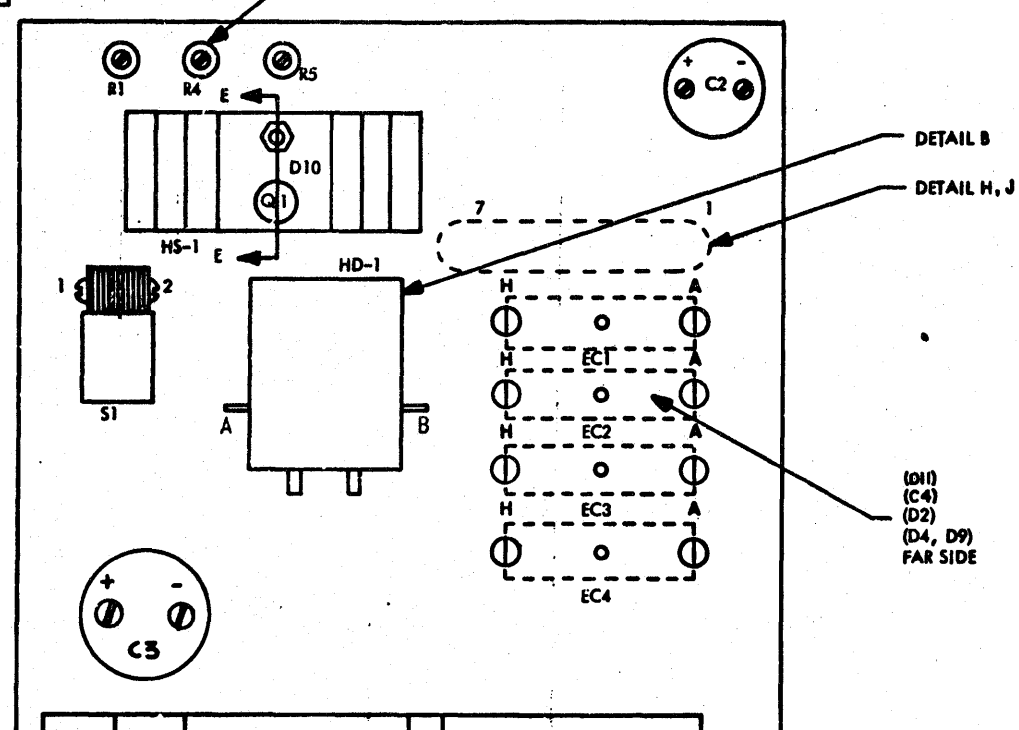
C

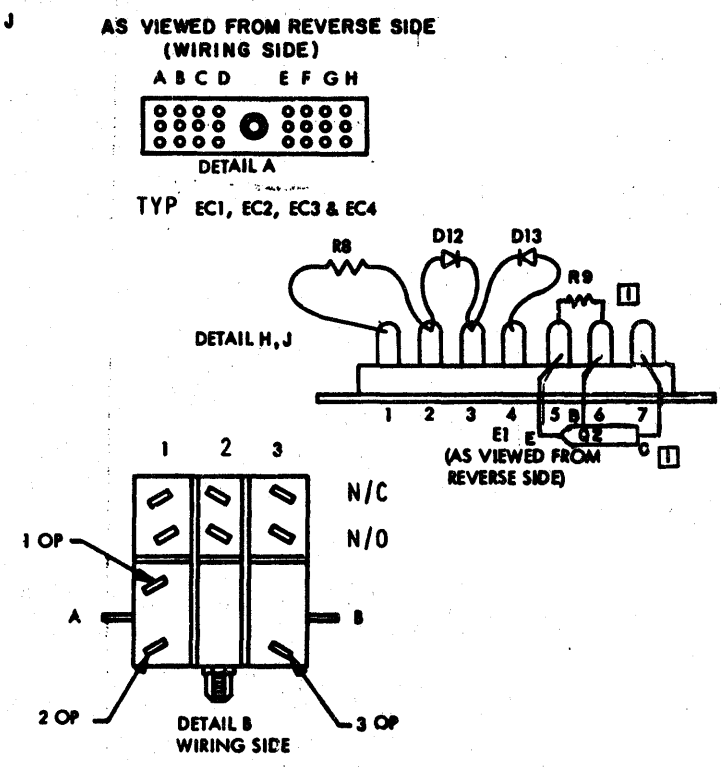
1750284 STANDARD CODE

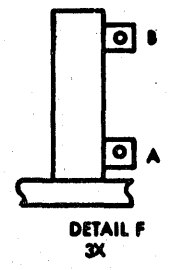
CARD CODE 1750284

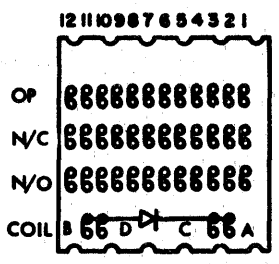
SHEET 9 OF 17

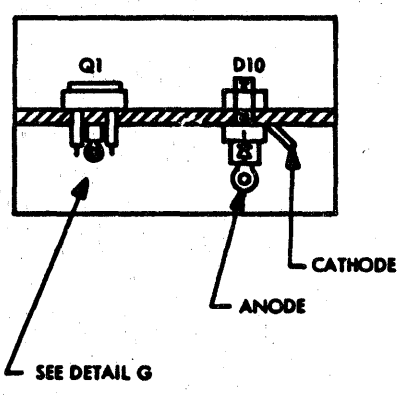
24 VOLT CONTROL PANEL (01E)

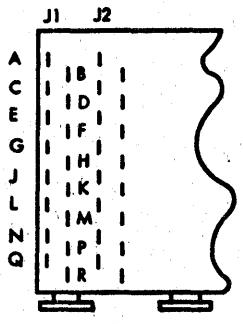


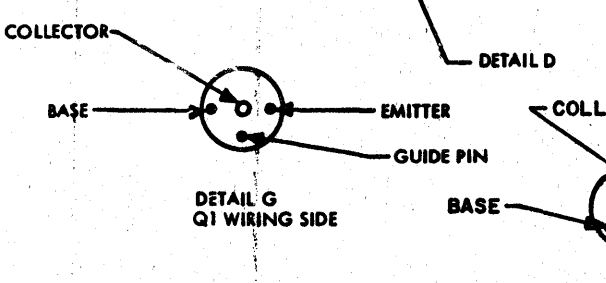












SECTION E-E

NOTES

[1] REQUIRED IN SYSTEMS WITH REMOTE POWER OFF FEATURE

[2] NOT REQUIRED FOR REMOTE CONFIGURATION

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.	1750284
NAME	SYSTEM DIAGRAM			MAY76	314419						
	COMPONENT LOCATION			AUG76	315608						
DESIGN	WJK	MAY76	MODEL	NOV 76	315621						
DETAIL			SCALE	JUL77	316710						
CHECK	WJK	MAY76	DRAW	JAN79	318589					YZ301	
APPRO	TES	MAY76	CHECK								

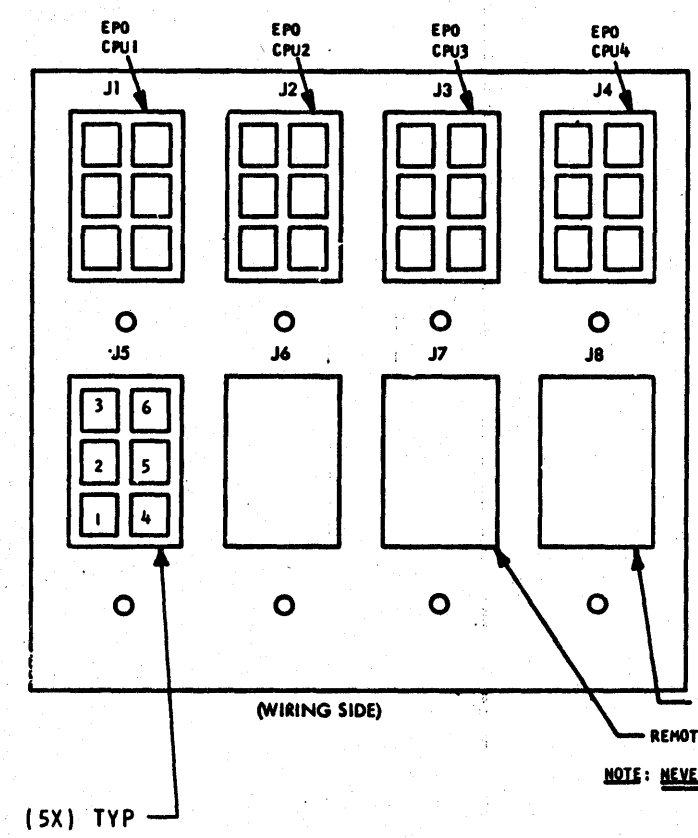
C

1750284

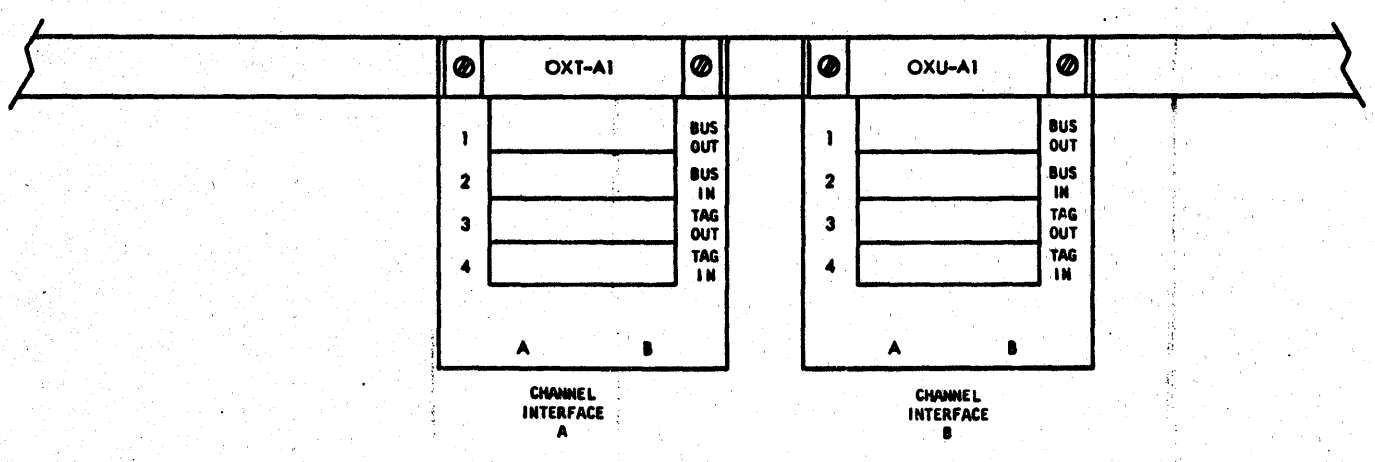
STANDARDS CODE

CARD CODE 1750284

EPO AND REMOTE ENABLE/DISABLE PANEL



NOTE: NEVER PLUG AN EPO CABLE INTO A REMOTE ENABLE/DISABLE SOCKET (J7 OR J8).



CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

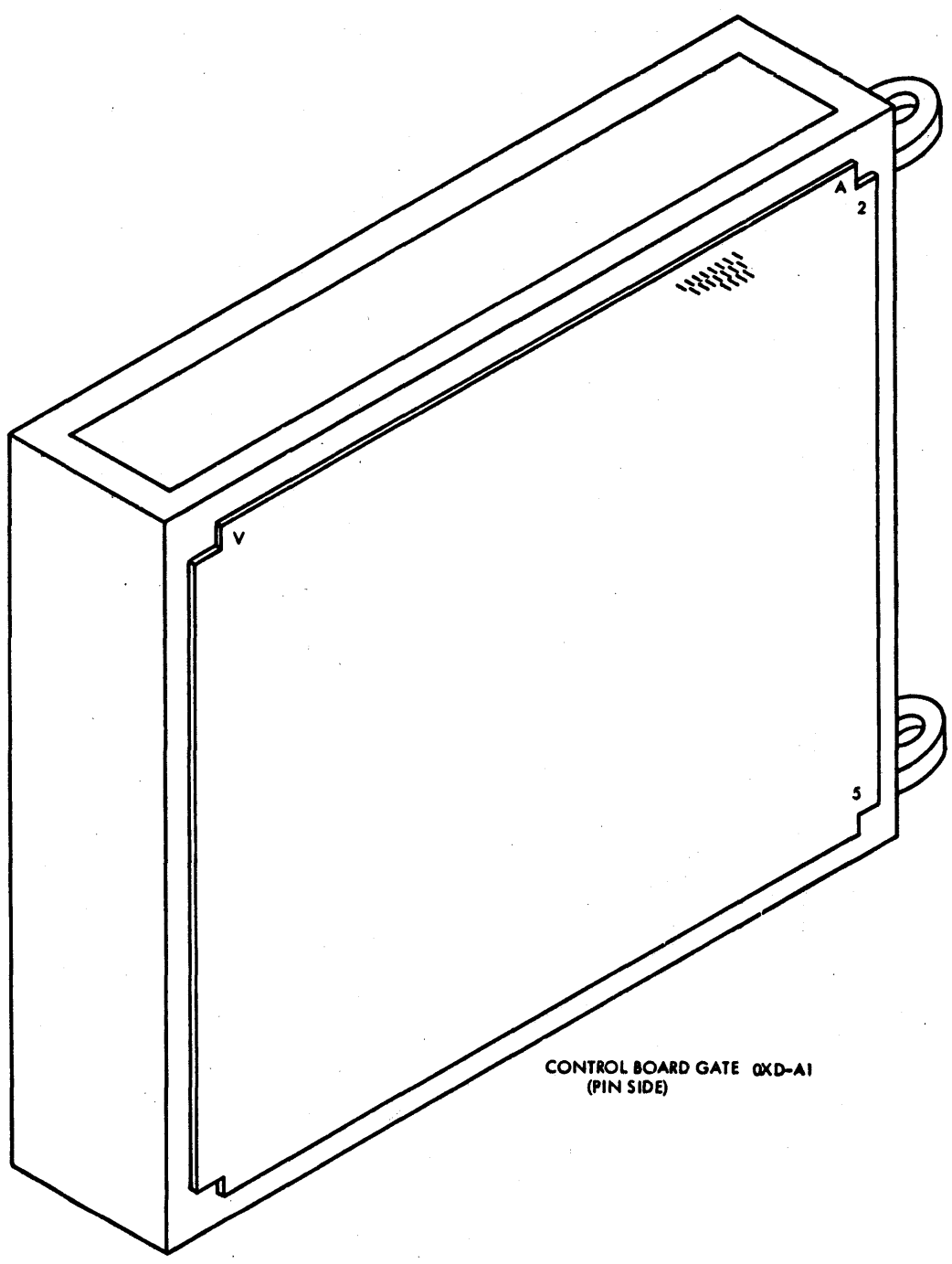
INTERNATIONAL BUSINESS MACHINES CORP.					DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME	SYSTEM DIAGRAM				MAY76	314419					
	COMPONENT LOCATION				AUG76	315608					
DESIGN	WJK	MAY76	MODEL		NOV76	315621					
DETAIL			SCALE		JUL77	316710					YZ301
CHECK	WJK	MAY76	DRAW		JAN79	318589					
APPRD	TES	MAY76	CHECK								

C

1750284

STANDARDS CODE

CARD CODE 1750284



CONTROL BOARD GATE 0XD-A1
(PIN SIDE)

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.						DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME	SYSTEM DIAGRAM					MAY76	314419					
	COMPONENT LOCATION					AUG76	315608					
DESIGN	WJK	MAY76	MODEL			NOV76	315621					
DETAIL			SCALE			JUL77	316710					VZ301
CHECK	WJK	MAY76	DRAW			JAN79	318589					
APPRO	TES	MAY76	CHECK									

1750284

C

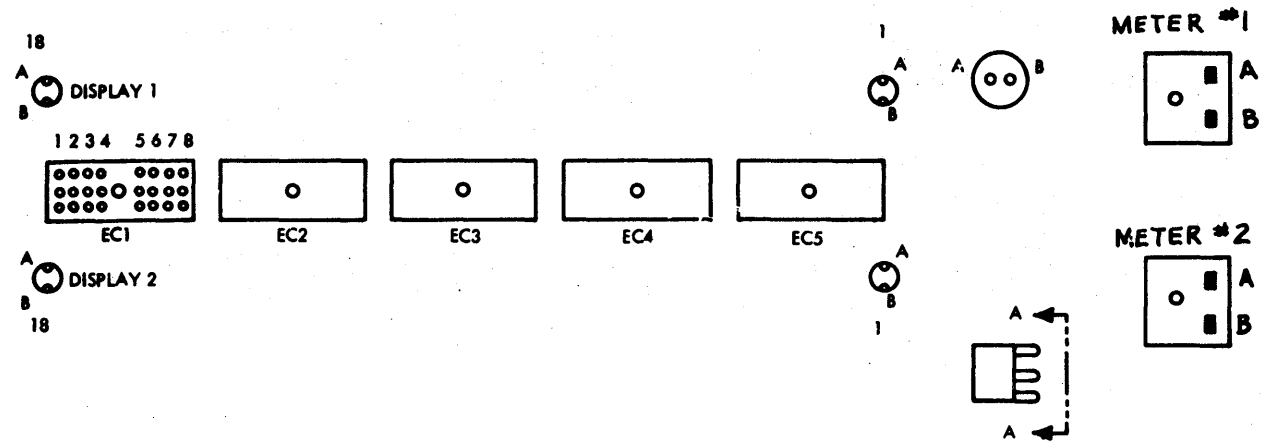
1750284

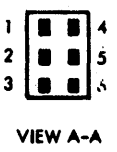
STANDARD CODE

CE AND OP PANEL - WIRING SIDE

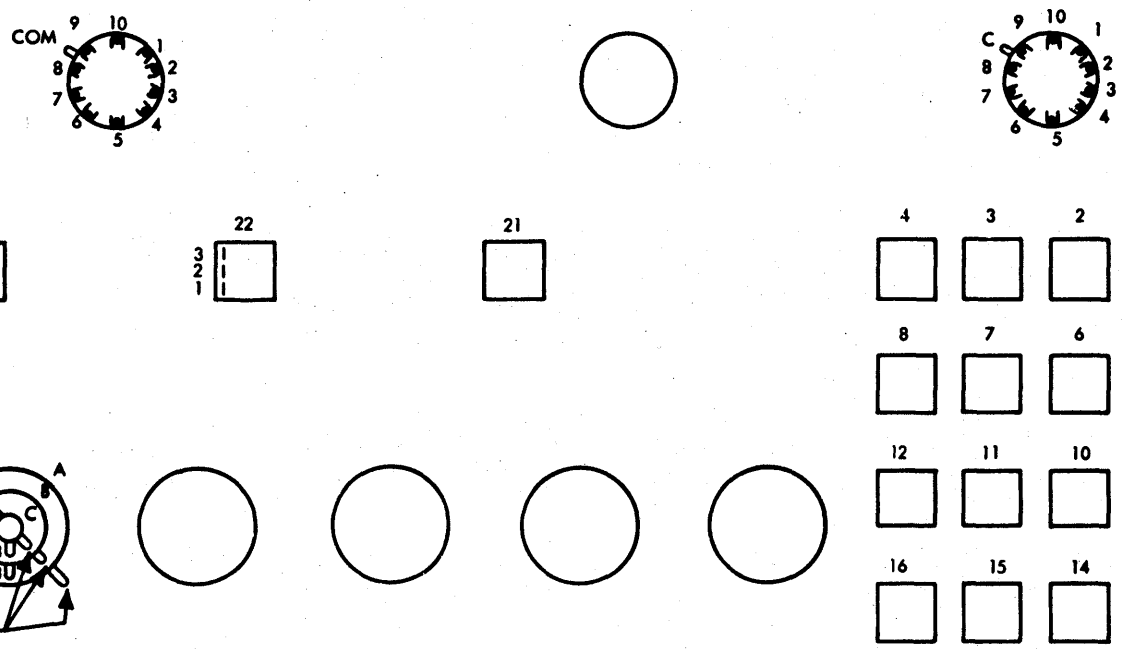
CARD CODE 1750284

SHEET 12 OF 17

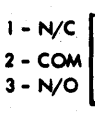




VIEW A-A

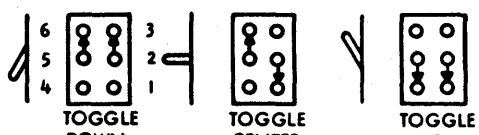


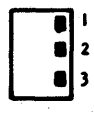
LAMPS
1, 2, 3, 7, 8, 9, 10



SWITCHES
11, 12, 17, 19, 20, 23 THRU 27

SWITCHES 5 & 6





TYPE 3CA
SWITCHES
5,6,13 AND 14

TYPE 4 CA
POS 13 OR 14 FOR IPL SOURCE

POS 5 AND 13 IF 2 CA'S IN FIRST FRAME
(CA4 AND CA2)
(CA4 AND CA4)

POS 6 AND 14 IF 2 CA'S IN FIRST EXP. FRAME
(CA4 AND CA4)

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.	
NAME	SYSTEM DIAGRAM				MAY76	314419						1750284
	COMPONENT LOCATION				AUG76	315608						
DESIGN	WJK	MAY76	MODEL		NOV76	315621						
DETAIL			SCALE		JUL77	316710					YZ301	
CHECK	WJK	MAY76	DRAW		JAN79	318589						
APPRD	TES	MAY76	CHECK									

C

1750284 STANDARDS CODE

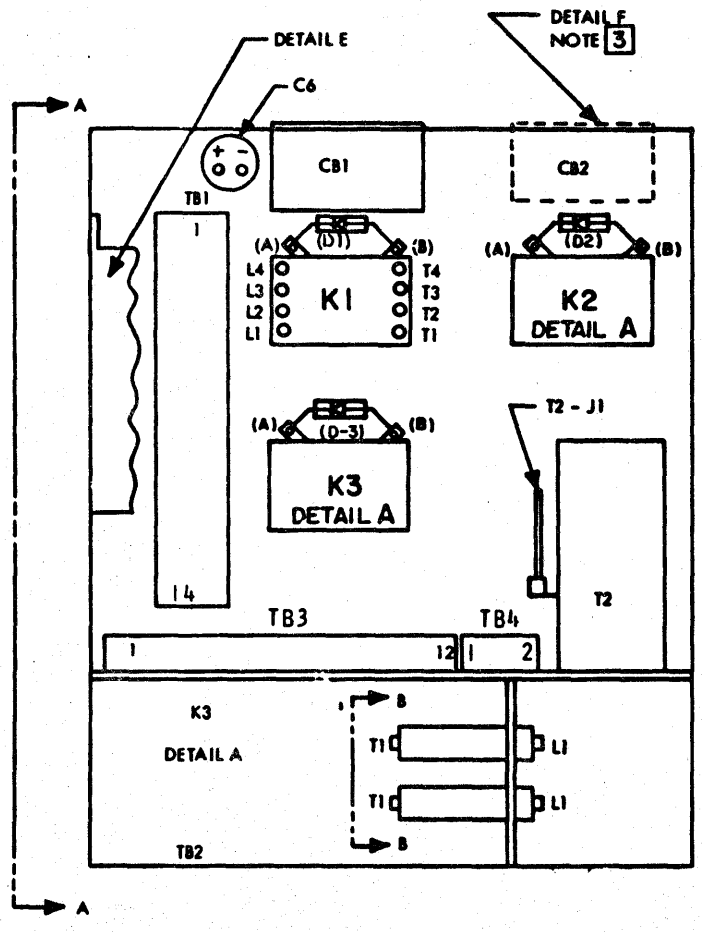
CARD CODE 1750284

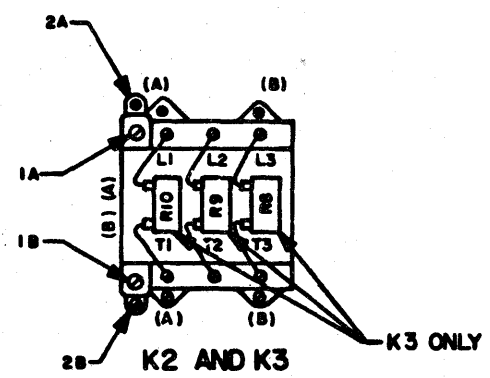
SHEET 13 OF 17

PRIME POWER BOX (PPB)

BASIC FRAME

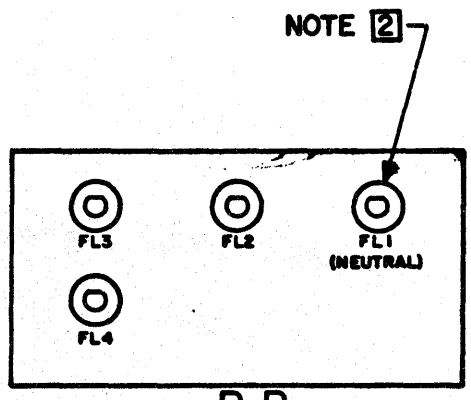
220/235V, 380/408V GERMANY ONLY



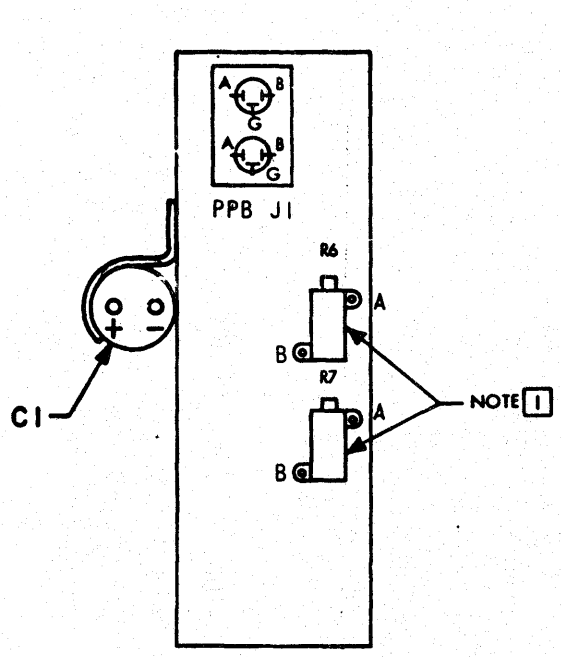


K2 AND K3

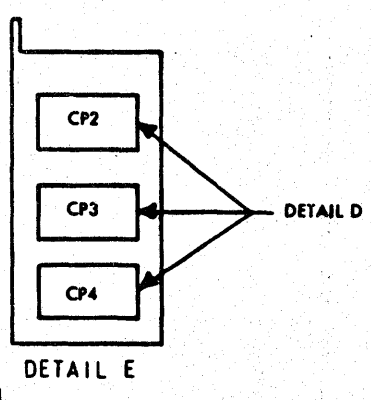
DETAIL A

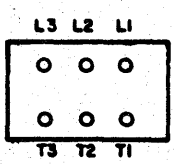


VIEW B-B



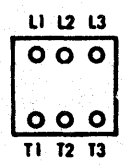
VIEW A-A





CB1 AND CB2

DETAIL F



CP2, 3, & 4

DETAIL D

WIRING SIDE

1. R6 & R7 ARE PRESENT WITH FRAMES 1 AND 2. R7 PRESENT ONLY WITH 3 OR MORE FRAMES.
2. USED ONLY FOR 50 Hz 380V AND 408V.
3. PRESENT WITH EXPANSION FRAMES ONLY.

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

INTERNATIONAL BUSINESS MACHINES CORP.					DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME	SYSTEM DIAGRAM				MAY76	314419					
	COMPONENT LOCATION				AUG76	315608					
DESIGN	WJK	MAY76	MODEL		NOV76	315621					
DETAIL			SCALE		JUL77	316710					YZ301
CHECK	WJK	MAY76	DRAW		JAN79	318589					
APPRO	TES	MAY76	CHECK								

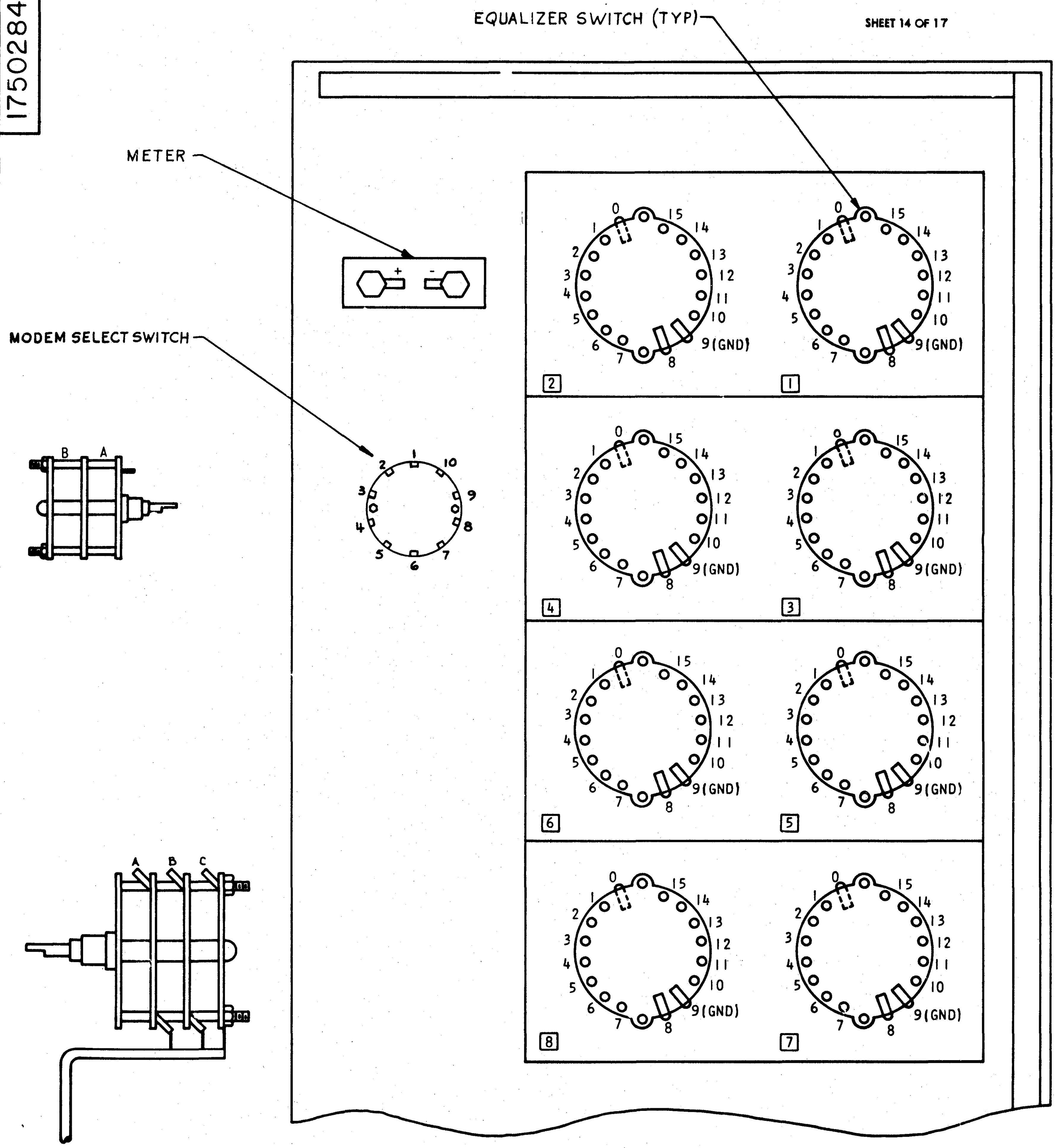
C

1750284 C

MODEM EQUALIZER PANEL

PART NO	LOGIC PG NO
1750284	YZ301

SHEET 14 OF 17



IBM

NAME	COMPONENT LOCATION DWG		
DESIGN	WJK	MAY76	SHT 14 OF 17
DETAIL			
CHECK	WJK	MAY76	CLASSIFICATION
APPRO	TES	MAY76	

	DATE	CHANGE NO		DATE	CHANGE NO
	MAY76	314419		JAN 79	318589
	AUG76	315608			
	NOV76	315621			
	JUL77	316710			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ 301

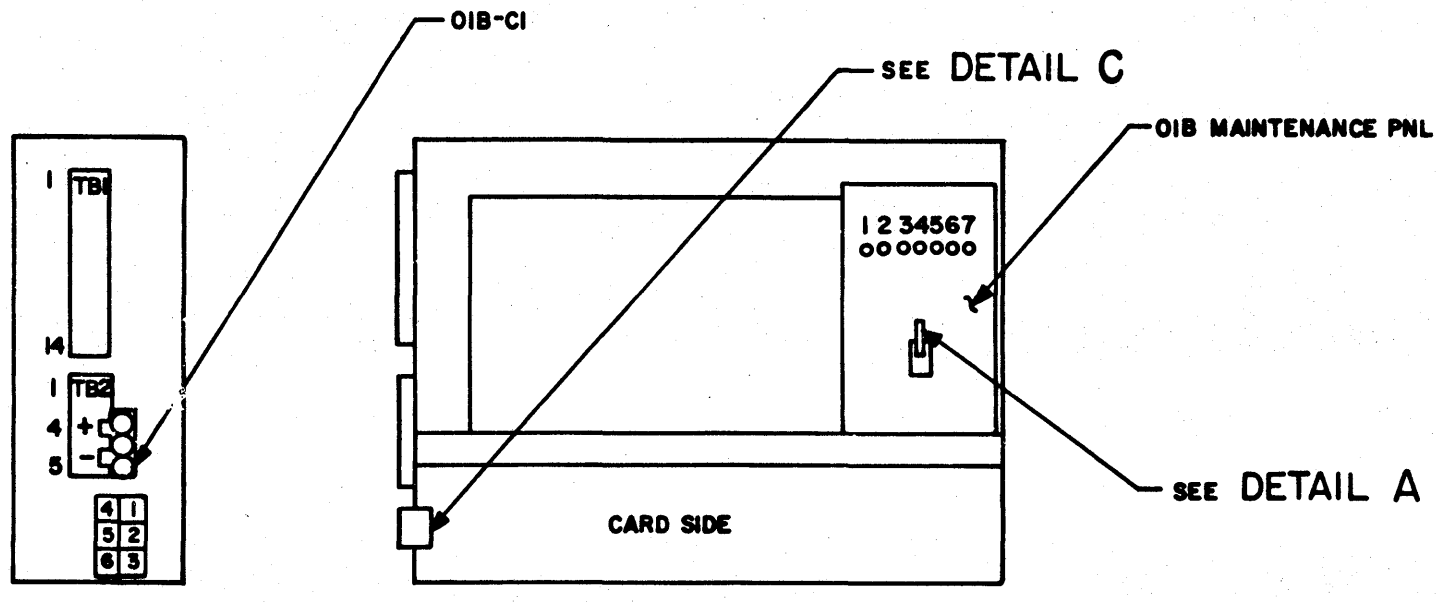
1750284 C

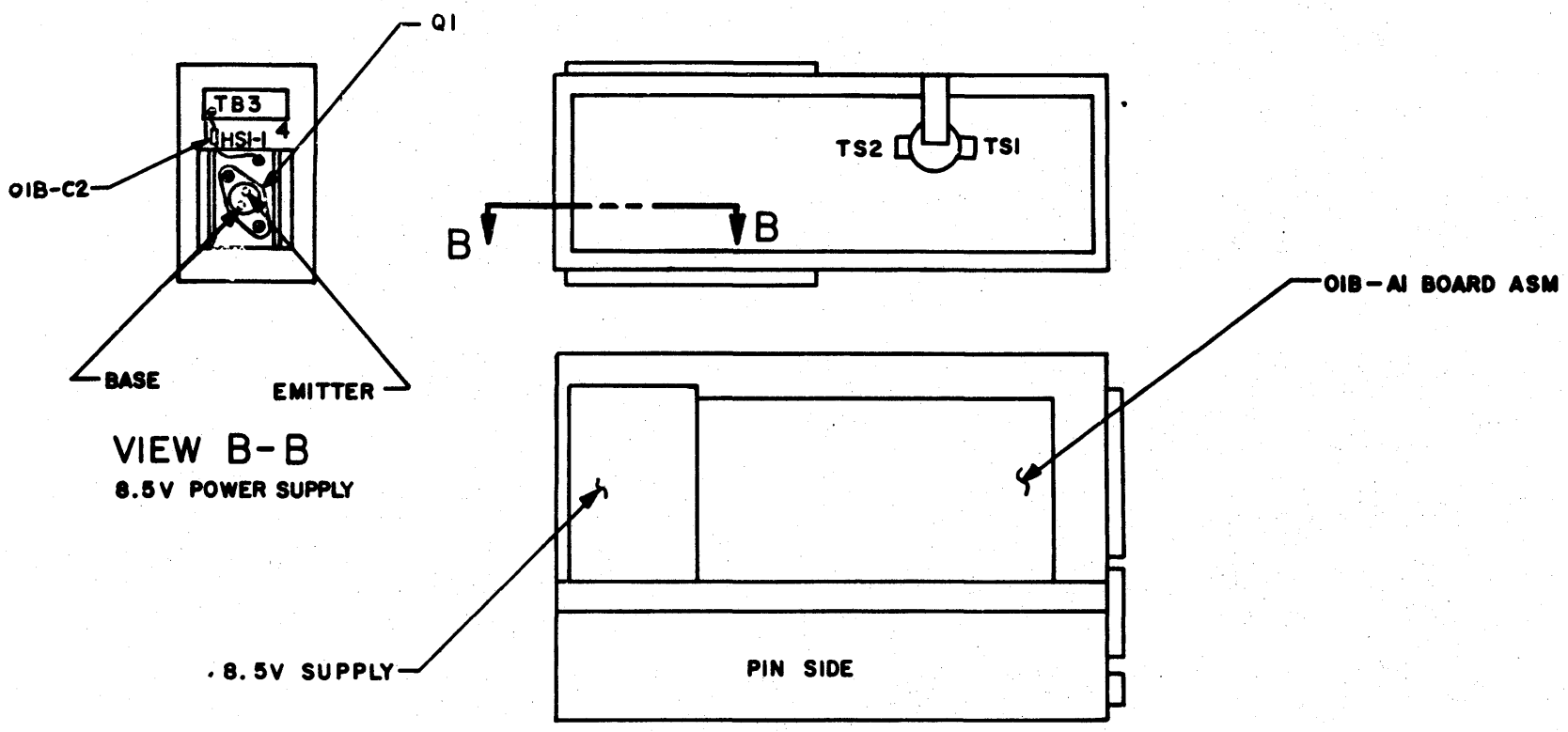
C

1750284

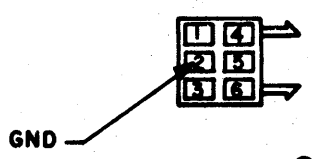
01B GATE
FET MEMORY

PART NO 1750284 | LOGIC PG NO YZ-301

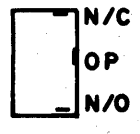




VIEW B-B
8.5V POWER SUPPLY



DETAIL C
01B – M1
WIRING SIDE



DETAIL A
01B – SW1
WIRING SIDE

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	SYSTEMS DIAGRAM				MAY76	314419		JAN 79	318589
COMPONENT LOCATION					AUG76	315608			
DESIGN	WJK	MAY76	SHT 15 OF 17		NOV76	315621			
DETAIL					JUL77	316710			
CHECK	WJK	MAY76	CLASSIFICATION		MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO
APPRO	TES	MAY76							YZ-301

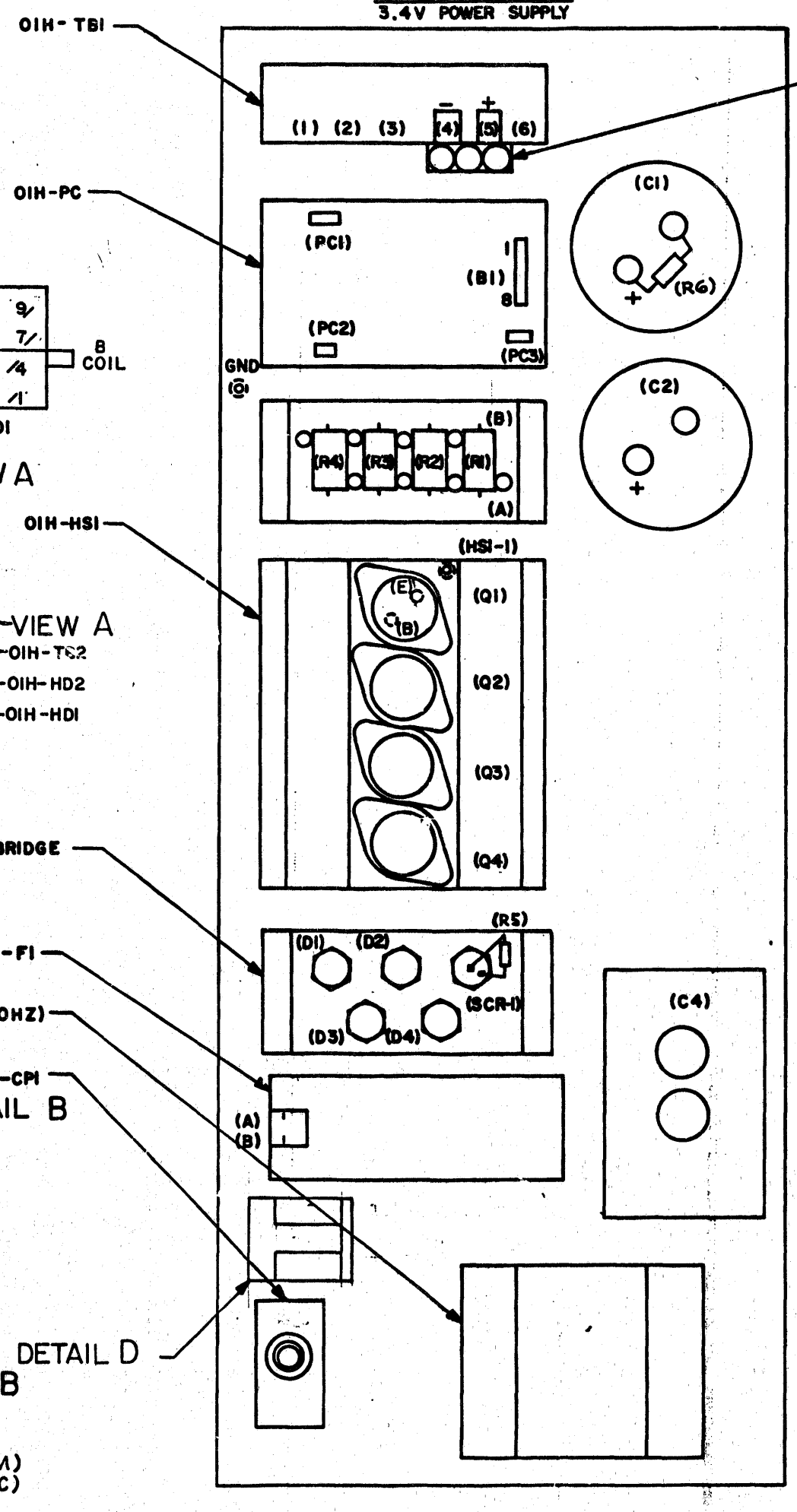
1750284 C

620-0134-1 MROZ 7805222304 VERTICAL ELECTRICAL FORMAT ASTROCLOTH N480T

C | 1750284

PART NO 1750284 | LOGIC PG NO YZ-301

01H
3.4V POWER SUPPLY



VIEW A

VIEW A

DETAIL D

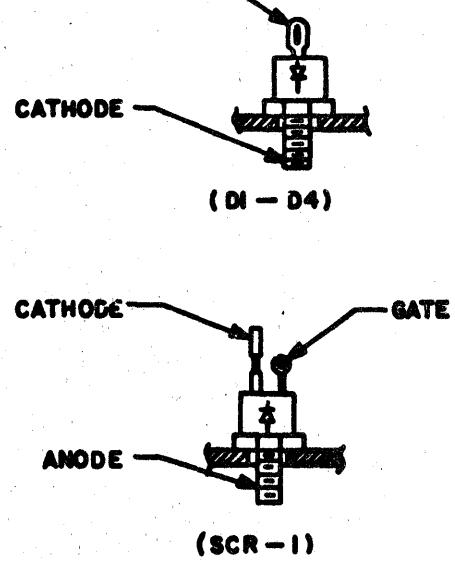
DIODE AND SCR BRIDGE
DETAIL C

DETAIL A

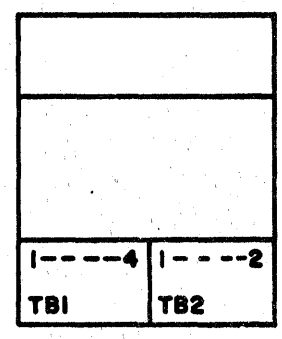
DETAIL B

01H-CP1
WIRING SIDE
(1.5 A DOM)
(2.0 A WTC)

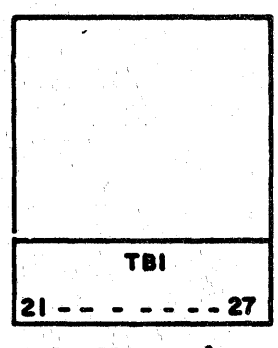
DETAIL D



DETAIL C



01H-T1 (50 HZ)
200V JAPAN
220/380 V WTC
235/408V WTC



DETAIL A

01H-T1 (60HZ)
200/208/230V DOMESTIC
WTC AND JAPAN

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	SYSTEMS DIAGRAM				MAY76	314419		JAN 79	318589
COMPONENT LOCATION					AUG 76	315608			
DESIGN	WJK	MAY76	SHT 16 OF 17		NOV76	315621			
DETAIL					JUL77	316710			
CHECK	WJK	MAY76	CLASSIFICATION	MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO	
APPRO	TES	MAY76						YZ-301	

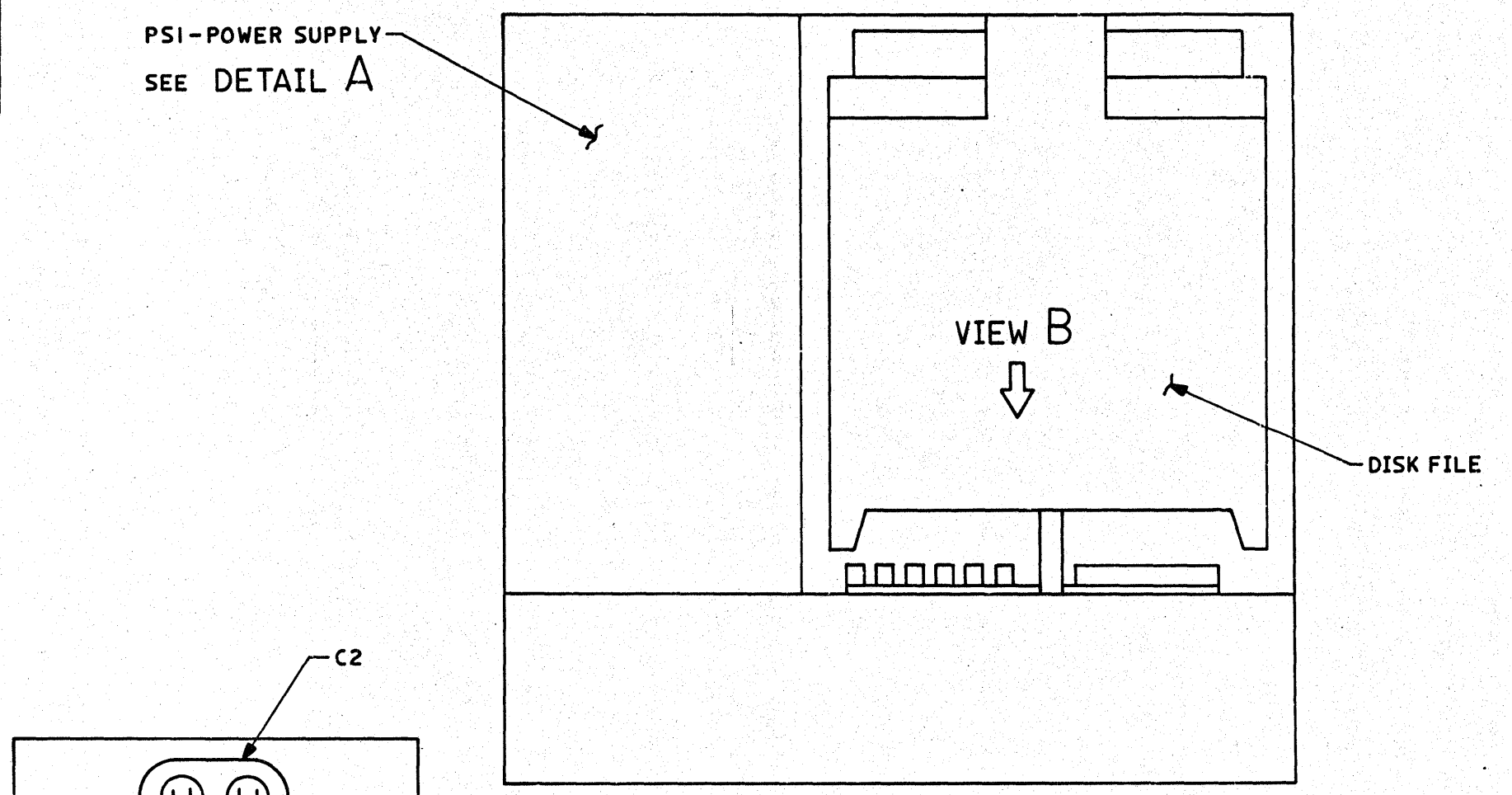
1750284 | C

1750284 C

DISK FILE - 50/60 HZ

PART NO 1750284 | LOGIC PG NO YZ-301

SHEET 17 OF 17



DETAIL A

PSI POWER SUPPLY

IBM

NAME	SYSTEM DIAGRAM				
	COMPONENT LOCATION				
DESIGN	WJK	JUL76	SHT 17 OF 17		
DETAIL	TS	AUG76			
CHECK	WJK	JUL76	CLASSIFICATION		
APPRO	RW	JUL76	WJK	JUL76	

	DATE	CHANGE NO		DATE	CHANGE NO
	NOV 76	315621			
	JUL 77	316710			
	JAN 79	318589			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ-301

1750284 C

1750282 C

PART NO 1750282 | LOGIC PG NO YZ321

	CAPACITORS (CONTINUED ON SHEET 3)			
	LOGIC PAGE	VALUE	P/N	
01E-C1	YZ053	100UF., 50V DC	223075	
01E-C2	YZ051	500UF., 50V DC	2175473	
01E-C3	YZ055	3000UF., 50V DC	5214162	
01E-C4	YZ056	100UF., 50V	223075	
	LOGIC PAGE	VALUE	P/N	
0XF-C1	YZ071	120.000UF., 15V	5796393	
0XF-C2		120.000UF., 15V	5796393	
0XF-C3		120.000UF., 15V	5796393	
0XF-C4		120.000UF., 15V	5796393	
0XF-C5		60.000UF., 8V	5261247	
0XF-C6		60.000UF., 8V	5261247	
0XF-C7		120.000UF., 15V	5796393	
0XF-C8		60.000UF., 8V	5261247	
0XF-C9	YZ071	60.000UF., 8V	5261247	
0XF-C12	YZ071	60.000UF., 8V	5261247	
0XF-C16	YZ073	100.000UF., 6V	5709381	
0XF-C17				
0XF-C18				
0XF-C19				
0XF-C20				
0XF-C21	YZ073	100.000UF., 6V	5709381	
01A-C1	YZ075	15UF., 35V	MOUNTED ON W-1	

	LOGIC PAGE (S)	VALUE	P/N
PPB-C1	YZ051	18000UF	5239119
PPB-C2	YZ001.011.021.031	LINE FILTER, .01UF	5214060
PPB-C3	YZ001.011.021.031	LINE FILTER, .01UF	5214060
PPB-C4	YZ001.011.021.031	LINE FILTER, .01UF	5214060
PPB-C5	YZ011	LINE FILTER, .01UF (W.T. ONLY)	5214060
PPB-C6	YZ051	1500UF	2181753

EMC FILTERS			
	LOGIC PAGE	VALUE	P/N
FL-1, FL-2, FL-3, FL-4	YZ011	EMC FILTER, 50 AMP (GERMAN ONLY)	1770797

CIRCUIT BREAKERS/CIRCUIT PROTECTORS		
3705	LOGIC PAGES	REMARKS
PPB-CB1	YZ001.011.021.031	REFER TO CHART ON APPROPRIATE PAGE
PPB-CB2	YZ001.011.021.031	FOR VALUES OF THESE COMPONENTS
PPB-CP1	YZ003.013.023	
PPB-CP2	YZ003.013.023.033	
PPB-CP3	YZ003.013.023.033	
PPB-CP4	YZ003.013.023.033	
01H-CP1	YZ075	5180399 (60HZ) 1.5A, 5180238 (50 HZ) 2.0A

ALL FRAMES	LOGIC PAGE	RATING	P/N	REMARKS
0XF-CP2	YZ071	10A	2218599	-12 VOLT SUPPLY
0XF-CP3	YZ071	30A	5993191	+12 VOLT SUPPLY
0XF-CP4	YZ071	10A	2218599	+6 VOLT SUPPLY

CHOKES - TRANSFORMERS				
	LOCATION	PAGE	P/N	REMARKS
L1	BASE *	YZ073	5993112	-4V FILTER
L2	0XF	YZ071	5993113	+6V FILTER
L3	0XF	YZ071	5993113	-12V FILTER
L5	0XF	YZ071	5993180	+12V FILTER
L6	0XF	YZ073	5993114	-4V FILTER
T1	01H	YZ075	4119631	+3.4V REGULATOR 50HZ
T1	01H	YZ075	5708922	+3.4V REGULATOR 50HZ
T1	PPB	YZ003	826102	CONV. OUTLET - 60HZ. DOMESTIC
T1	PPB	YZ023	1859339	CONV. OUTLET - 60HZ. JAPAN
T2	PPB	YZ051	5993116	SEQUENCING CONTROL VOLTAGES
T3	BASE *	YZ071	5993111	+6, +12, -12, -30 VOLTS/LOGIC
T4	BASE *	YZ073	5993110	-4V LOGIC; AC-REF; USE-METER

* REFER TO YZ301, SHEET 1, FOR PHYSICAL LOCATION

CONNECTORS - EDGE									
	a	b	c	d	e	f	g	h	
01E-EC1	054	056	053	055	056	054	054	056	P/N 302090
01E-EC2	055	055	053	056	055	053	056	056	P/N 302090
01E-EC3	051	051	051	057	051	051	051	051	P/N 302090
01E-EC4	054	054	054	057	054	054	054	057	P/N 302090
	1	2	3	4	5	6	7	8	(SEE YZ301 SHEET 13)
OP.PNL-EC1									P/N 302090
OP.PNL EC2									
OP.PNL EC3									
OP.PNL EC4									
OP.PNL EC5									
OP.PNL EC6									
OP.PNL EC7					051		051		
OP.PNL EC8			054	054		051	053	051	P/N 302090
	a	b	c	d	e	f	g	h	
0XF-EC1	071	071	071	071	073	073	055	073	P/N 302090
0XG-EC1		073		073	073	073	073	073	P/N 302090
0XG-EC2		073		073	073	073	073	073	P/N 302090
0XG-EC3		073		073	073	073	073	073	P/N 302090

NOTE: OP-PNL EDGE CONNECTORS ON AP-XXX LOGIC PAGES

CONNECTORS - EPO							
	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	
EPOJ1-4	051	051	053	053	053	053	
EPOJ-5	051	051				051	

CONNECTORS - SMS 01E GATE									
CONNECTOR	1	2	3	4	5	6	7	8	"J" OR "P"
PIN A	056	056	056	056	051	057	051	053	
B	052	052	052	052	057	051	051	053	
C	052	052	052	052	053	X	051	055	
D	056	056	056	056	053	057		055	
E	056	056	056	056	054	051		055	
F	053	053	053	053	054	051		055	
G	056	056	056	056	053	053		055	
H	056	056	056	056	053	053		055	
J	056	056	056	056	053	053		055	
K	056	056	056	056	054	053		055	
L	056	056	056	056	054	053		053	
M	056	056	056	056	057	053		056	
N	055	055	055	055	053	053		055	
P	055	055	055	055	054	053		056	
Q	054	054	054	054	053	053		056	
R	054	054	054	054	053	053		055	

CONTACTORS 60Hz/50Hz JAPAN (FOR 50Hz WT, SEE BELOW)			
MAIN FRAME (3705) CONTACTS ON PAGES:	COIL ON	P/N	CIRCUIT
PPB-K1 YZ003, 023, 033, 052	YZ051	5351162	EPO
PPB-K2 YZ003, 023, 033, 052	YZ052	5351162	FRM 1 A-C

CONTACTORS 50 Hz WT			
MAIN FRAME (3705) CONTACTS ON PAGES:	COIL ON	P/N	CIRCUIT
PPB-K1 YZ013, 052	YZ 051	5351162	EPO
PPB-K2 YZ013, 052	YZ 052	5214578	FRM 1 A-C
PPB-K3 YZ013, 052	YZ 052	5214578	FRM 1 A-C

NOTES 1. ALL 3-DIGIT LOCATIONS SHOULD HAVE A "YZ-" PREFIX UNLESS OTHERWISE NOTES

IBM									
NAME	COMPONENTS - CROSS REFERENCE -				DATE	CHANGE NO		DATE	CHANGE NO
	3705 II BASE FRAME				MAY76	314419		AUG 77	313977
					JUL76	315605		OCT 78	318894
DESIGN	TS	MAY76	SHT 1 OF 4		AUG76	315608			
DETAIL					NOV76	315621			
CHECK	TS	MAY76	CLASSIFICATION	MUST CONFORM TO ENG SPEC	DEVELOPMENT NO		LOGIC PG NO	YZ321	
APPRO	TS	MAY76							

1750282 C

620-0134-1 MROR 780822804 VERTICAL ELECTRICAL FORMAT ASTROCLOTH N6607

1750282 C

PART NO 1750282 | LOGIC PG NO YZ321

DIODES/RECTIFIERS/TRANSISTORS (CONT ON SHEET 3)				
	LOGIC PAGE	IBM TYPE	P/N	REMARKS
01E-D1	YZ053	AM	615354	01E-RY6
01E-D2	YZ055	AM	↕	0XF-HD1
01E-D3	YZ056	AM	↕	01E-RY2
01E-D4	YZ055	AM	↕	0XF-HD2
01E-D5	YZ056	AM	↕	01E-RY12
01E-D6	YZ054	AM	↕	01E-RY11
01E-D7	YZ054	AM	↕	01E-RY10
01E-D8	YZ051	AM	↕	01E-RY9
01E-D9	YZ053	AM	615354	———
01E-D10	YZ051	GB	369680	———
01E-D11	YZ056	AM	615354	———
01E-D12	YZ054	JB	2391158	
01E-D13	YZ054	JB	2391158	
01E-D17	YZ053	AM	615354	01E-RY15 [2]
PPB-D1	YZ051	AM	5270652	3705 FRAME
PPB-D2	YZ052	AM	5270652	3705 FRAME
01H-D5678	YZ075		(2X)1749582	2 DIODES PER ASM
01A-D1	YZ075		5214179	ON 01A-W1 DIST. PNL
01H-D1	YZ075		127324	
01H-D2	YZ075		127324	
01H-D3	YZ075		127324	
01H-D4	YZ075		127324	
01H-SCR1	YZ075		208975	
0XF-SCR7	YZ073		1770790	-4V
0XF-SCR8	YZ073		1770790	-4V
0XF-SCR9	YZ071		208975	+6V
0XF-SCR10	↕		↕	↕
0XF-SCR11	↕		↕	↕
0XF-SCR12	↕		↕	↕
0XF-SCR13	↕		↕	↕
0XF-SCR14	YZ071		208975	+6V
0XF-SCR15	YZ073		1770790	-4V
0XF-SCR16	YZ073		1770790	-4V
0XF-SCR17	YZ071		** 208975/ 595256	-12V
0XF-SCR18	↕		↕	↕
0XF-SCR19	↕		↕	↕
0XF-SCR20	↕		↕	↕
0XF-SCR21	↕		↕	↕
0XF-SCR22	YZ071		**208975/ 595256	-12V
0XF-SCR23	YZ073		1770790	-4V
0XF-SCR24	YZ073		1770790	-4V
0XF-SCR25	YZ071		**5214104/ 595256	+12V
0XF-SCR26	↕		↕	↕
0XF-SCR27	↕		↕	↕
0XF-SCR28	↕		↕	↕
0XF-SCR29	↕		↕	↕
0XF-SCR30	YZ071		**5214104/ 595256	+12V
01E-Q1	YZ051	108	369214	-6V POWER CONTROL
01E-Q2	YZ053	188	369696	REMOTE PWR OFF [2]
01E-DC1	YZ053	DIODE-CAPACITOR	1753436	01E-RY6 SEE NOTE [3]

** ALWAYS USE PART NUMBER 595256 FOR REPLACEMENTS

RELAYS - WIRE CONTACT														
	COIL	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	P/N
01E-														
RY-1	YZ056	054	054	053	055									769011
RY-2	YZ056	056	054	055	055									769011
RY-3	YZ053	054	053	054	053	053	053	053	053	053	053	055	054	769027
RY-6	YZ053	054	055	053	051	056	056	053	053	053	055	055	054	769027
RY-9	YZ051	053		053	053	053	053							769017 [1]
RY-10	YZ054		053	054	053									769011
RY-11	YZ054		054	053	053									769011
RY-12	YZ056	056	054	053	055									769011
RY-13	YZ055	055	054											769011
RY-15	YZ053	053	053											769011 [2]

RELAYS - HEAVY DUTY														
	COIL	-1	-2	-3	-4	-5	-6	-7						P/N
01E-														
HD1	YZ055	052		051										2145046
0XF-														
HD1	YZ055	071	071	073										2145046
HD2	YZ055	071		071										2145046
01H-HD1	YZ075						075	075						441092
01H-HD2	YZ075				075			075						441092

RESISTORS (CONT ON SHEET 3)				
	LOGIC PAGE(S)	VALUE	P/N	REMARKS
01A-R1	YZ075/077	3Ω, 25W	1770799	ASM WITH 01C-C1
0PS-R1	YZ073	330.1/2W	733693	EC7-3 TO EC7-6
01E-R1	YZ054	100Ω, 25W	507142	
01E-R2	YZ053	5.1K, 1/2W	317024	
01E-R3	YZ053	25Ω, 5W	1770801	
01E-R4	YZ051	10Ω, 10W	2531181	
01E-R5	YZ051	270Ω, 10W	2102582	
01E-R6	YZ055	25Ω, 5W	1770801	
01E-R7	YZ054	5.1K, 1/2W	317024	
01E-R8	YZ054	5.1K, 1/2W	317024	
01E-R9	YZ053	820Ω, 1/4W	217082	[2]
0X-R1	YZ071	4Ω, 25W	591465	SEE YZ301 SHEET 1
0X-R2	YZ071	25Ω, 25W	4117273	SEE YZ301 SHEET 1
0X-R3	YZ071	25Ω, 50W	4117273	SEE YZ301 SHEET 1
0XF-R6	YZ071	30Ω, 2W	589764	SEE YZ301 SHEET 6
0XF-R8	YZ073	30Ω, 2W	589764	↕
0XF-R9	YZ073	20Ω, 10W	124695	↕
0XF-R11	YZ071	30Ω, 2W	589764	↕
0XF-R12	YZ071	30Ω, 2W	589764	↕
0XF-R13	YZ071	30Ω, 2W	589764	↕
0XF-R14	YZ071	30Ω, 2W	589764	SEE YZ301 SHEET 6
PPB-R1				
PPB-R2	YZ001,011,021,031	1MΩ, 1W	5318934	LINE FILTER
PPB-R3	YZ001,011,021,031	1MΩ, 1W	5318934	LINE FILTER
PPB-R4	YZ001,011,021,031	1MΩ, 1W	5318934	LINE FILTER
PPB-R5	YZ011	1MΩ, 1W	5318934	LINE FILTER
PPB-R6	YZ051	50Ω, 50W	801615	SEE NOTE [7] ON YZ051
PPB-R7	YZ051	50Ω, 50W	801615	SEE NOTE [8] ON YZ051
PPB-R7	YZ051	250Ω, 25W	5261946	SEE NOTE [8] ON YZ051

MOTORS/BLOWERS				
	LOCATION	PAGE	P/N	VOLTAGE
DISK MOTOR	REMOTE HOUSING	YZ037		200/208/230V, 60HZ 200/240V, 50HZ
GATE FAN	0XA	YZ003, 005	2590224	208/230V. 60HZ DOMESTIC
GATE FAN	0XA	YZ013, 015	2590703	220/235/380/408V. 50HZ - W.T.
GATE FAN	0XA	YZ023, 025	2590224	200V. 60HZ, JAPAN
GATE FAN	0XA	YZ033, 035	2590703	200V. 50HZ, JAPAN
FET MEMORY FANS	01B	YZ003	5357050	208/230V. 60HZ DOMESTIC
	01B	YZ013	5357050	200V, 60HZ JAPAN
	01B	YZ023	4120172	220/235/380/408V 50HZ W.T.
	01B	YZ033	4120172	200V., 50HZ, JAPAN
HEAT SINK (2 EACH)	0XG	YZ003		208/230V. 60HZ, DOMESTIC
	0XG	YZ013		220/235/380/408V. 50HZ, W.T.
	0XG	YZ023		200V., 60HZ, JAPAN
	0XG	YZ033	5357050	200V., 50HZ, JAPAN
3.4V POWER	01H	YZ075	1749636	ALL VOLTAGES

NOTES:
[1] NOT USED IN 3705 REMOTE
[2] USED IN SYSTEMS WITH REMOTE POWER OFF FEATURE
[3] 01E-DC1 REPLACES 01E-D1 ON 3705 II IN WORLD TRADE

IBM

NAME	COMPONENTS - CROSS REFERENCE -		
	3705 II BASE FRAME		
DESIGN	TES	MAY76	SHT 2 OF 4
DETAIL			
CHECK	TES	MAY76	CLASSIFICATION
APPRO	TES	MAY76	

	DATE	CHANGE NO		DATE	CHANGE NO
	MAY76	314419		AUG 77	313977
	JUL76	315605		OCT 78	318894
	AUG76	315608			
RAC	NOV76	315621			

MUST CONFORM TO ENG SPEC	DEVELOPMENT NO	LOGIC PG NO
		YZ321

1750282 C

420-0134-1 MRO# 7808222204 VERTICAL ELECTRICAL FORMAT ASTROCLOTH M88T

1750282 C

PART NO 1750282 | LOGIC PG NO YZ321

01D-A1A2

CABLE P/N 5993206

SOURCE	PIN	WIRE #	CIRCUIT	LOGIC PAGE
01-T4-TB2-4	B02	16	PHASE A - REF 1	YZ111BC1
01-T4-TB2-1	B03	17	PHASE A - REF C.T.	YZ111BC3
	B04	18	SPARE	
	B05	19	SPARE	
01-T4-TB2-6	B07	20	PHASE B - REF 1	YZ111BC5
01-T4-TB2-2	B08	21	PHASE B - REF C.T.	YZ111BC7
	B09	22	SPARE	
01-T4-TB2-13	B10	23	USE METER TRANSFORMER	YZ111FF2
0X-R1-C	B12	5	-4V SHUNT - LINE	YZ171AF2
0X-R1-D	B13	11	-4V SHUNT - LOAD	YZ171AF4
EC-7-1	D02	1	PHASE A SAMPLE PULSE	YZ111DE3
EC-7-2	D04	2	PHASE B SAMPLE PULSE	YZ111DE1
EC-8-1	D05	3	DRIVE METER	YZ111AH4
	D06	4	SPARE	
EC-7-4	D07	6	USE METER RETURN	YZ111FH6
EC-6-1	D09	7	PHASE B - INDICATORS	YZ111BD7
EC-6-8	D10	8	PHASE A - INDICATORS	YZ111BD5
01-T4-TB2-17	D11	13	PHASE C - REF 1	YZ111BD1
01-T4-TB2-3	D12	14	PHASE C - REF C.T.	YZ111BD3
	D13	15	SPARE	

01D-A1D5

CABLE P/N 5993287

POS	PIN	WIRE #	CIRCUIT	LOGIC PAGE
01E-EC4-a	B02	13	POWER-OFF SW-B N/O	YZ171AG4
01E-EC3-a	B03	24	-6V DC (DISTRIBUTION)	YZ191AC4
01E-EC4-e	B04	15	POWER ON RESET CONTROLLED	YZ171AG2
	B05			
	B07			
	B08			
	B09			
01E-P1-F	B10	6	GND ON O/V O/C FAULT	YZ171BJ2
01E-P1-K	B12	9	RR1-1 SERIES STRING	YZ101GE4
01E-P1-L	B13	10	+24V 01E-J4L	YZ101BL2
01E-P1-M	D02	1	RR2-1 COMMON	YZ101EJ4
01E-P1-D	D04	2	RR2-2/RR3-2 COMMON	YZ101FL4
01E-P1-A	D05	3	+6V SENSE, RR3-2 PARALLEL	YZ101BL6
01E-P1-E	D06	4	-30V SENSE, RR2-2 PARALLEL	YZ101BL3
	D07			
01E-P1-G	D09	5	+24V 01E-J4G	YZ101BL5
01E-P1-H	D10	7	RR3-1 COMMON	YZ101EL4
01E-P1-J	D11	8	+24V 01E-J4J	YZ101BJ4
01E-EC3-e	D12	22	+30V INPUT TO +20V REGULATOR	YZ101AB2
01E-EC3-e	D13	23	+30V INPUT TO +20V REGULATOR	YZ101AB4
01E-EC1-H	D08	26	DC COMMON	YZ056

01D-A1E5

CABLE P/N 1749624

FROM	TO	CIRCUIT	LOGIC PAGE
01D-A1E5 D09	01B-A1V2 D09	* +E, +8.5 UV	YZ101
B06	B06	+E, -4 UV MAIN	YZ101
D10	D10	+E, -4 ± 12 UV	YZ101
D03	D03	GND FOR +12 SEQ. .	YZ161
B09	B09	GND FOR +6 SEQ. .	YZ195
D04	D04	** -E, +3.4 UV	YZ195
D05	D05	+E, 3.4 0V	YZ171
B04	B04	+E, SEQUENCING ERROR	YZ171
B08	B08	+E, +3.4 UV	YZ171
B02	B02	+E, -4 UV (IN 01B OR 01D)	YZ195
D06	D06	-E, +8,5 0V	YZ171
D07	D07	+E, +8,5 0V	YZ195
B05	B05	+E, ANY 0V	YZ171
B07	B07	-6V DC	YZ191
B03	B03	+20 V DIST. TO 01B	YZ101
		* +E = +ERROR	
		** -E = -ERROR	

01D-A1A5

CABLE P/N 1749581

POS	PIN	WIRE #	CIRCUIT	LOGIC PAGE
	B02	1	-12V SENSE 01A-TB1-3	YZ101AH2
	B03			
	B04	2	-SCR17 CATHODE	YZ131FD2
	B05	3	-SCR18 CATHODE	YZ131FF2
	B07	4	-SCR19 CATHODE	YZ131FH2
	B08			
	B09	5	-SCR20 CATHODE	YZ131FH4
	B10	6	-SCR21 CATHODE	YZ131FF4
	B12	7	-SCR22 CATHODE	YZ131FD4
	B13			
	D02	T1	-12V COMMON 01A-W1-8	YZ101AH4
	D04	T2	+SCR17 CONTROL GATE	YZ131FD1
	D05	T3	+SCR18 CONTROL GATE	YZ131FF1
	D06			
	D07	T4	+SCR19 CONTROL GATE	YZ131FH1
	D09	T5	+SCR20 CONTROL GATE	YZ131FH3
	D10	T6	+SCR21 CONTROL GATE	YZ131FF3
	D11			
	D12	T7	+SCR22 CONTROL GATE	YZ131FD3
	D13			
			(7 TWISTED- PAIRS IN THIS CABLE)	

CAPACITORS (CONTINUED FROM SHEET 1)

	LOGIC PAGE	VALUE	P/N
0PS-C1	YZ073	.1UF	1770787
0PS-C2	YZ073	.1UF	1770787
01H-C1	YZ075	120,000 UF,, 15V	5796393
01H-C2	YZ075	120,000 UF,, 15V	5796393
01H-C3	YZ075	3,000 UF	1863157
01H-C4	YZ075	30 UF, 330 VAC	525817
01B-C1	YZ075	.850 UF	1749564
01B-C2	YZ075	.018 UF	1749627

DIODES/RECTIFIERS/TRANSISTORS (CONT. FROM SHEET 2)

01B-Q1	YZ075	380	2396629	
01H-Q1	YZ075	358	2391346	
01H-Q2	YZ075	358	2391346	
01H-Q3	YZ075	358	2391346	
01H-Q4	YZ075	358	2391346	

RESISTORS (CONT. FROM SHEET 2)

01H-R1	YZ075	.1Ω 12.5W	5214466	SEE YZ301 SHEET 16
01H-R2	YZ075	.1Ω 12.5W	5214466	
01H-R3	YZ075	.1Ω 12.5W	5214466	
01H-R4	YZ075	.1Ω 12.5W	5214466	
01H-R5	YZ075	430Ω .25W	216437	
01H-R6	YZ075	5Ω 5W	626577	SEE YZ301 SHEET 16

IBM

NAME	3705 II BASE FRAME		CABLE CROSS REF
DESIGN	TES	MAY76	SHT 3 OF 4
DETAIL			
CHECK	TES	MAY76	CLASSIFICATION
APPRO	TES	MAY76	

	DATE	CHANGE NO		DATE	CHANGE NO
	MAY76	314419		AUG 77	313977
	JUL76	315605		OCT78	318894
	AUG76	315608			
	NOV76	315621			

MUST CONFORM TO ENG SPEC | DEVELOPMENT NO | LOGIC PG NO YZ321

1750282 C

1750282 C

PART NO 1750282 | LOGIC PG NO YZ321

01D-A1B4

CABLE P/N 1749581

POS	PIN	WIRE #	CIRCUIT	LOGIC PAGE
	B02	8	-4V SENSE 01A-TB1-13	YZ101AD2
	B03			
HS-EC1-d	B04	9	-SCR7 CATHODE	YZ121FD2
HS-EC2-d	B05	10	-SCR15 CATHODE	YZ121FF2
HS-EC3-d	B07	11	-SCR23 CATHODE	YZ121FH2
	B08			
HS-EC1-f	B09	12	-SCR8 CATHODE	YZ121FD4
HS-EC2-f	B10	13	-SCR16 CATHODE	YZ121FF4
HS-EC3-f	B12	14	-SCR24 CATHODE	YZ121FH4
	B13			
	D02	T8	-4V COMMON 01A-W1-8	YZ101AD4
HS-EC1-b	D04	T9	+SCR7 CONTROL GATE	YZ121FD1
HS-EC2-b	D05	T10	+SCR15 CONTROL GATE	YZ121FF1
	D06			
HS-EC3-b	D07	T11	+SCR23 CONTROL GATE	YZ121FH1
HS-EC1-e	D09	T12	+SCR8 CONTROL GATE	YZ121FD3
HS-EC2-e	D10	T13	+SCR16 CONTROL GATE	YZ121FF3
	D11			
HS-EC3-e	D12	T14	+SCR24 CONTROL GATE	YZ121FH3
	D13			
			(7 TWISTED - PAIRS IN THIS CABLE)	

01D-A1B5

CABLE P/N 1749581

POS	PIN	WIRE #	CIRCUIT	LOGIC PAGE
OXF-EC1-e	B02	15	-4V O/V SENSE CHOKE L6	YZ121AD4
	B03			
EC1-d	B04	16	+6V O/V SENSE OXF-EC1-D	YZ151AF2
EC1-c	B05	17	+12V O/V SENSE CHOKE L5	YZ161AF2
EC1-b	B07	18	-12V O/V SENSE OXF-EC1-B	YZ131AD2
	B08			
	B09			
	B10			
	B12	19	+6V SENSE, MEM TB1-12	YZ101AN2
	B13			
	D02	T15	-4V O/V SENSE RETURN OXF-EC1-E	YZ121AD6
	D04	T16	+6V O/V SENSE RETURN OXF-EC1-F	YZ151AF4
	D05	T17	+12V O/V SENSE RETURN OXF-EC1-G	YZ161AF4
	D06			
	D07	T18	-12V O/V SENSE RETURN OXF-EC1-H	YZ131AD4
	D09	T19	-30V O/V SENSE RETURN OXF-EC1-H	YZ141AD4
	D10			
	D11			
	D12			
	D13			
			(5 TWISTED - PAIRS IN THIS CABLE)	

01D-A1C4

CABLE P/N 1749581

POS	PIN	WIRE #	CIRCUIT	LOGIC PAGE
	B02	20	+6V SENSE MEM. TB1-12	YZ101AK2
	B03			
	B04	21	-SCR9 CATHODE	YZ151FD2
	B05	22	-SCR10 CATHODE	YZ151FF2
	B07	23	-SCR11 CATHODE	YZ151FH2
	B08			
	B09	24	-SCR12 CATHODE	YZ151FH4
	B10	25	-SCR13 CATHODE	YZ151FF4
	B12	26	-SCR14 CATHODE	YZ151FD4
	B13			
	D02	T20	W1-5	YZ101AK4
	D04	T21	+SCR9 CONTROL GATE	YZ151FD1
	D05	T22	+SCR10 CONTROL GATE	YZ151FF1
	D06			
	D07	T23	+SCR11 CONTROL GATE	YZ151FH1
	D09	T24	+SCR12 CONTROL GATE	YZ151FH3
	D10	T25	+SCR13 CONTROL GATE	YZ151FF3
	D11			
	D12	T26	+SCR14 CONTROL GATE	YZ151FD3
	D13			
			(7 TWISTED - PAIRS IN THIS CABLE)	

01D-A1C5

CABLE P/N 1749581

POS	PIN	WIRE #	CIRCUIT	LOGIC PAGE
	B02	27	+12V SENSE 01A-TB1-14	YZ101AF2
	B03			
	B04	28	-SCR25 CATHODE	YZ161FD2
	B05	29	-SCR26 CATHODE	YZ161FF2
	B07	30	-SCR27 CATHODE	YZ161FH2
	B08			
	B09	31	-SCR28 CATHODE	YZ161FH4
	B10	32	-SCR29 CATHODE	YZ161FF4
	B12	33	-SCR30 CATHODE	YZ161FD4
	B13			
	D02	T27	+12V COMMON 01A-W1-8	YZ101AF4
	D04	T28	+SCR25 CONTROL GATE	YZ161FD1
	D05	T29	+SCR26 CONTROL GATE	YZ161FF1
	D06			
	D07	T30	+SCR27 CONTROL GATE	YZ161FH1
	D09	T31	+SCR28 CONTROL GATE	YZ161FH3
	D10	T32	+SCR29 CONTROL GATE	YZ161FF3
	D11			
	D12	T33	+SCR30 CONTROL GATE	YZ161FD3
	D13			
			(7 TWISTED - PAIRS IN THIS CABLE)	

DC SIGNAL GROUND TO FRAME GROUND JUMPERS FOR BOARDS 0XA-A1,A2,A3,A4,B1, B2,B3,B4 ON EACH FRAME

FROM	TO	PART NUMBER
A2 D08	FRAME	1770813
A5 D08	FRAME	1770813
F1 D13	FRAME	1770813
Q1 E13	FRAME	1770813
V2 D08	FRAME	1770813
V5 D08	FRAME	1770813
Q6 B02	FRAME	1770813
F6 E02	FRAME	1770813

DC SIGNAL GROUND TO FRAME GROUND JUMPERS FOR 01B (FET) BOARD

FROM	TO	PART NUMBER
A2 - D08	FRAME GND	1770813
A5 - D08		
F1 - D13		
Q1 - E13		
Q6 - B02		
F6 - E02		
U1 - A13		
T6 - C02	FRAME GND	1770813

IBM

NAME	CABLE CROSS REF		
	3705 II BASE FRAME		
DESIGN	TES	MAY76	SHT 4 OF 4
DETAIL			
CHECK	TES	MAY76	CLASSIFICATION
APPRO	TES	MAY76	

	DATE	CHANGE NO
	MAY76	314419
	JUL76	315605
	AUG76	315608
	NOV76	315621

DATE	CHANGE NO
AUG 77	313977
OCT78	318894

MUST CONFORM TO ENG SPEC | DEVELOPMENT NO | LOGIC PG NO YZ321

1750282 C

620 0134 1 MROX 780822204 VERTICAL ELECTRICAL FORMAT ASTROCLOTH N6907

PART NO 1750285 | LOGIC PG NO YZ996

INSTRUCTIONS FOR MACHINE FEATURE CONFIGURATION CHART

THE PURPOSE OF THE MACHINE FEATURE CONFIGURATION CHART IS TO PROVIDE A MEANS OF RECORDING A DETAILED 3705 CONFIGURATION FOR USE BY THE CE, AND FOR SUBMISSION WITH A MES ORDER TO INDICATE BOTH THE CURRENT MACHINE CONFIGURATION AND THE NEW MES'D CONFIGURATION. TO FACILITATE ITS USE, THE CHART IS DIVIDED AT THE MIDDLE AND CAN BE REPRODUCED IN TWO PASSES THROUGH A 8 1/2 x 11 COPIER.

THE SHADED AREAS ARE PRIMARILY FOR USE OF THE PLANT MES DEPARTMENT. THE CROSSED-OUT AREAS INDICATE AN INVALID ENTRY AREA. ONLY THE INSTALLED COLUMN SHOULD BE USED - THE CURRENT ROW WILL INDICATE THE CURRENT MACHINE CONFIGURATION; THE NEW ROW CAN BE USED BY THE DP MARKETING REPRESENTATIVE TO INDICATE THE NEW CONFIGURATION AFTER AN MES.

SPECIFY CODES (FOUR DIGIT NUMBER STARTING WITH A 9) ARE USED TO IDENTIFY ITEMS SUCH AS COLOR AND VOLTAGE AND TO SHOW BOTH TYPE AND LOCATION IN THE LIB TYPE SECTION. THE LINE SET TYPE (E.G., 1A, 4B) IS ENTERED IN THE LINE SET SECTION IN THE APPROPRIATE PARTITION BLOCK. THE NECESSARY SPECIFY CODES AND OTHER INFORMATION ARE GIVEN BELOW. THE LINE SET FEATURE CODES ARE GIVEN FOR REFERENCE.

MODEL NUMBER AND MEMORY SIZES

3705-I MODEL	CORE STORAGE	3705-II MODEL	FET STORAGE
A1,B1,C1,D1	16K	E1,F1,G1,H1	32K
A2,B2,C2,D2	48K	E2,F2,G2,H2	64K
B3,C3,D3	80K	E3,F3,G3,H3	96K
B4,C4,D4	112K	E4,F4,G4,H4	128K
C5,D5	144K	E5,F5,G5,H5	160K
C6,D6	176K	E6,F6,G6,H6	192K
D7	208K	E7,F7,G7,H7	224K
D8	240K	E8,F8,G8,H8	256K

VOLTAGE - SPECIFY CODE

208V	9903
230V	9905

COLOR - SPECIFY CODE

RED	9041
YELLOW	9042
BLUE	9043
GREY	9045
WHITE	9046

ADDRESS SUBSTITUTION/HIGH SPEED SELECT-SPECIFY CODE

		ADDRESS SUBSTITUTION	HIGH SPEED SELECT
BLOCK INSTALLATION OF LINE SET IN PARTITION	1		9011
BLOCK INSTALLATION OF LINE SET IN PARTITION	2		9012
BLOCK INSTALLATION OF LINE SET IN PARTITION	3		9013
BLOCK INSTALLATION OF LINE SET IN PARTITION	4		9014
BLOCK INSTALLATION OF LINE SET IN PARTITION	5	9004	9015
BLOCK INSTALLATION OF LINE SET IN PARTITION	6	9003	9016
BLOCK INSTALLATION OF LINE SET IN PARTITION	7	9002	9017
BLOCK INSTALLATION OF LINE SET IN PARTITION	8	9001	9018

BUSINESS MACHINE CLOCK - SPECIFY CODE

SPEED BPS		
45.5	9601	
50.0	9613	
56.9	9602	
74.2	9603	
75.0	9604	
110.0	9605	
134.5	9606	
150.0	9611	
300.0	9612	
600.0	9607	
950.0	9614	
1200.0	9608	
2000.0	9609	
2400.0	9610	
150,600,1200	9615	(CS-3 ONLY)

LIB TYPE/POSITION - SPECIFY CODE

LIB TYPE	POSITION 1	2	3	4	5	6
1	9311	9312	9313	9314	9315	9316
2	9321	9322	9323	9324	9325	9326
3	9331	9332	9333	9334	9335	9336
4	9341	9342	9343	9344	9345	9346
5	9351	9352	9353	9354	—	—
6	9361	9362	9363	9364	9365	9366
7	9371	9372	9373	9374	9375	9376
8	9381	9382	9383	9384	9385	9386
9	9391	9392	9393	9394	9395	9396
10	9401	9402	9403	9404	9405	9406
11	9411	9412	9413	9414	—	—
12	9421	9422	9423	9424	9425	9426

LINE SET TYPES AND FEATURE CODES

LINE SET	FEATURE CODE	LINE SET	FEATURE CODE
1A	4711	4A	4741
1B	4712	4B	4742
1C	4713	4C	4743
1D	4714	5A	4751
1E	4715	5B	4752
1F	4716	6A	4761
1G	4717	8A	4781
1H	4718	8B	4782
1J	4719	9A	4791
1K	2944	10A	4784
1S	4720	11A	4754
1T	4725	11B	4755
1U	4726	12A	4785
2A	4721	12B	4786
3A	4731		
3B	4732		

IBM					DATE	CHANGE NO		DATE	CHANGE NO
NAME	CONFIGURATION CHART				JUN 76	314419			
	INSTRUCTIONS				NOV76	315621			
DESIGN	J V	JUN 76	SHT 1 OF 1						
DETAIL									
CHECK	WJK	JUN 76	CLASSIFICATION	MUST CONFORM TO ENG SPEC		DEVELOPMENT NO		LOGIC PG NO	
APPRO	BJ	JUN 76						YZ996	

MACHINE FEATURE CONFIGURATION CHART EC 314419 JUN 76 YZ997 P/N 1750286

MES # _____ _____ _____ _____
SERIAL OR ORDER # _____ _____ _____ _____

VOLTAGE SPECIFY _____
COLOR SPECIFY _____

	MODEL #	MEMORY SIZE
CURRENT		
NEW		

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
REMOTE POWER OFF	6250					X	X	X		X	X	X		X	X	X	
REMOTE PROGRAM LOAD	6260																
EXTENDED ENVIRONMENT	3620																
INTERNAL AIR CIRCULATION	4670																
	4671																
UNIT PROTECTION	8510					X	X	X		X	X	X		X	X	X	
CHAN ADAPT TYPE 1	1541																
TYPE 2	1542																
TYPE 3	1543																
TYPE 4	1544																
TWO CHANNEL SWITCH	8002																
COMM SCANNER TYPE 1	1641					X	X	X		X	X	X		X	X	X	
TYPE 2	1642																
TYPE 3	1643																
ATTACHMENT BASE TYPE 1	1301					X	X	X		X	X	X		X	X	X	
TYPE 2	1302																
ADDR SUB/HI SPD SEL - SPECIFY CODE																	
BUSINESS MACHINE CLOCK	4650	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4
(ENTER SPECIFY CODE) CURRENT																	
NEW																	

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
LIB TYPE *																	
LIB POSITION 1 CURRENT																	
NEW																	
(ENTER SPECIFY CODE) 2 CURRENT																	
NEW																	
3 CURRENT																	
NEW																	
4 CURRENT																	
NEW																	
5 CURRENT		X	X	X													
NEW																	
6 CURRENT																	
NEW																	
* SEE MAXIMUM LIB RESTRICTIONS FOR COMM SCANNER TYPES IN SALES MANUAL		PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F
LINE SETS																	
LIB POSITION 1 CURRENT																	
NEW																	
(ENTER LINE SET TYPE) 2 CURRENT																	
NEW																	
3 CURRENT																	
NEW																	
4 CURRENT																	
NEW																	
5 CURRENT		X	X	X	X												
NEW																	
6 CURRENT																	
NEW																	

LIST RPQ NUMBERS INSTALLED

DATE OF LAST ENTRY _____

MACHINE FEATURE CONFIGURATION CHART EC 314419 JUN 76 YZ997 P/N 1750286

MES # _____ _____ _____ _____
SERIAL OR ORDER # _____ _____ _____ _____

VOLTAGE SPECIFY _____
COLOR SPECIFY _____

	MODEL #	MEMORY SIZE
CURRENT		
NEW		

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
REMOTE POWER OFF	6250																
REMOTE PROGRAM LOAD	6260																
EXTENDED ENVIRONMENT	3620																
INTERNAL AIR CIRCULATION	4670																
	4671																
UNIT PROTECTION	8510																
CHAN ADAPT TYPE 1	1541																
TYPE 2	1542																
TYPE 3	1543																
TYPE 4	1544																
TWO CHANNEL SWITCH	8002																
COMM SCANNER TYPE 1	1641																
TYPE 2	1642																
TYPE 3	1643																
ATTACHMENT BASE TYPE 1	1301																
TYPE 2	1302																
ADDR SUB/HI SPD SEL - SPECIFY CODE																	
BUSINESS MACHINE CLOCK	4650	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4
(ENTER SPECIFY CODE) CURRENT																	
NEW																	

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
LIB TYPE *																	
LIB POSITION 1 CURRENT																	
NEW																	
(ENTER SPECIFY CODE) 2 CURRENT																	
NEW																	
3 CURRENT																	
NEW																	
4 CURRENT																	
NEW																	
5 CURRENT																	
NEW																	
6 CURRENT																	
NEW																	

	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F
* SEE MAXIMUM LIB RESTRICTIONS FOR COMM SCANNER TYPES IN SALES MANUAL																																
LINE SETS																																
LIB POSITION 1 CURRENT																																
NEW																																
(ENTER LINE SET TYPE) 2 CURRENT																																
NEW																																
3 CURRENT																																
NEW																																
4 CURRENT																																
NEW																																
5 CURRENT																																
NEW																																
6 CURRENT																																
NEW																																

LIST RPQ NUMBERS INSTALLED

DATE OF LAST ENTRY _____

MACHINE FEATURE CONFIGURATION CHART EC 314419 JUN 76 YZ997 P/N 1750286

MES # _____ _____ _____ _____

SERIAL OR ORDER # _____ _____ _____ _____

VOLTAGE SPECIFY _____

COLOR SPECIFY _____

	MODEL #	MEMORY SIZE
CURRENT	_____	_____
NEW	_____	_____

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
REMOTE POWER OFF	6250					X	X	X		X	X	X		X	X	X	
REMOTE PROGRAM LOAD	6260																
EXTENDED ENVIRONMENT	3620																
INTERNAL AIR CIRCULATION	4670 4671																
UNIT PROTECTION	8510					X	X	X		X	X	X		X	X	X	
CHAN ADAPT TYPE 1	1541					X	X	X		X	X	X		X	X	X	
TYPE 2	1542																
TYPE 3	1543																
TYPE 4	1544																
TWO CHANNEL SWITCH	8002																
COMM SCANNER TYPE 1	1641					X	X	X		X	X	X		X	X	X	
TYPE 2	1642																
TYPE 3	1643																
ATTACHMENT BASE TYPE 1	1301					X	X	X		X	X	X		X	X	X	
TYPE 2	1302																
ADDR SUB/HI SPD SEL - SPECIFY CODE																	
BUSINESS MACHINE CLOCK	4650	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4

(ENTER SPECIFY CODE) CURRENT _____ _____ _____ _____

NEW _____ _____ _____ _____

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
LIB TYPE *																	
LIB POSITION 1 CURRENT																	
NEW																	
2 CURRENT																	
(ENTER SPECIFY CODE) NEW																	
3 CURRENT																	
NEW																	
4 CURRENT																	
NEW																	
5 CURRENT		X	X	X													
NEW																	
6 CURRENT																	
NEW																	
* SEE MAXIMUM LIB RESTRICTIONS FOR COMM SCANNER TYPES IN SALES MANUAL		PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F
LINE SETS																	
LIB POSITION 1 CURRENT																	
NEW																	
2 CURRENT																	
(ENTER LINE SET TYPE) NEW																	
3 CURRENT																	
NEW																	
4 CURRENT																	
NEW																	
5 CURRENT		X	X	X	X												
NEW																	
6 CURRENT																	
NEW																	

LIST RPQ NUMBERS INSTALLED

DATE OF LAST ENTRY _____

MACHINE FEATURE CONFIGURATION CHART EC 314419 JUN 76 YZ997 P/N 1750286

MES # _____ _____ _____ _____

SERIAL OR ORDER # _____ _____ _____ _____

VOLTAGE SPECIFY _____

COLOR SPECIFY _____

MODEL # MEMORY SIZE

CURRENT _____ _____

NEW _____ _____

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
REMOTE POWER OFF	6250					XX	XX	XX		XX	XX	XX		XX	XX	XX	
REMOTE PROGRAM LOAD	6260																
EXTENDED ENVIRONMENT	3620																
INTERNAL AIR CIRCULATION	4670																
	4671																
UNIT PROTECTION	8510																
CHAN ADAPT TYPE 1	1541																
TYPE 2	1542																
TYPE 3	1543																
TYPE 4	1544																
TWO CHANNEL SWITCH	8002																
COMM SCANNER TYPE 1	1641					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TYPE 2	1642																
TYPE 3	1643																
ATTACHMENT BASE TYPE 1	1301					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TYPE 2	1302																
ADDR SUB/HI SPD SEL - SPECIFY CODE																	
BUSINESS MACHINE CLOCK	4650	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4
(ENTER SPECIFY CODE) CURRENT																	
NEW																	

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
LIB TYPE *																	
LIB POSITION 1 CURRENT																	
NEW																	
2 CURRENT																	
(ENTER SPECIFY CODE) NEW																	
3 CURRENT																	
NEW																	
4 CURRENT																	
NEW																	
5 CURRENT		XX	XX	XX													
NEW																	
6 CURRENT																	
NEW																	
* SEE MAXIMUM LIB RESTRICTIONS FOR COMM SCANNER TYPES IN SALES MANUAL		PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F
LINE SETS																	
LIB POSITION 1 CURRENT																	
NEW																	
2 CURRENT																	
(ENTER LINE SET TYPE) NEW																	
3 CURRENT																	
NEW																	
4 CURRENT																	
NEW																	
5 CURRENT		XX	XX	XX	XX												
NEW																	
6 CURRENT																	
NEW																	

LIST RPQ NUMBERS INSTALLED

DATE OF LAST ENTRY _____

MACHINE FEATURE CONFIGURATION CHART EC 314419 JUN 76 YZ997 P/N 1750286

MES # _____ _____ _____ _____
SERIAL OR ORDER # _____ _____ _____ _____

VOLTAGE SPECIFY _____
COLOR SPECIFY _____

	MODEL #	MEMORY SIZE
CURRENT	_____	_____
NEW	_____	_____

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
REMOTE POWER OFF	6250					X	X	X		X	X	X		X	X	X	
REMOTE PROGRAM LOAD	6260																
EXTENDED ENVIRONMENT	3620																
INTERNAL AIR CIRCULATION	4670																
	4671																
UNIT PROTECTION	8510					X	X	X		X	X	X		X	X	X	
CHAN ADAPT TYPE 1	1541																
TYPE 2	1542																
TYPE 3	1543																
TYPE 4	1544																
TWO CHANNEL SWITCH	8002																
COMM SCANNER TYPE 1	1641					X	X	X		X	X	X		X	X	X	
TYPE 2	1642																
TYPE 3	1643																
ATTACHMENT BASE TYPE 1	1301					X	X	X		X	X	X		X	X	X	
TYPE 2	1302																
ADDR SUB/HI SPD SEL - SPECIFY CODE																	
BUSINESS MACHINE CLOCK	4650	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4

(ENTER SPECIFY CODE) CURRENT
NEW

LIB TYPE *

LIB POSITION 1 CURRENT / NEW
2 CURRENT / NEW
3 CURRENT / NEW
4 CURRENT / NEW
5 CURRENT / NEW
6 CURRENT / NEW

(ENTER SPECIFY CODE)

	FRAME 1				FRAME 2				FRAME 3				FRAME 4			
	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
1 CURRENT	X	X	X													
NEW	X	X	X													
2 CURRENT																
NEW																
3 CURRENT																
NEW																
4 CURRENT																
NEW																
5 CURRENT																
NEW																
6 CURRENT																
NEW																

	FRAME 1								FRAME 2								FRAME 3								FRAME 4							
	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F
1 CURRENT	X	X	X	X	X	X																										
NEW	X	X	X	X	X	X																										
2 CURRENT																																
NEW																																
3 CURRENT																																
NEW																																
4 CURRENT																																
NEW																																
5 CURRENT																																
NEW																																
6 CURRENT																																
NEW																																

* SEE MAXIMUM LIB RESTRICTIONS FOR COMM SCANNER TYPES IN SALES MANUAL

LINE SETS

LIB POSITION 1 CURRENT / NEW
2 CURRENT / NEW
3 CURRENT / NEW
4 CURRENT / NEW
5 CURRENT / NEW
6 CURRENT / NEW

(ENTER LINE SET TYPE)

LIST RPQ NUMBERS INSTALLED

DATE OF LAST ENTRY _____

MACHINE FEATURE CONFIGURATION CHART EC 314419 JUN 76 YZ997 P/N 1750286

MES #
SERIAL OR ORDER #

VOLTAGE SPECIFY
COLOR SPECIFY
MODEL # MEMORY SIZE
CURRENT
NEW

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
REMOTE POWER OFF	6250					XX	XX	XX		XX	XX	XX		XX	XX	XX	
REMOTE PROGRAM LOAD	6260																
EXTENDED ENVIRONMENT	3620																
INTERNAL AIR CIRCULATION	4670																
	4671																
UNIT PROTECTION	8510					XX	XX	XX		XX	XX	XX		XX	XX	XX	
CHAN ADAPT TYPE 1	1541					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TYPE 2	1542					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TYPE 3	1543					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TYPE 4	1544					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TWO CHANNEL SWITCH	8002					XX	XX	XX		XX	XX	XX		XX	XX	XX	
COMM SCANNER TYPE 1	1641					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TYPE 2	1642																
TYPE 3	1643																
ATTACHMENT BASE TYPE 1	1301					XX	XX	XX		XX	XX	XX		XX	XX	XX	
TYPE 2	1302					XX	XX	XX		XX	XX	XX		XX	XX	XX	
ADDR SUB/HI SPD SEL - SPECIFY CODE																	
BUSINESS MACHINE CLOCK	4650	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4	OSC1	OSC2	OSC3	OSC4

(ENTER SPECIFY CODE) CURRENT NEW

LIB TYPE *

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
LIB POSITION 1	CURRENT																
	NEW																
2	CURRENT																
(ENTER SPECIFY CODE)	NEW																
3	CURRENT																
	NEW																
4	CURRENT																
	NEW																
5	CURRENT	XX	XX	XX													
	NEW																
6	CURRENT																
	NEW																

	FRAME 1								FRAME 2								FRAME 3								FRAME 4							
	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F

* SEE MAXIMUM LIB RESTRICTIONS FOR COMM SCANNER TYPES IN SALES MANUAL

LINE SETS

		FRAME 1				FRAME 2				FRAME 3				FRAME 4			
		INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN	INSTALLED	ADD	REMOVE	DO NOT USE THIS COLUMN
LIB POSITION 1	CURRENT																
	NEW																
2	CURRENT																
(ENTER LINE SET TYPE)	NEW																
3	CURRENT																
	NEW																
4	CURRENT																
	NEW																
5	CURRENT	XX	XX	XX	XX												
	NEW																
6	CURRENT																
	NEW																

	FRAME 1								FRAME 2								FRAME 3								FRAME 4							
	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F	PART 0-1	PART 2-3	PART 4-5	PART 6-7	PART 8-9	PART A-B	PART C-D	PART E-F

RPQ NUMBERS INSTALLED

DATE OF LAST ENTRY _____