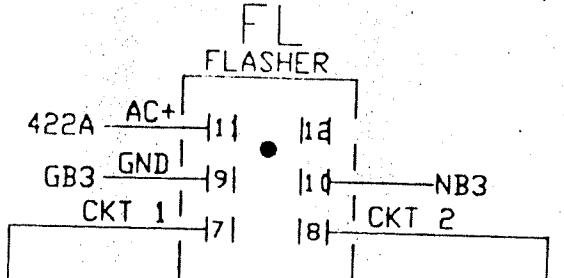
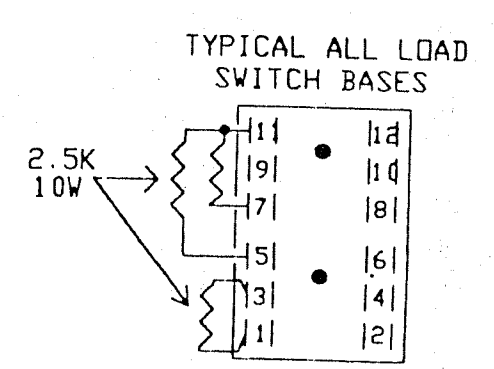


		LS	1	2	3	4	5	6	7	8	9	10	11	12	
		CONT 0	1	2	3	4	5	6	7	8	9	10	11	12	
		PLAN 0	1	2	3	4	5	6	7	8	2P	4P	6P	8P	
IN	GREEN / WALK	10	62A	69A	76A	82A	102A	109A	116A	122A	72A	85A	112A	125A	
	YELLOW/PED CLR	8	63A	70A	77A	83A	103A	110A	117A	123A	142B	144B	146B	148B	
	RED/DON'T WALK	6	64A	71A	78A	84A	104A	111A	118A	124A	73A	86A	113A	126A	
OUT	GREEN / WALK	7	201A	207A	213A	219A	225A	231A	237A	243A	249A	255A	261A	267A	
	YELLOW	5	FP1-13	FP2-13	FP3-13	FP4-13	FP5-13	FP6-13	FP7-13	FP8-13	251A	257A	263A	269A	
	RED/DON'T WALK	3	FP1-1	FP2-1	FP3-1	FP4-1	FP5-1	FP6-1	FP7-1	FP8-1	253A	259A	265A	271A	
POWER	+24 VDC	9	LS2-9	LS1-9 LS3-9	LS2-9 LS4-9	LS3-9 LS5-9	LS4-9 LS6-9 LS7-9	LS5-9 LS8-9	LS6-9 LS9-9	LS7-9 LS10-9	LS8-9 LS11-9	LS9-9 LS12-9	LS10-9 LS1-9	LS11-9 LS2-9	LS12-9 LS3-9
	CHASSIS GROUND	2	LS2-2	LS1-2 LS3-2	LS2-2 LS4-2	LS3-2 LS5-2	LS4-2 LS6-2	LS5-2 LS7-2	LS6-2 LS8-2	LS7-2 LS9-2	LS8-2 LS10-2	LS9-2 LS11-2	LS10-2 LS12-2	LS11-2 LS1-2	LS12-2 LS2-2
	AC COMMON	11	NB3 LS1-11	NB3	NB3	NB3	NB3	NB3	NB3	NB3	NB3	NB3	NB3	NB3	NB3
	115 VAC	1	SB1	SB1	SB1	SB1	SB1	SB1	SB1	SB1	SB1	SB1	SB1	SB1	SB1

LOAD SWITCH
PANEL ASSEMBLY
(REAR VIEW)



NEMA+ 12CH CONFLICT MONITOR CM1

SH1 SHELL GROUND	GB3
A1 AC+ 11	826B
B1 RELAY 1 NO	148A
C1 RELAY 2 NC	141A
D1 CH 12 GRN	833A
E1 CH 11 GRN	834A
F1 CH 10 GRN	835A
G1 CH 9 GRN	836A
H1 CH 8 GRN	837A
J1 CH 7 GRN	838A
K1 CH 6 GRN	839A
L1 CH 5 GRN	840A
M1 CH 4 GRN	841A
N1 CH 3 GRN	842A
P1 CH 2 GRN	843A
R1 CH 1 GRN	844A
S1 +24 MONITOR	59B
T1 LOGIC GROUND	53B
U1 CHASSIS GROUND	53B
V1 AC-	949A
W1 RELAY 1 COMMON (AC+)	850A
X1 RELAY 2 COMMON (LG)	54B
Y1 CH 12 YEL	829A
Z1 CH 11 YEL	830A
a1 CH 10 YEL	831A
b1 CH 9 YEL	832A
c1 CH 8 YEL	833A
d1 CH 7 YEL	834A
e1 CH 6 YEL	835A
f1 CH 5 YEL	836A
g1 CH 4 YEL	837A
h1 CH 3 YEL	838A
i1 CH 2 YEL	839A
j1 CH 1 YEL	840A
k1 CONT. VOLT. MON.	52B
n1 +24V MONITOR INHIBIT	1001B
p1 RELAY 1 NC	849A
q1 RELAY 2 NO	157A
r1 CH 12 WK	837A
s1 CH 11 WK	838A
t1 CH 10 WK	839A
u1 CH 9 WK	840A
v1 CH 8 WK	841A
w1 CH 7 WK	842A
x1 CH 6 WK	843A
y1 CH 5 WK	844A
z1 CH 4 WK	250A
aa1 SPARE 1	844A
bb1 RESET	142A
cc1 CAB. INTERLOCK A	1004B
dd1 LAB. INTERLOCK B	1003B
ee1 CH 6 WK	1002B
ff1 CH 4 WK	262A
gg1 SPARE 2	256A
hh1 SPARE 3	143A
	144A

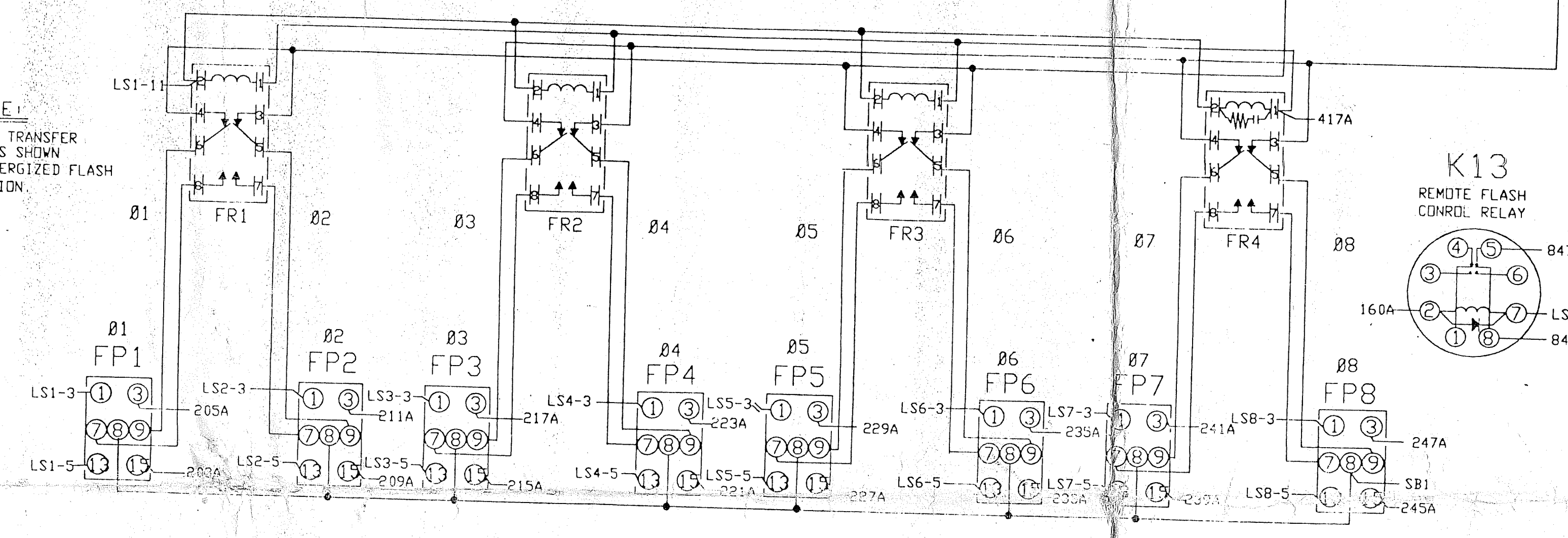
CONFLICT MONITOR MATRIX PROGRAMMING INSTRUCTIONS

1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12
1-3	2-4	3-5	4-6	5-7	6-8	7-9	8-10	9-11	10-12	
1-4	2-5	3-6	4-7	5-8	6-9	7-10	8-11	9-12		
1-5	2-6	3-7	4-8	5-9	6-10	7-11	8-12			
1-6	2-7	3-8	4-9	5-10	6-11	7-12				
1-7	2-8	3-9	4-10	5-11	6-12					
1-8	2-9	3-10	4-11	5-12						
1-9	2-10	3-11	4-12							
1-10	2-11	3-12								
1-11	2-12									
1-12										

CH1-0.1 CH9-0.1
CH2-0.2 CH10-0.1
CH3-0.3 CH11-0.1
CH4-0.4 CH12-0.1

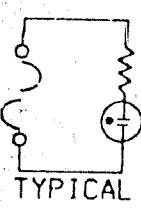
CHANNEL-0 COMBINATIONS NOT PINNED WITH MATRIX JUMPERS CONSTITUTE CONFLICTING MOVEMENTS. TO PROGRAM, CIRCLE PERMISSIVE COMBINATIONS AND INSTALL JUMPERS ON CORRESPONDING PINS ON THE PROGRAM CARD.

NOTE:
FLASH TRANSFER
RELAYS SHOWN
DE-ENERGIZED FLASH
POSITION.



FLASH PLUG JUMPERING

RED	1-7
YEL	1-3
WHT	1-8



TIGHTENING TORQUE SPECIFICATIONS			
SCREW SIZE	6-32	8-32	10-32
POUND INCHES	12	16	25.9
WEIDMULLER			
BLOCK TYPE	SAKS6	SAKEN	SAK35N
POUND INCHES	10.5	16	35

REV	DESCRIPTION

VEHICLE SIGNALS

SIGNAL	TERMINAL	G	Y	R
1-1	201 203 205			
1-2	202 204 206			
2-1		207 209 211		
2-2		208 210 212		
2-3		207 209 211		
4-1		219 221 223		
4-2		220 222 224		
4-3		219 221 223		
5-1	225 227 229			
5-2	226 228 230			
6-1		231 233 235		
6-2		232 234 236		
6-3		231 233 235		
8-1		243 245 247		
8-2		244 246 248		
8-3		243 245 247		

VEH DETECTORS

DET	TERMINAL
D1-1	303-309
D1-2	306-307
D2-1	345-346
D2-2	348-349
D4-1	313-314
D5-1	308-309
D5-2	311-312
D6-1	350-351
D6-2	353-354
D8-1	355-356
D8-2	358-359
D8-3	323-324

PED SIGNALS PED PUSHBUTTONS

SIGNAL	TERMINAL	PPB	TERMINAL
P2-1	249 253	PB2-1,2	301
P2-2	250 254	PB4-1,2	302
P4-1	255 259	PB6-1,2	343
P4-2	256 260	PB8-1,2	344
P6-1	261 265		
P6-2	262 266		
P8-1	267 271		
P8-2	268 272		

EVP SENSORS

CONTR. CHAN.	PHASES	POLE #	SIGNAL	DC (+)	GND
1-6	3	333	334 337		
2-5	1	336	334 337		
4-8	2-4	338	339 342		
6-4-8		341	339 342		

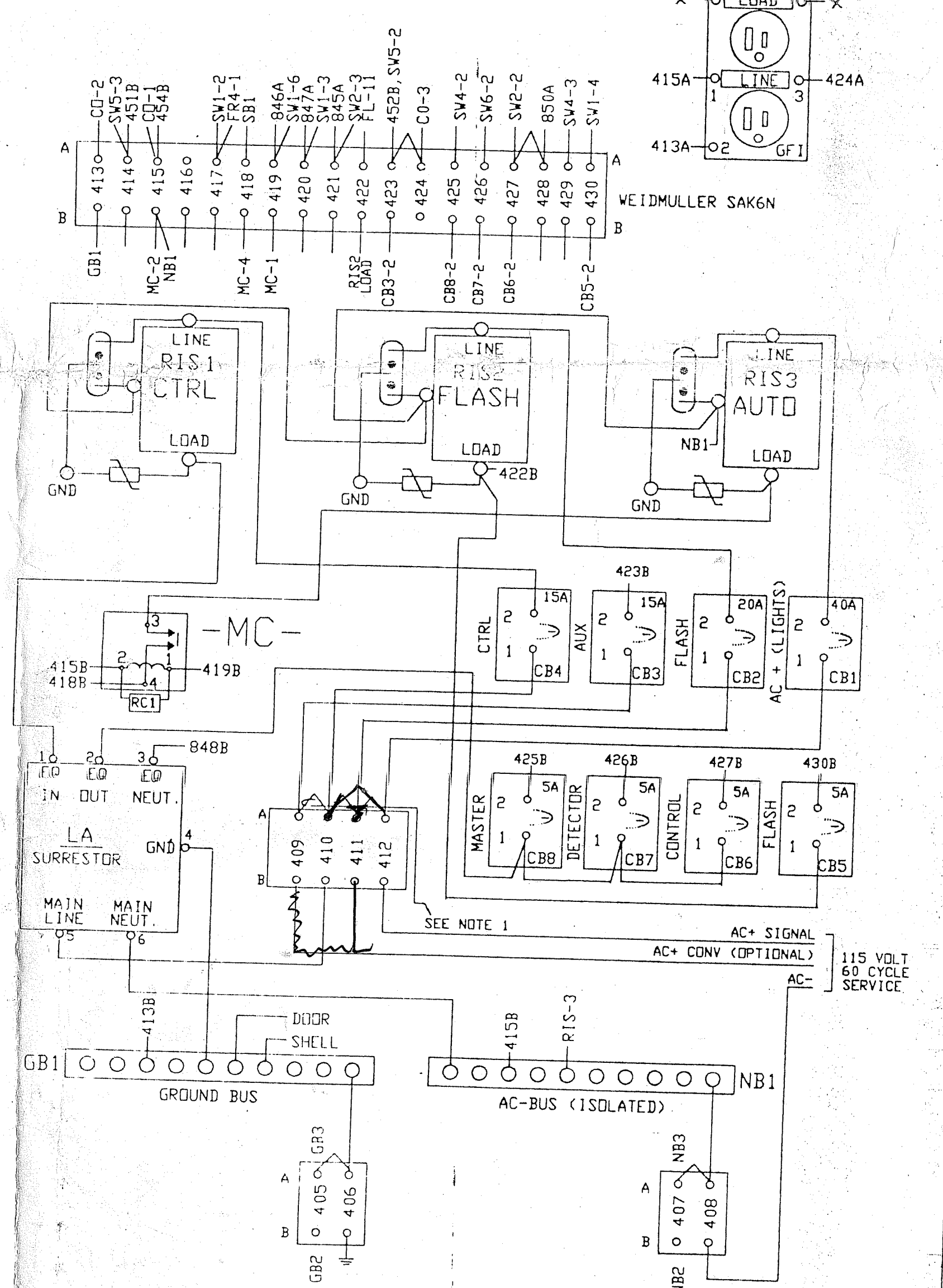
NOTES

- IF A SIGNAL SERVICE CABINET IS USED REMOVE JUMPER 409A, 410A, CONV AC+.
- IF EVP HEADS ARE INSTALLED JUMPER 363A TO 365A AND / OR 375A TO 377A.

EVP CONFIRMATORY LIGHTS

CONTR. CHAN.	PHASES	POLE #	TERM
1-6	3	251	
2-5	1	257	
4-8	2-4	263	
6-4-8		264	

POWER PANEL ASSEMBLY (FRONT VIEW)



CSAH 1 (EAST RIVER ROAD)
AND CR 132 (85TH AVENUE NW)
S.P. 02-601-35

ACT ELECTRONICS

REV STATUS OF SHEETS

SHEET	1	2	3
REV	D	D	D

CHECKED BY-

CONT. () LOAD RELAY, NEMA+ CONFLICT MONITOR, () LOOP DETECTORS

1992

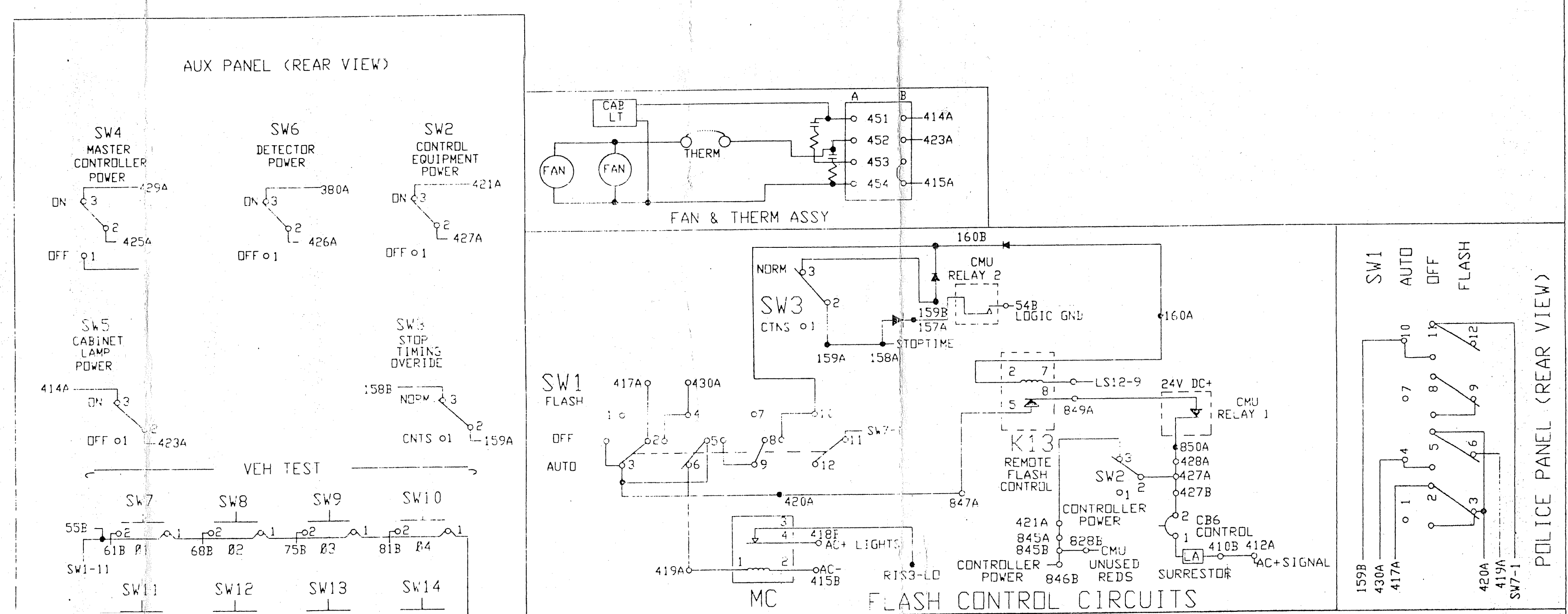
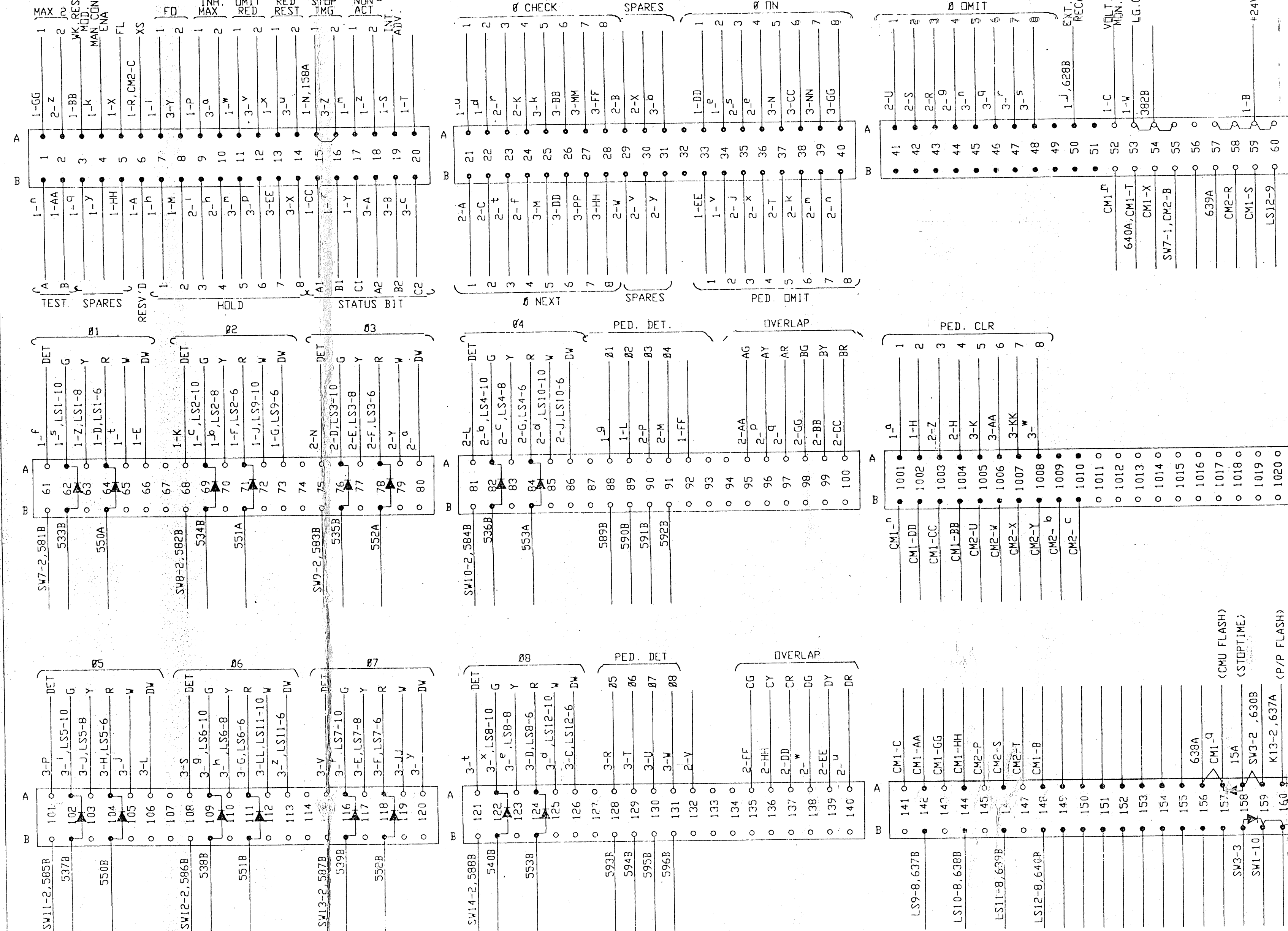
DRAWING NO

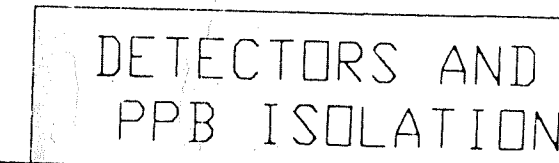
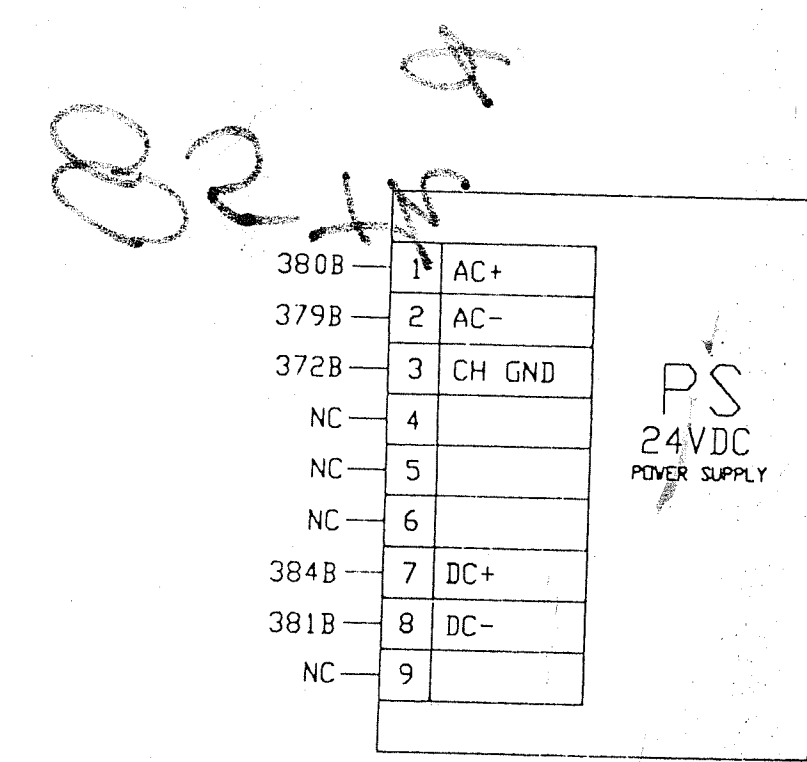
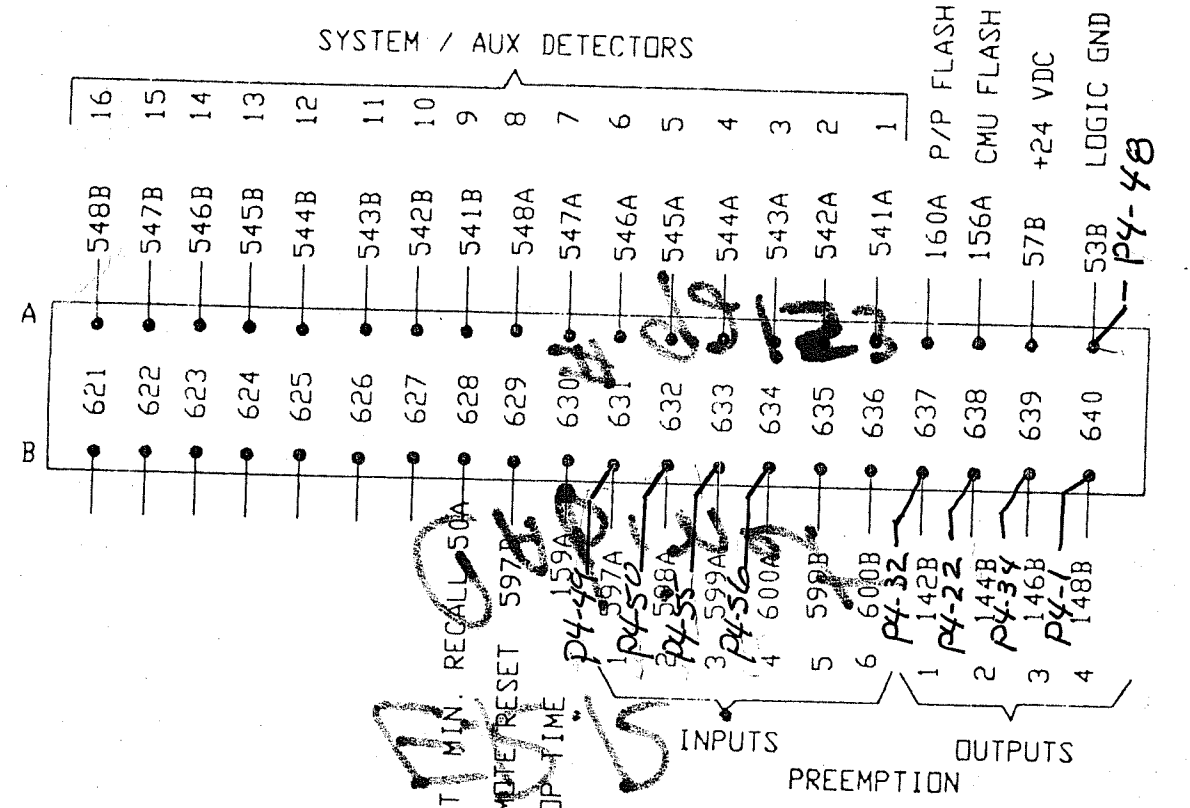
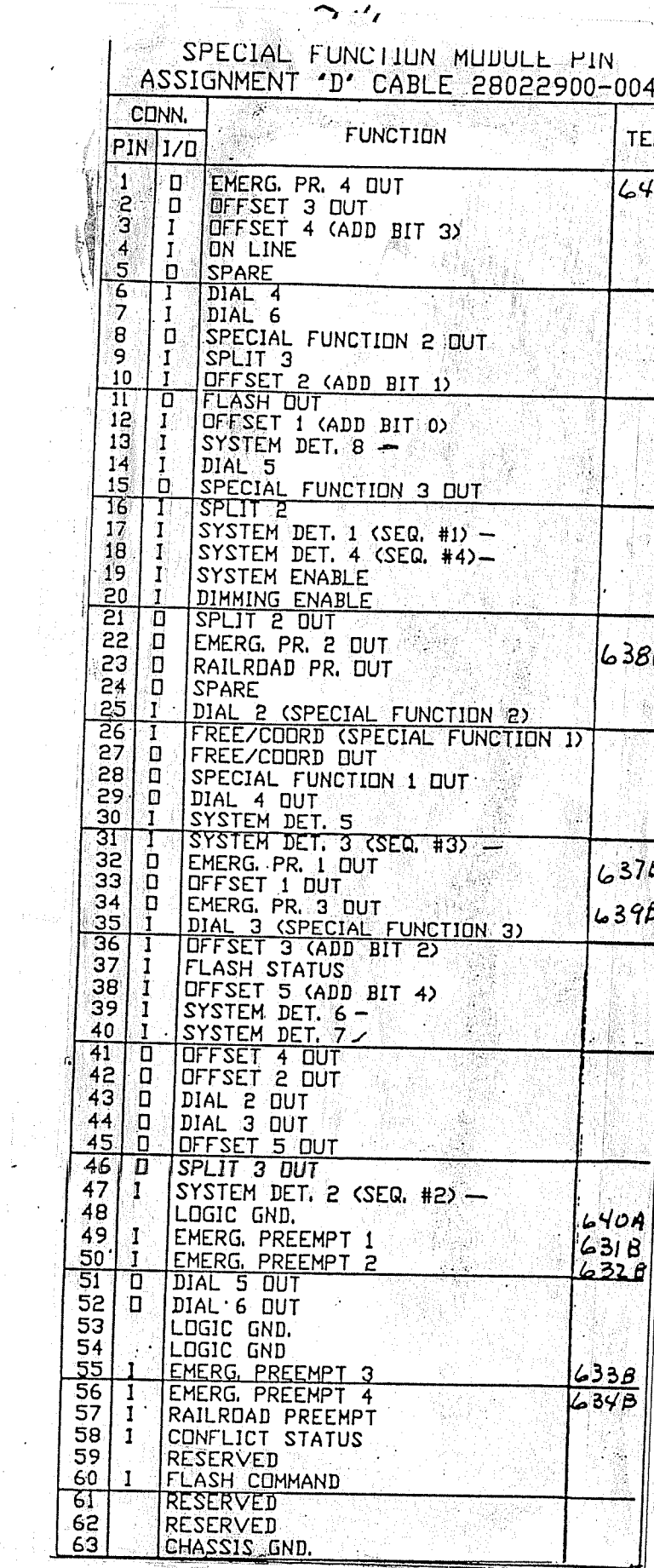
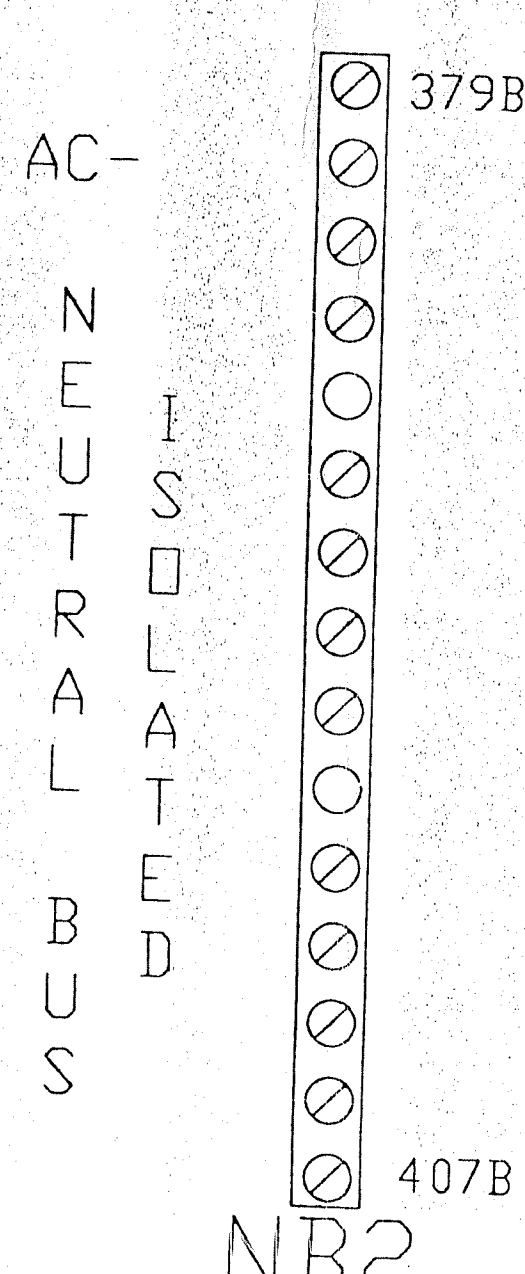
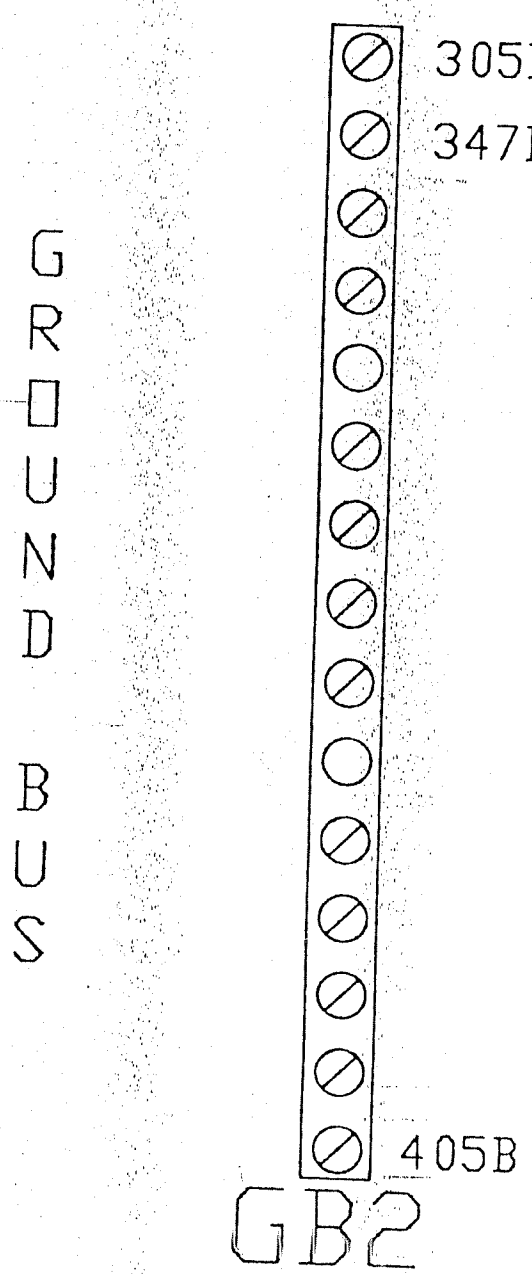
SHEET NO. 1 OF 3

1	SH1 SHELL GROUND	GB3
	AL RESV.	6B
	BL 24VDC+	59A
	CL VOLTAGE MONITOR	52A
	DL #1 RED	64A
	EL #1 DWK	66A
	FL #2 RED	71A
	GL #2 DWK	73A
	HL #2 PCL	1002A
	JL #2 WK	72A
	KL #2 VEH DET	68A
	LL #2 PED DET	89A
	ML #2 HOLD	88
	NL STOP TIMING 1	15A
	PL INHIBIT MAX TERM 1	9A
	RL EXTERNAL START	6A
	SL INTERVAL ADVANCE	19A
	T INDICATOR LAMP CNT	20A
	UL AC- COMMON	848A
	V CHASSIS GROUND	GB3
	W LOGIC GROUND	53A
	X FLASH LOGIC OUT	5A
	Y STATUS BIT C1	17B
	Z #1 YEL	63A
	a #1 PCL	1001A
	b #2 YEL	70A
	c #2 GRN	69A
	d #2 CHECK	22A
	e #2 PHASE ON	32A
	f #1 VEH DET	61A
	g #1 PED DET	88A
	h #1 HOLD	7B
	i FORCE OFF 1	7A
	j EXT MIN RECALL ALL 0	50A
	k MAN. CONTROL ENABLE	4A
	n CALL TO NON-ACT 1	17A
	o TEST INPUT A	1B
	p AC+ CONTROL	846B
	q SPARE 1	3B
	r STATUS BIT B1	16B
	s #1 GRN	62A
	t #1 WK	65A
	u #1 CHECK	21A
	v #2 PED OMIT	34B
	w OMIT RED CLR	11A
	x RED REST MODE 1	13A
	y SPARE 2	4B
	z CALL TO NON-ACT 11	18A
	AA TEST INPUT B	2B
	BB WALK REST MODIFIER	3A
	CC STATUS BIT A1	15B
	DD #1 PHASE ON	33A
	EE #1 PED OMIT	33B
	FF PED RECYCLE 1	92A
	GG MAX 2 SELECT	1A
	HH SPARE 3	5B

2	SH1 SHELL GROUND	GB3
	AL #1 PHASE NEXT	21B
	BL SPARE 1	29A
	CL #2 PHASE NEXT	22B
	DL #3 GRN	76A
	EL #3 YEL	77A
	FL #3 RED	78A
	GL #4 RED	84A
	HL #4 PCL	1004A
	JL #4 DWK	86A
	KL #4 CHECK	24A
	LL #4 VEH DET	81A
	ML #3 VEH DET	91A
	NL #3 PHASE OMIT	43A
	PL #3 PHASE OMIT	90A
	RL #3 PHASE OMIT	43A
	SL #2 PHASE OMIT	42A
	TL #5 PED OMIT	37B
	UL #1 PHASE OMIT	41A
	VL PED RECYCLE 2	132A
	W SPARE 2	29B
	X SPARE 3	30A
	Y #3 WK	79A
	Z #3 PCL	1003A
	a #3 DWK	80A
	b #4 GRN	82A
	c #4 YEL	83A
	d #4 WALK	85A
	e #4 PHASE ON	36A
	f #4 PHASE NEXT	24B
	g #4 PHASE OMIT	44A
	h #4 HOLD	10B
	i #3 HOLD	9B
	j #3 PED OMIT	35B
	k #6 PED OMIT	38B
	l #7 PED OMIT	39B
	m #8 PED OMIT	40B
	n #1 A YEL	96A
	o #1 A RED	97A
	p #3 CHECK	23A
	q #3 PHASE ON	95A
	r #3 PHASE NEXT	23B
	s #1 D RED	140A
	t SPARE 4	30B
	u #1 D GRN	138A
	v #4 PED OMIT	36B
	w SPARE 5	31B
	x MAX 2 SELECT 2	2A
	AA #1 A GRN	95A
	BB #1 B YEL	99A
	CC #1 B RED	100A
	DD #1 C RED	137A
	EE #1 D YEL	139A
	FF #1 C GRN	135A
	GG #1 B GRN	98A
	HH #1 C YEL	136A

3	SH1 SHELL GROUND	GB3
	AL STATUS BIT A2	18B
	BL STATUS BIT B2	19B
	C #8 DWK	126A
	D #8 RED	124A
	E #7 YEL	117A
	F #7 RED	118A
	G #6 RED	111A
	H #5 RED	104A
	JL #5 YEL	103A
	KL #5 PCL	1005A
	LL #5 DWK	106A
	ML #5 PHASE NEXT	25B
	NL #5 PHASE ON	37A
	PL #5 VEH DET	101A
	RL #5 PED DET	128A
	SL #6 VEH DET	108A
	TL #6 PED DET	129A
	UL #7 PED DET	130A
	VL #7 VEH DET	115A
	W #8 PED DET	131A
	X #8 HOLD	14B
	Y FORCE OFF 2	8A
	Z STOP TIME 2	16A
	a INHIBIT MAX TERM 2	10A
	b SPARE 1	31A
	c STATUS BIT C2	20B
	d #8 WK	125A
	e #8 YEL	123A
	f #7 GRN	116A
	g #6 GRN	109A
	h #6 YEL	110A
	i #5 GRN	102A
	j #5 WK	105A
	k #5 CHECK	25A
	l #5 HOLD	11B
	m #5 PHASE OMIT	45A
	n #6 HOLD	12B
	o #6 PHASE OMIT	46A
	p #7 PHASE OMIT	47A
	q #8 PHASE OMIT	48A
	r #8 VEH DET	121A
	s RED REST MODE 2	14A
	t OMIT RED CLR 2	12A
	u #8 PCL	1008A
	v #8 GRN	122A
	w #7 DWK	120A
	x #6 DWK	113A
	y #6 PCL	1006A
	z #6 CHECK	26A
	aa #6 PHASE ON	38A
	bb #6 PHASE	26B
	cc #7 HOLD	13B
	dd #8 CHECK	28A
	ee #8 PHASE ON	40A
	ff #8 PHASE NEXT	28B
	gg #7 WK	119A
	hh #7 PCL	1007A
	ii #6 WK	112A
	jj #7 CHECK	27A
	kk #7 PHASE ON	39A
	ll #7 PHASE NEXT	27B



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