

SHEET INDEX

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OPTION INDEX

APP OR WRG	RATED ON ISSUE	REF NOTES	LOCATION

DWG ISSUE	CD ISSUE	DATE ISSUED	BY	APPD
		05-20-84	MLN CEJ	JLJ PFV

SUPPORTING INFORMATION

CATEGORY	NO.
DC POWER DISTRIBUTION GROUNDING GG2A CONVERTER PLANT	SD-5D075-01 ED-5D022-01 SD-87404-01

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5ESS* SWITCHING EQUIPMENT +48V DC POWER DISTRIBUTION CIRCUIT	7T13 PROVISIONAL
* TRADEMARK OF AT&T TECHNOLOGIES	DWG SIZE 88
AT&T BELL LABORATORIES	SD-5D070-01 SHEET A1 OF 8

SHEET INDEX—OPERATION AND MAINTENANCE

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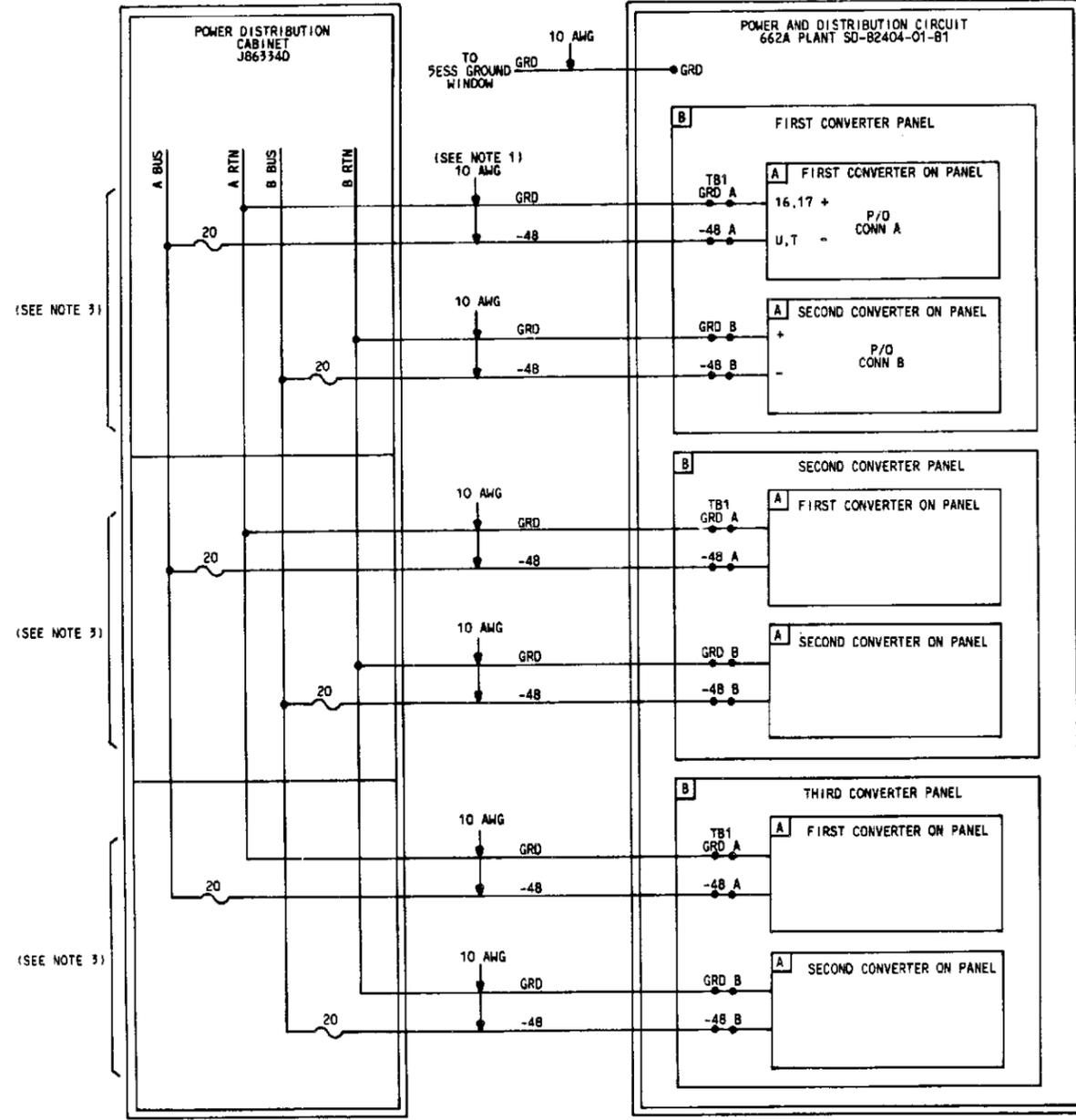
FIGURES, NOTES AND OTHER INFORMATION REFERENCED IN THIS DRAWING BUT NOT LISTED IN THIS "OPERATION AND MAINTENANCE" SHEET INDEX ARE REQUIRED FOR ENGINEERING AND MANUFACTURING PURPOSES ONLY AND ARE NOT PROVIDED.

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5ESS# SWITCHING EQUIPMENT +48V DC POWER DISTRIBUTION CIRCUIT OPERATION AND MAINTENANCE	PROVISIONAL	
	DWG SIZE 68	ISSUE 1
* TRADEMARK OF AT&T TECHNOLOGIES		SHEET A#1 OF 6
AT&T BELL LABORATORIES	SD-50070-01	

FS I

POWER INPUT CIRCUIT



NOTES:

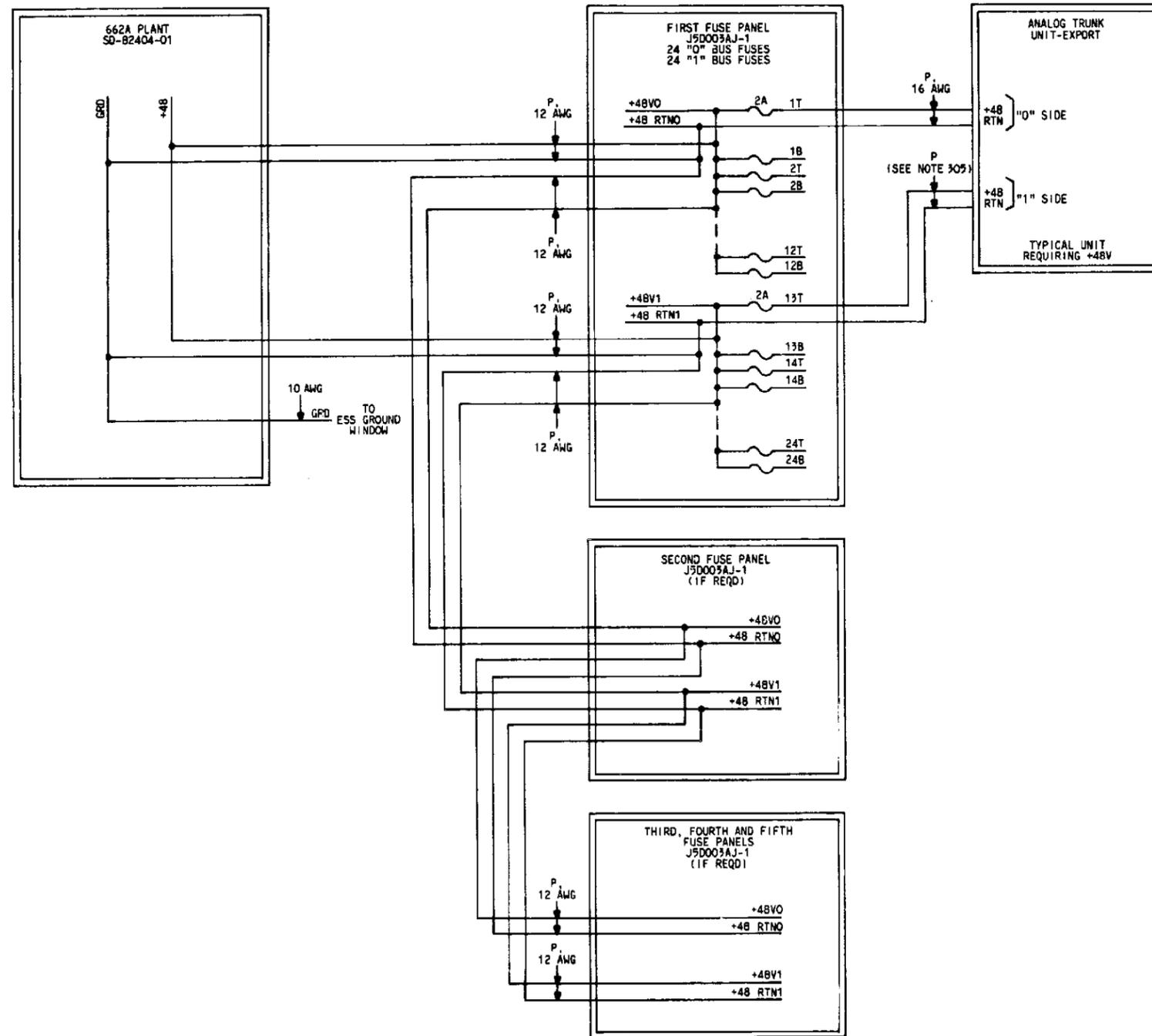
1. 1.0V MAX LOOP DROP #10 AWG UP TO 300 FEET (ONE WAY). CONNECT TO TB1 USING T AND B CRIMP LUG NUMBER RC337.
2. ADD SECOND AND/OR THIRD CONVERTER PANEL AS REQUIRED TO MEET SYSTEM LOAD REQUIREMENTS.
3. TO PROVIDE FULL REDUNDANT INPUT POWERING, ASSIGN ONLY ONE "A" BUS AND ONE "B" BUS FEEDER IN EACH POWER DISTRIBUTION CABINET PANEL TO THE 662A PLANT. PANELS IN DIFFERENT POWER DISTRIBUTION CABINETS MAY BE USED.

SEE PROPRIETARY NOTICE ON COVER SHEET

+48V DC POWER DISTRIBUTION		DWG SIZE	ISSUE
		88	1
AT&T BELL LABORATORIES		SD-50070-01	B#1

FS 2

POWER DISTRIBUTION CIRCUIT

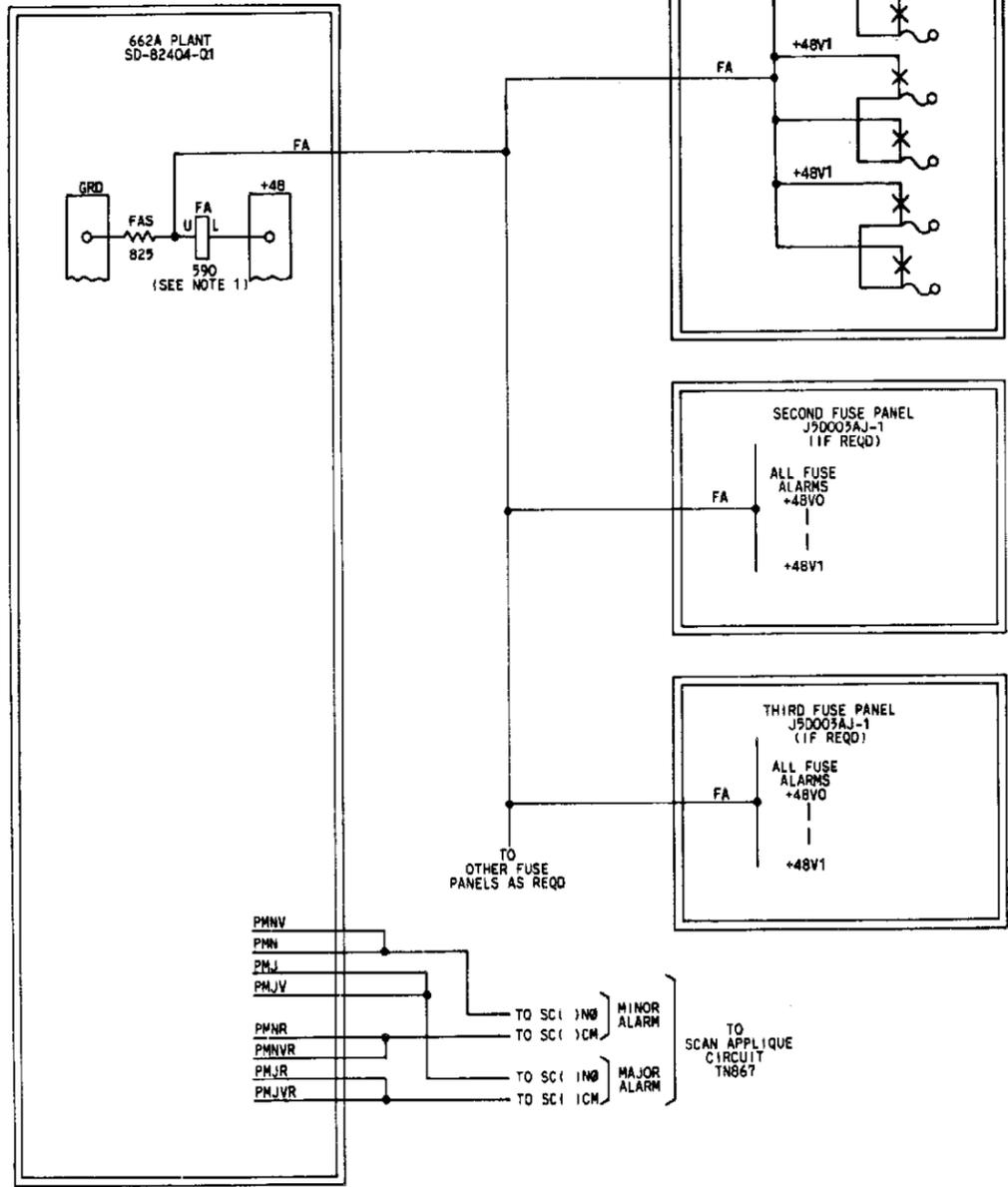


SEE PROPRIETARY NOTICE ON COVER SHEET

+48V DC POWER DISTRIBUTION	DWG SIZE	ISSUE
	08	/
AT&T BELL LABORATORIES	SD-50070-01	ENR 2

PART OF FS 3
ALARM CIRCUIT

NOTES:
1. FA RELAY IS NORMALLY OPERATED.

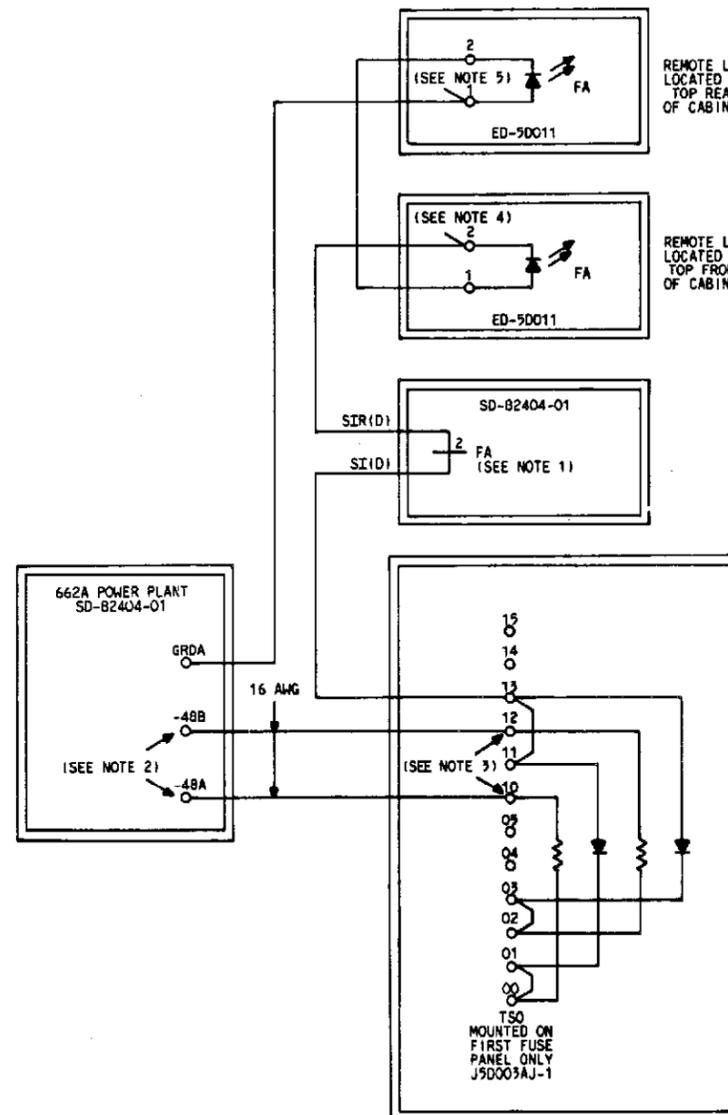


SEE PROPRIETARY NOTICE ON COVER SHEET

+48V DC POWER DISTRIBUTION		DWG SIZE	ISSUE
		08	1
AT&T BELL LABORATORIES		SD-50070-01	B#3

PART OF FS 3

ALARM CIRCUIT



NOTES:

1. FA RELAY IS NORMALLY OPERATED.
2. CONNECT ON TB1 USING 16 AWG RED WIRE AND T & B LUG RB857 OR EQUIVALENT USING SECOND SCREW ON TB1.
3. SOLDER TO PIN ON TSO AND SLFEVE.
4. IF A -48 VOLT FUSE/FILTER PANEL IS USED IN THIS CABINET (FOR OTHER EQUIPMENT), THERE WILL BE A MULT TO SD-50053-01, TS2, PIN 207 FROM THIS PIN.
5. IF A -48 VOLT FUSE/FILTER PANEL IS USED IN THIS CABINET (FOR OTHER EQUIPMENT), THERE WILL BE A MULT TO SD-50053-01, TS2, PIN 012 OR 212 FROM THIS PIN.

SEE PROPRIETARY NOTICE ON COVER SHEET

+48V DC POWER DISTRIBUTION	DWG SIZE	ISSUE
	88	1
AT&T BELL LABORATORIES	SD-50070-01	B#4

CIRCUIT NOTES:

DESIG	FUSE AMPS	POTENTIAL	ONE PER
		2A SEE NOTE 305	
<u>BATTERY SYMBOL</u>		<u>VOLTAGE RANGE</u>	
-48V +48V		-42.5 TO -52.5 +48.0 TO +90.0	

102. A 10 AWG WIRE SHALL BE RUN FROM THE CONTROL AND DISCHARGE PANEL TO THE ESS SINGLE POINT GROUND (GROUND WINDOW) TO PROVIDE A SEPARATE RETURN FOR THE NOISE OF THE +48 SYSTEM. THE RTN FOR THE +48V OUTPUT MUST NOT BE TIED TO THE CABINET GROUND (DIGITAL GROUND).

SEE PROPRIETARY NOTICE ON COVER SHEET

+48V DC POWER DISTRIBUTION		DWG SIZE	ISSUE
		88	/
AT&T BELL LABORATORIES	SD-50070-01	DI	

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED:
RESISTANCE VALUES ARE IN OHMS,
CAPACITANCE VALUES ARE IN MICROFARADS,
VALUES PRECEDED BY THE SYMBOL + (PLUS)
OR - (MINUS) ARE IN VOLTS.

302.

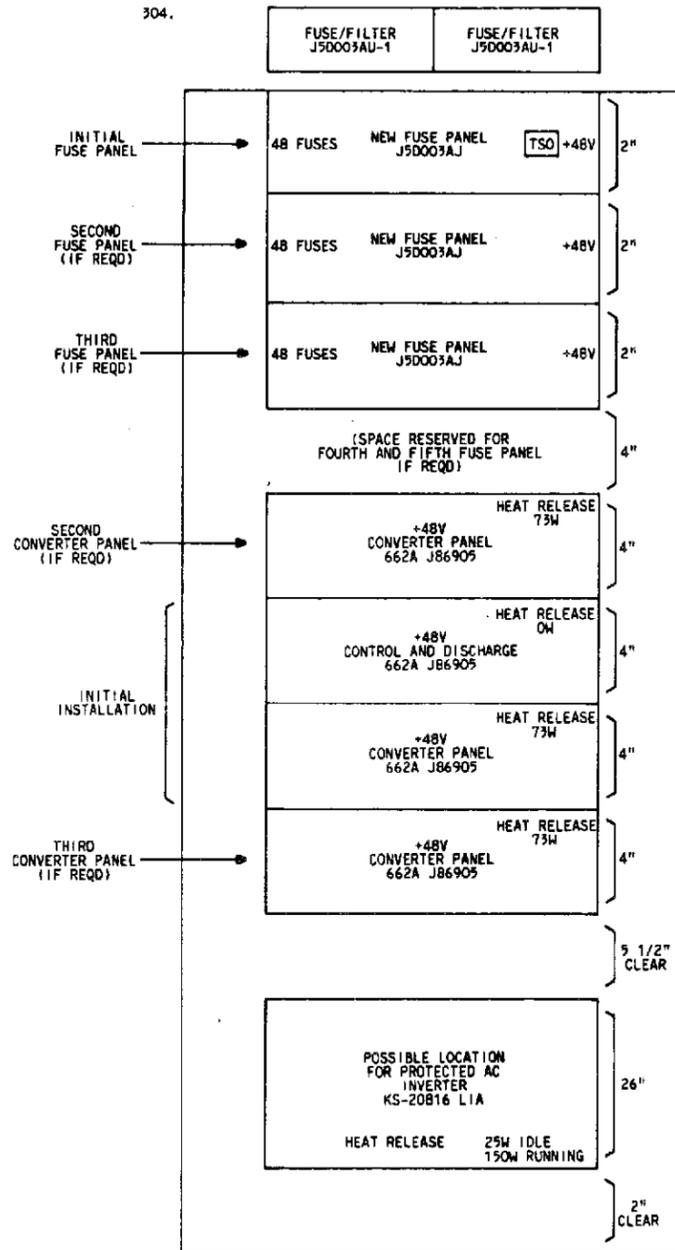
FEATURE OR OPTION	PROVIDE		
	APP	APP OR WRG	QUANTITY

303. RECORD OF FIGURES, WIRING AND APPARATUS CHANGES

CHANGED ON ISSUE	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	ADM	MD

INFORMATION NOTES (CONT):

304.



INFORMATION NOTES (CONT):

305. TYPICALLY EACH ANALOG TRUNK UNIT WILL BE FUSED WITH TWO 70B 2 AMPERE FUSES, ONE FOR EACH SERVICE GROUP. THESE TWO FUSES SHOULD BE ASSIGNED FROM DIFFERENT BUSES IN THE J50003AJ-1 FUSE PANEL. RUN THESE CONNECTIONS WITH #16 PAIRED WIRES (GRAY FOR #48 AND GRAY/BLACK FOR +48V RTN) FOR DISTANCES UP TO 150 FEET ONE WAY. BEYOND THAT DISTANCE USE #14 WIRE. THIS WILL PROVIDE A 1 VOLT LOOP DROP.

306. FOR ESTIMATING PURPOSES, USE THE FOLLOWING TABLE TO DETERMINE QUANTITIES OF FUSE PANELS, AND 132AD POWER UNIT IN THE 662A PLANT:

NUMBER OF TRUNK CIRCUITS REQUIRING +48V	NUMBER OF ANALOG TRUNK UNITS (IF ALL CIRCUITS REQUIRE +48V)	AVERAGE AMPERES OF +48V REQUIRED	J50003AJ FUSE PANEL		662A POWER PLANT	
			TOTAL NUMBER OF +48V FUSES REQUIRED	TOTAL NUMBER OF FUSE PANELS REQUIRED	NUMBER OF 132AD POWER UNITS REQUIRED	COMBINED TOTAL OUTPUT CURRENT RATING OF EQUIPPED POWER UNITS
181	5	2.3A	10	1	2	2.3A
757	23	4.6A	46	1	3	4.6A
1500	46	6.9A	92	2	4	6.9A
2304	72	8.7A	144	3	5	9.2A
2900	78	9.2A	156	4	5	9.2A
3700	113	11.5A	230	5	6	11.5A

(MAXIMUM PLANT CAPACITY)

SEE PROPRIETARY NOTICE ON COVER SHEET

+48V DC POWER DISTRIBUTION	OWB SIZE	ISSUE
	48	1
AT&T BELL LABORATORIES	SD-5070-01	D#1