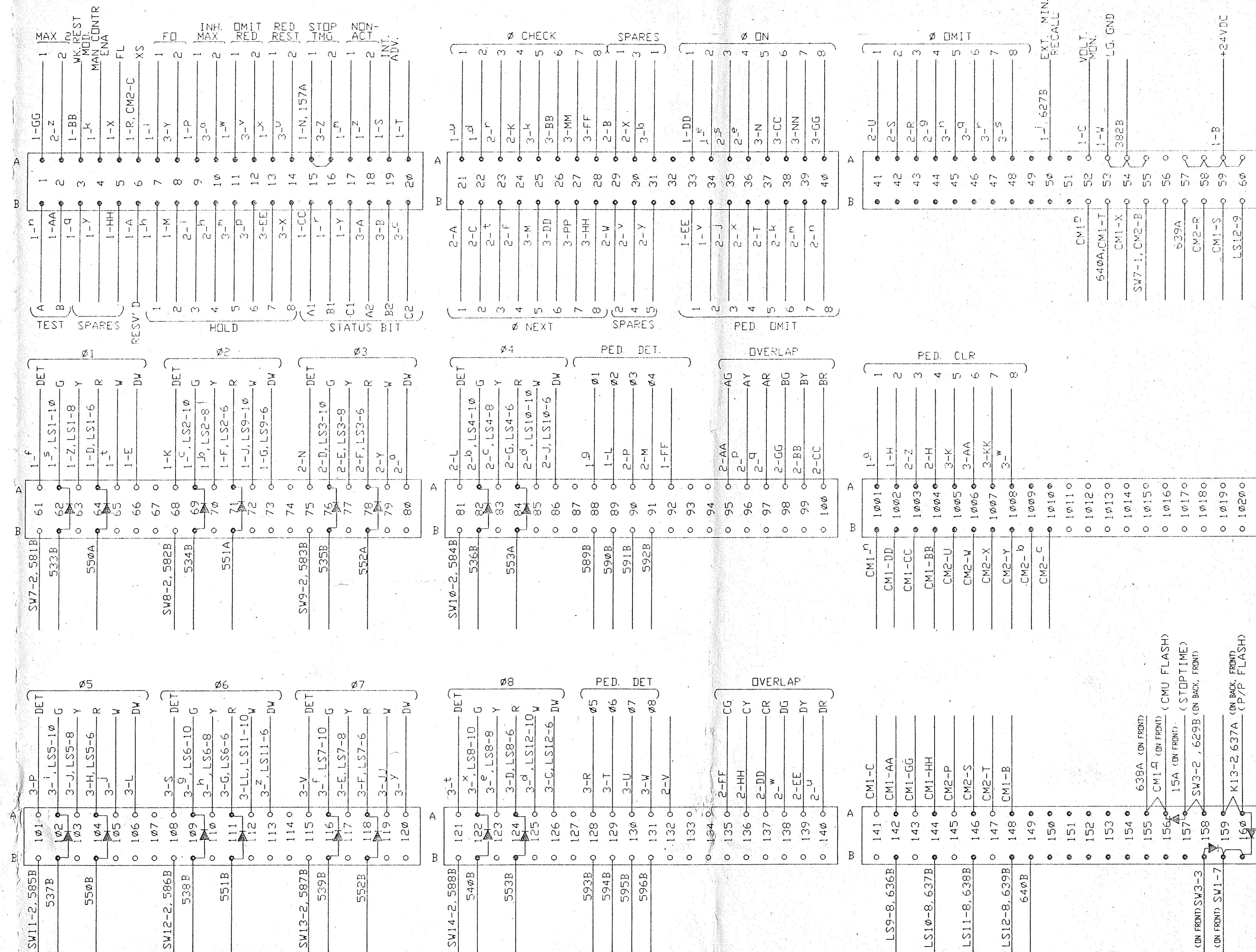


1		2		3	
SH SHELL GROUND		1-V			
AL RESV.	6B	AL	01 PHASE NEXT	21B	AL STATUS BIT A2
BI 24VDC+	59A	BL	SPARE 1	29A	BL STATUS BIT B2
CL VOLTAGE MONITOR	52A	CL	02 PHASE NEXT	22B	CL 08 DWK
DL 01 RED	64A	DL	03 GRN	76A	DL 08 RED
EL 01 DWK	62A	EL	03 YEL	77A	EL 07 YEL
FL 02 RED	66A	FL	03 RED	78A	FL 07 RED
GL 02 DWK	71A	GL	04 RED	84A	GL 06 RED
HL 02 PCL	73A	HL	04 PCL	100A	HL 05 RED
JL 02 WK	100A	JL	04 DWK	100A	JL 05 YEL
KL 02 VEH DET	72A	KL	04 CHECK	85A	KL 05 PCL
ML 02 PED DET	68A	ML	04 VEH DET	24A	ML 05 DWK
NL 02 HOLD	89A	NL	04 PED DET	81A	NL 05 PHASE NEXT
NI STOP TIMING 1	88	NI	03 VEH DET	91A	NI 05 PHASE ON
PI INHIBIT MAX TERM 1	15A	PI	03 PED DET	75A	PI 05 VEH DET
RI EXTERNAL START	9A	RI	03 PHASE OMIT	90A	RI 05 PED DET
SI INTERVAL ADVANCE	9A	SI	02 PHASE OMIT	43A	SI 06 VEH DET
TI INDICATOR LAMP CONT	19A	TI	05 PED OMIT	42A	TI 06 PED DET
UL AC - NEUTRAL	20A	UL	01 PHASE OMIT	37B	UL 07 PED DET
VL CHASSIS GROUND	NB1	VL	PED RECYCLE 2	41A	VL 07 VEH DET
WL LOGIC GROUND	GB1	WL	SPARE 2	132A	WL 08 PED DET
XL FLASH LOGIC OUT	53A	XL	SPARE 3	29B	XL 08 HOLD
Y STATUS BIT C1	17B	Y	03 WK	30A	Y FORCE OFF 2
Z 01 YEL	63A	Z	03 PCL	100A	Z STOP TIME 2
0 01 PCL	100A	0	03 DWK	100A	0 INHIBIT MAX TERM 2
K 02 YEL	76A	K	04 GRN	82A	K SPARE 1
C 02 GRN	62A	C	04 YEL	82A	C STATUS BIT C2
02 CHECK	69A	d	04 WALK	83A	d 08 WK
02 PHASE ON	22A	e	04 PHASE ON	85A	e 08 YEL
01 VEH DET	34A	f	04 PHASE NEXT	36A	f 07 GRN
01 PED DET	61A	F	04 PHASE OMIT	24B	F 06 GRN
01 HOLD	88A	G	04 HOLD	44A	G 06 YEL
I FORCE OFF 1	7B	H	03 HOLD	10B	H 05 GRN
J EXT MIN RECALL ALL/0	7A	J	03 PED OMIT	35B	JL 05 WK
K MAN. CONTROL ENABLE	50A	K	06 PED OMIT	38B	K 05 CHECK
L CALL TO NON-ACT 1	4A	L	07 PED OMIT	39B	L 05 HOLD
M TEST INPUT A	17A	M	08 PED OMIT	40B	M 05 PHASE OMIT
P AC+ CONTROL	84B	P	DL A YEL	96A	P 06 HOLD
Q SPARE 1	3B	Q	DL A RED	97A	Q 06 PHASE OMIT
R STATUS BIT B1	16B	R	03 CHECK	23A	R 07 PHASE OMIT
S 01 GRN	62A	S	03 PHASE ON	35A	S 08 PHASE OMIT
T 01 WK	65A	T	03 PHASE NEXT	23B	T 08 VEH DET
U 01 CHECK	21A	U	DL D RED	140A	U RED REST MODE 2
V 02 PED OMIT	34B	V	SPARE 4	30B	V 0MIT RED CLR 2
W 0MIT RED CLR	11A	W	DL D GRN	138A	W 08 PCL
X RED REST MODE 1	13A	X	04 PED OMIT	36B	X 08 GRN
Y SPARE 2	4B	Y	SPARE 5	31B	Y 07 DWK
Z CALL TO NON-ACT II	18A	Z	MAX 2 SELECT 2	2A	Z 06 DWK
AA TEST INPUT B	2B	AA	DL A GRN	95A	AA 06 PCL
BB WALK REST MODIFIER	3A	BB	DL B YEL	99A	BB 06 CHECK
CC STATUS BIT A1	15B	CC	DL B RED	100A	CC 06 PHASE ON
DD 01 PHASE ON	33A	DD	DL C RED	137A	DD 06 PHASE NEXT
EE 01 PED OMIT	33B	EE	DL D YEL	139A	EE 07 HOLD
FF PED RECYCLE 1	92A	FF	DL C GRN	135A	FF 08 CHECK
GG MAX 2 SELECT	1A	GG	DL B GRN	98A	GG 08 PHASE ON
HH SPARE 3	5R	HH	DL C YEL	136A	HH 08 PHASE NEXT

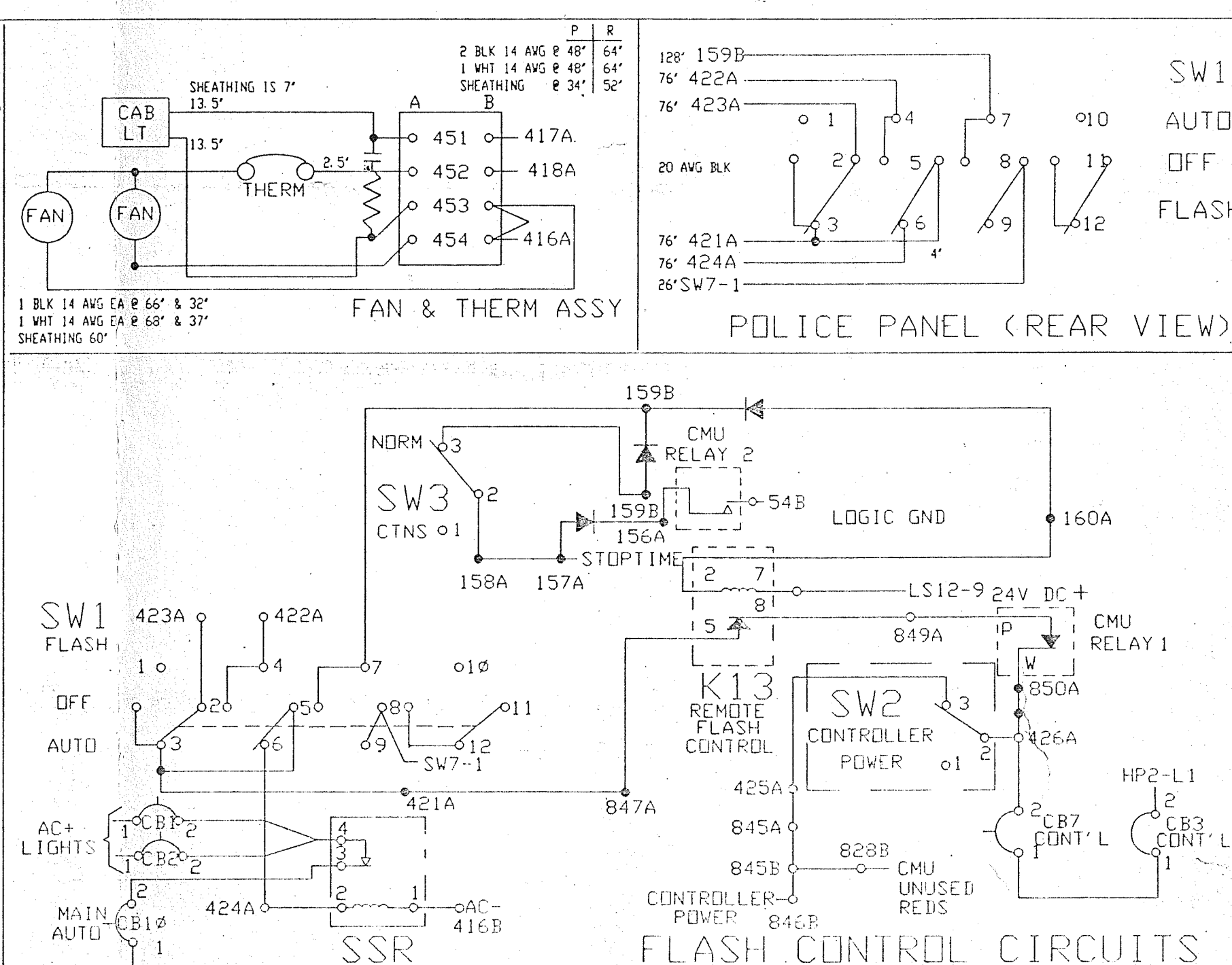
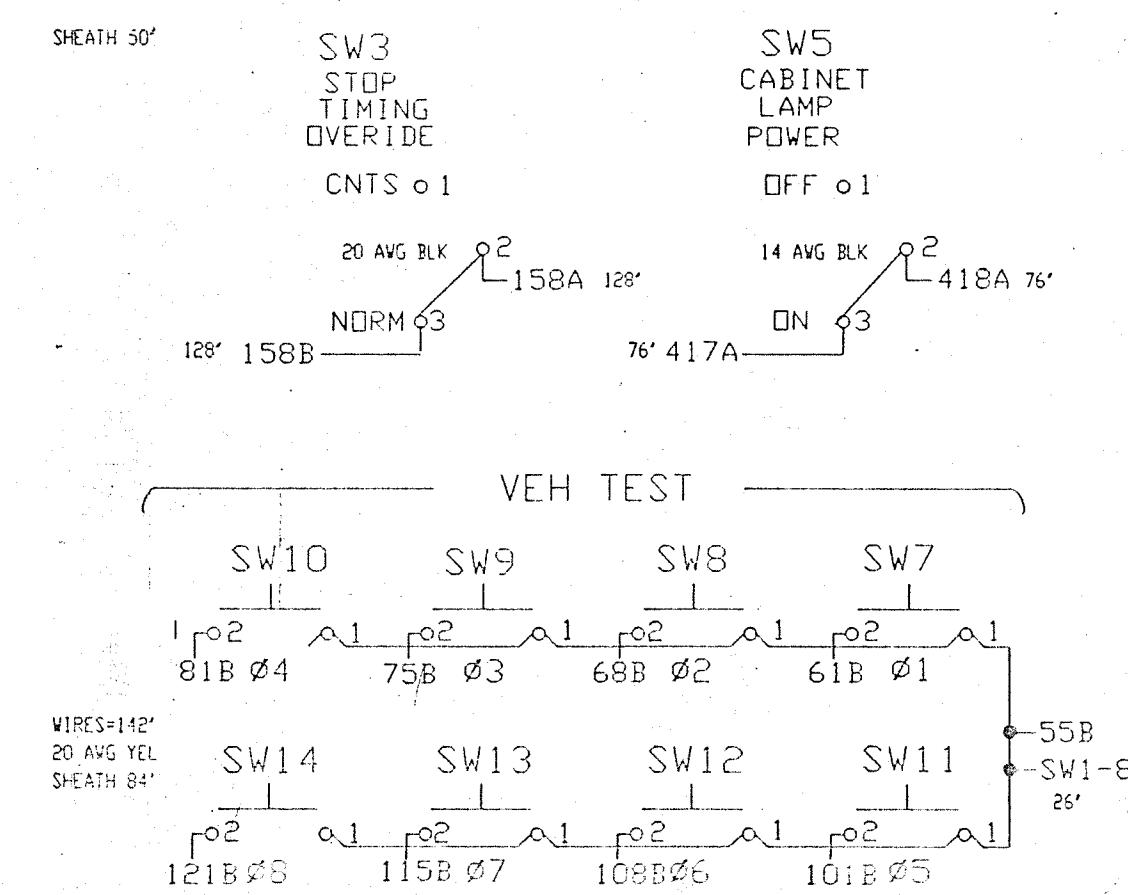
SHEATHING IS 73°

Qty	Description	Mfr.	Pt. #	Manufacturer
2	black, 20 pt, closed back	73120		Vernitron
10	black, 20 pt, feedthrough	73620		Vernitron
8	black, 20 pt, feedthrough	73620-59		Vernitron
2	black, 6pt, closed back	73106		Vernitron
8	bolt, 10-32x5/16'	10-32x5/16 SS SPMS		Adams
38	bolt, 6-32x1/4"	6-32x1/4 SS SPMS		Adams
4	bolt, 8-32x1/2"	8-32x1/2 SS SPMS		Adams
4	bolt, 8-32x1/4"	8-32x1/4 SS SPMS		Adams
3	bus bar, 3.625"	34890		Weidmuller
1	bus bar, 6.25"	34890		Weidmuller
1	cable 'A', blue, UL1015, 20AWG, 116'	CABLE A		TSC
1	cable 'B', blue, UL1015, 20AWG, 116'	CABLE B		TSC
1	cable 'C', blue, UL1015, 20AWG, 116'	CABLE C		TSC
1	cable 'CM1', red, UL1015, 20AWG, 116'	CABLE CM1		TSC
1	cable 'CM2', red, UL1015, 20AWG, 116'	CABLE CM2		TSC
25	clamp, small, Z810	126130		Weidmuller
56	contact, female, flash plug	02-09-1104D		Molex
80	contact, male, flash plug	02-09-2103		Molex
1	cover, lexan, 1.75" x 12"	LEXAN DADBACK		Codillac
1	cover, lexan, 2.25" x 15"	LEXAN DADFBT		Codillac
1	cover, SINTRA BLACK, 118" thick, 1.5' x 875'	COVER, HOLE, FR5		Codillac
191	crimp, spade, 18-22 AWG	320665		AMP
20	diode, blocking	1N4205		Motorola
12	grommet, large	4860007038		Lifetime
7	grommet, small	4860005478		Lifetime
8	insulator, bus bar	29986		Weidmuller
109	juniper, between blocks	3620		Wrico
14	juniper, curved	7833		Vernitron
2	label, 'High Voltage', small	PLD-67		Panduit
2	mounts, cable tie, small	TC5828		T&B
1	panel, loadbay	9601		Excel
1	panel, loadswitch support	9202		Excel
8	plug, flash, red	03-09-2154R		Molex
4	plug, flash, white	03-09-2154		Molex
4	plug, flash, yellow	03-09-2154		Molex
36	resistor, 2.5K, 7.5W min	20J2K5		Dhmitry
1	silkscreen load switch support	9202-S		SilkScreen
1	silkscreen loadbay	9601-S		SilkScreen
4	snubber	XC0472		Okaya
8	socket, flash plug	03-09-1151		Molex
8	socket, flash relay	S3-5408-LAB		Vernitron
1	socket, flasher	S3-5406-LAB		Vernitron
14	socket, loadswitch	S3-5412-LAB		Vernitron
1	socket, octal, relay	SR2P-51		Vernitron
3	standoff, 1.25"	8433		Keystone
2	standoff, 1.625"	8436		Keystone
5	tag, cable	8409-0356		SPC Products
8	washer, #10, internal lock	#10 INT LOCK SS		Adams
38	washer, #6, internal lock	#6 INT LOCK SS		Adams
48	washer, #8, internal lock	#8 INT LOCK SS		Adams
5	wingnuts, 8-32, nylon	0600932WN		Adams

Hinge Panel			
Qty	Description	Mfr. Pt #	Manufacturer
8	bolt, 10-32x1/4"	10-32x1/4 SS SPMS	Adams
0.111	hinge, 2-4" pieces	NA570-1-1/2	Austin
2	panel, hinge	9603	Strand
16	washer, #10, internal lock	#10 INT LOCK SS	Adams

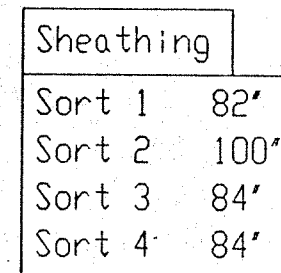
[illegible][illegible]

Auxiliary and Police Panels			
Dty	Description	Mfr. P. #	Manufacturer
2	crimp, 14-16awg, spade, 46	BM-2193-06X	Molex-ETC
16	crimp, 18-20awg, spade, 85	AM-2190-06X	Molex-ETC
3	round, switch	8493K1	Extron
1	161screen auxiliary panel	9613-S5	611screen Spec
1	161screen police panel	9613-S5	611screen Spec
1	switch, police	411L-12	Microswitch
8	switch, push button	8531M2022	CKK
5	switch, SV2-SV6	111L-2	Microswitch

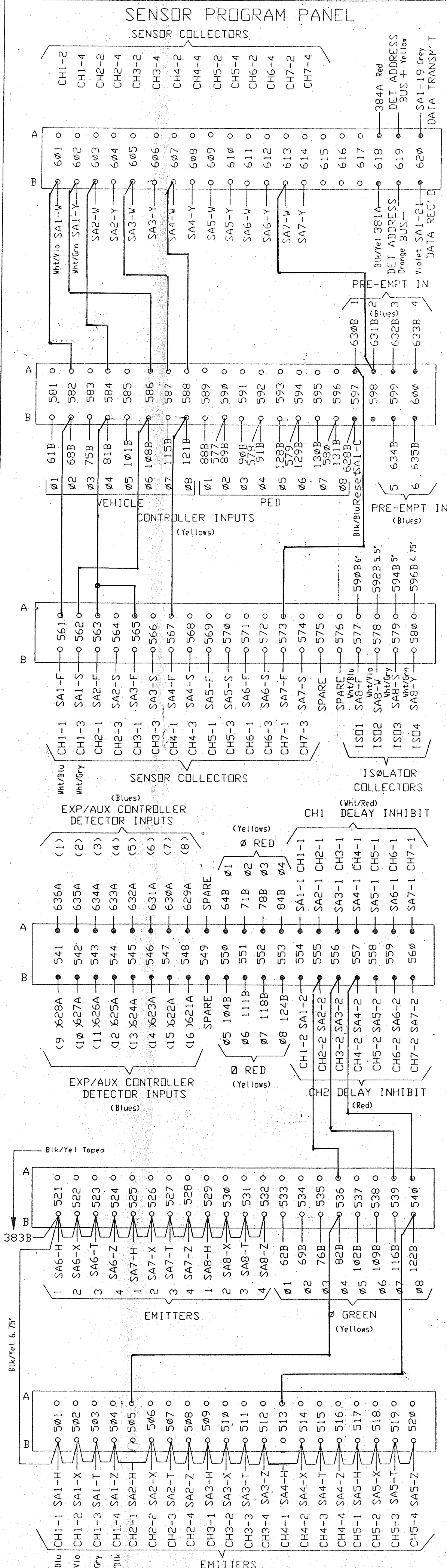
[illegible]

Main I/O Terminals				
Point	Wire Color	Description	Sort#	Length
1	Black/Yellow	Logic Ground	Even	96"
2	Red	24VDC+	Even	96"
3	Black/Blue	Reset	2	120"
4				
5	Orange	Address Bit 0	2	120"
6	Yellow	Address Bit 1	2	120"
7				
8	Grey	Data Transmit	2	120"
9				
10	Violet	Data Receive	2	120"
11				
12	Green	Chassis Ground	Even	96"
13	Black	AC+	Even	96"
14				
15	White	AC-	Even	96"

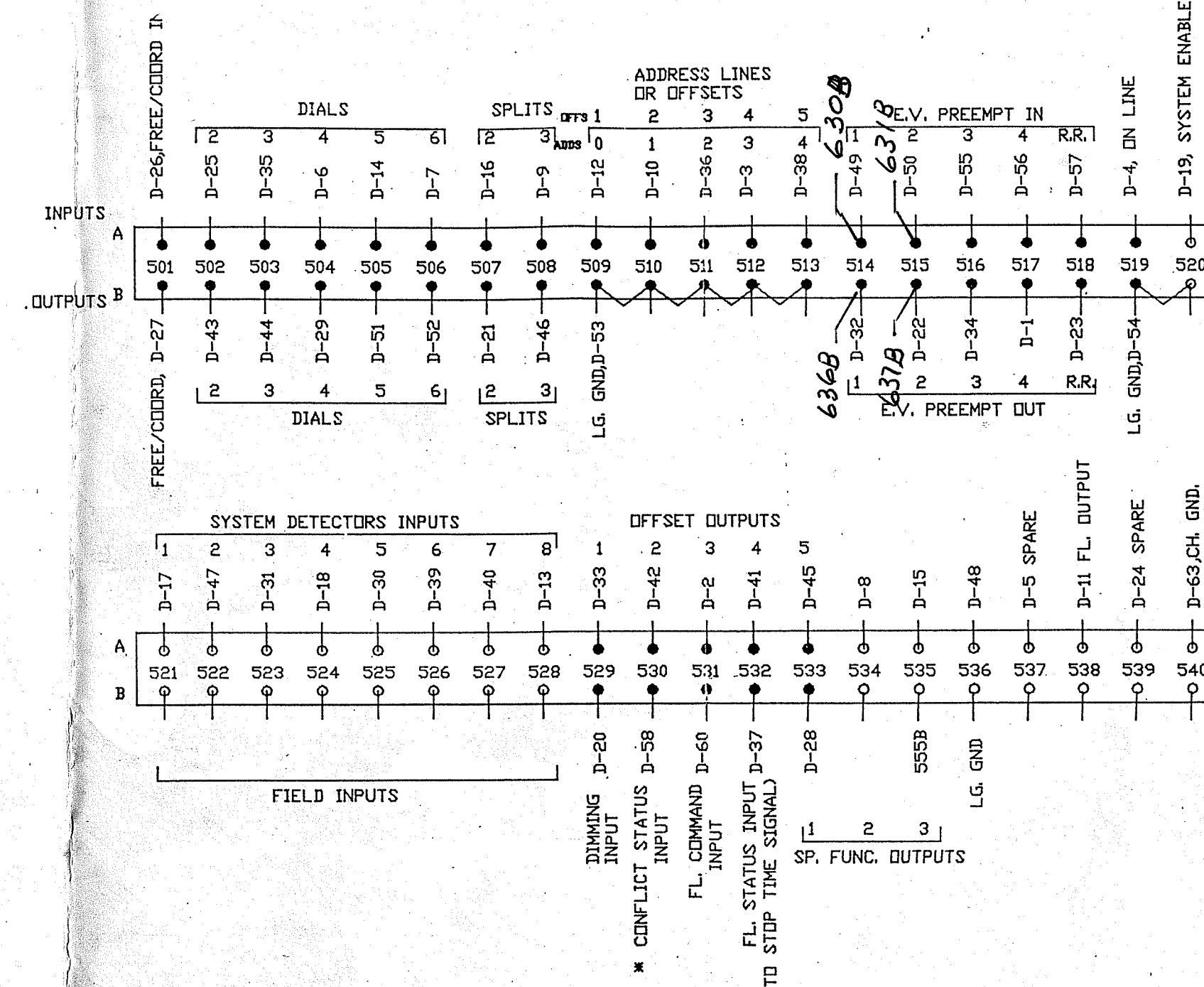
Do not use White/Red on SA8.



DETECTOR RACK		
Qty	Description	Manufacturer
18	bolt, 4-40x1/4", phillips	Adams
18	washer, #4, internal lock	Adams
1	9411	Excel
1	circuit board	ADIC
2	mounts, cable tie, small	T&L
2	clamp, wire	754-20-2-10
2	bolt, 10-32x5/8"	Adams
2	nut, 10-32	Adams
15	connector, edge	Viking
30	key, polarizing	Viking
1	connector, 12 pt	Alttech
1	connector, 3pt	Alttech
8	connector, MK3/10 DG	Veribulter
16	connector, MK3/4 DG	Veribulter
1	labor, assy of PC board	Production Tech
2	cover, lexan, 1/8" x 3-1/2" x 22"	Coldilac
2	washer, #10, internal lock	Adams

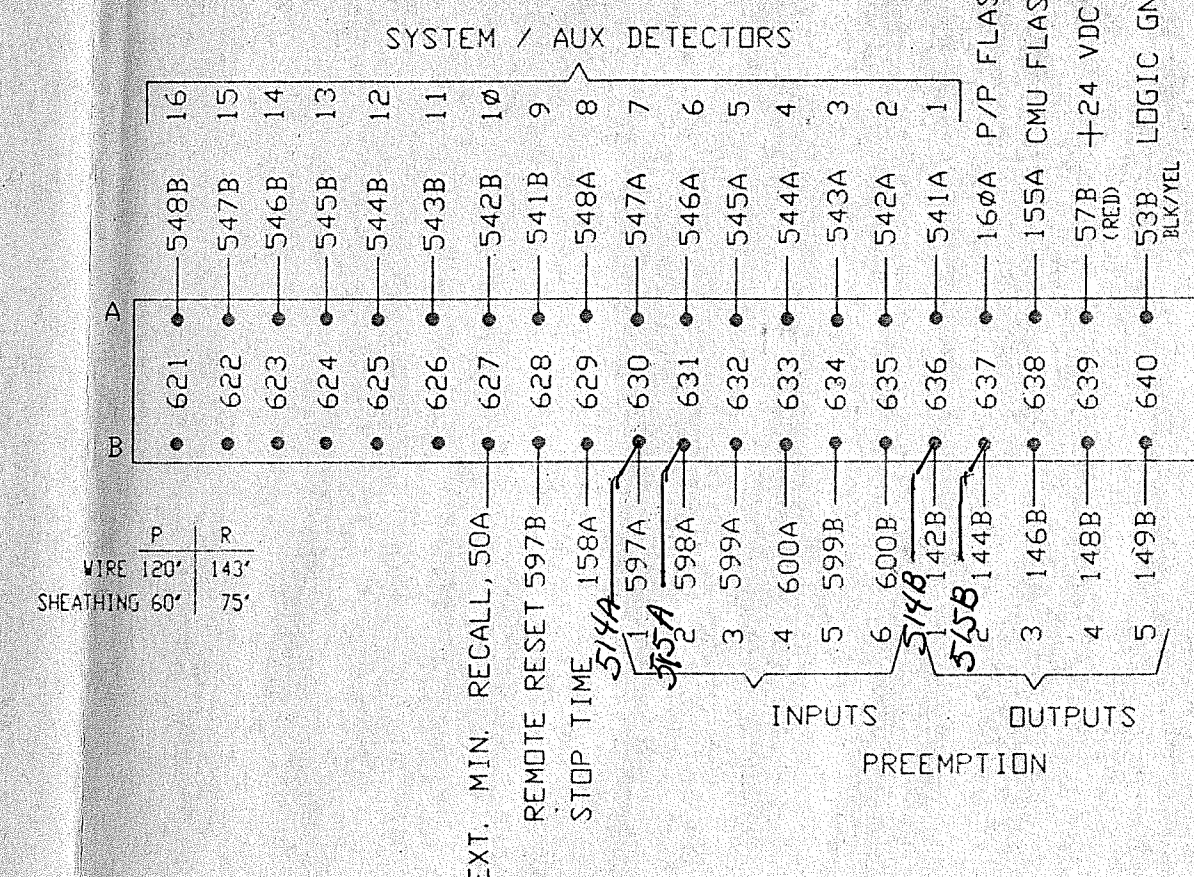


SPECIAL FUNCTION MODULE PIN ASSIGNMENT "D" CABLE 28022900-004			
CONN. PIN 1/0		FUNCTION	TERM.
1	0	EMERG. PR. 4 OUT	5178
2	0	OFFSET 3 OUT	519A
3	0	OFFSET 4 (ADD BIT 3)	519A
3	1	0 LINE	519A
5	0	SPARE	537A
6	1	DIAL 4	504A
7	0	DIAL 6	506A
8	1	SPECIAL FUNCTION 2 OUT	534A
9	1	SPLIT 3	508A
10	1	OFFSET 2 (ADD BIT 1)	510A
11	1	0	518A
12	1	OFFSET 1 (ADD BIT 0)	509A
13	1	SYSTEM DET. 8	528A
14	1	DET. 5	505A
15	0	SPECIAL FUNCTION 3 OUT	535A
16	1	SPLIT DET. 1 (SEQ. #1)	507A
17	1	SYSTEM DET. 4 (SEQ. #1)	530A
18	1	SYSTEM DET. 4 (SEQ. #4)	524A
19	1	SYSTEM ENABLE	520A
20	0	DIMMING ENABLE	529A
21	0	SPLIT 2	507B
22	0	EMERG. PR. 2 OUT	515B
23	0	RAILROAD PR. OUT	518B
24	0	SPARE	539A
25	1	DIAL 2 (SPECIAL FUNCTION 1)	503A
26	1	FREE/COORD (SPECIAL FUNCTION 1)	507A
27	1	FREE/COORD (SPECIAL FUNCTION 1)	507A
28	0	SPECIAL FUNCTION 1 OUT	533B
29	0	DIAL 4 OUT	504B
30	1	SYSTEM DET. 5	505B
31	1	SYSTEM DET. 3 (SEQ. #3)	523A
32	0	EMERG. PR. 1 OUT	516B
33	0	OFFSET 1 OUT	529A
34	0	EMERG. PR. 3 OUT	514B
35	1	DIAL 3 (SPECIAL FUNCTION 3)	503A
36	1	OFFSET 1 (ADD BIT 2)	512A
37	1	FLASH STATUS	525A
38	1	OFFSET 5 (ADD BIT 4)	516A
39	1	SYSTEM DET. 6	526A
40	1	SYSTEM DET. 7	527A
41	0	OFFSET 4 OUT	532A
42	0	OFFSET 2 OUT	530A
43	0	DIAL 2 OUT	502B
44	0	DIAL 3 OUT	503B
45	0	OFFSET 5 OUT	533B
46	0	SPLIT OUT	509B
47	1	SYSTEM DET. 2 (SEQ. #2)	522A
48	0	LOGIC GND	514A
49	1	EMERG. PREEMPT 1	514A
50	1	EMERG. PREEMPT 2	515A
51	1	DIAL 5 OUT	508B
52	0	DIAL 6 OUT	509B
53	0	LOGIC GND	519B
54	0	LOGIC GND	519B
55	1	EMERG. PREEMPT 3	517A
56	1	EMERG. PREEMPT 4	517A
57	1	RAILROAD PREEMPT	518A
58	0	CONFLICT STATUS	530B
59	1	RESERVE	T
60	1	FLASH COMMAND	513B
61	0	RESERVED	T
62	0	RESERVED	T
63	0	CHASSIS GND.	540A



ALL SOCKETS ARE WIRED TO ACCEPT VEH DET. OR EVP DISCRIMINATOR PPB ISOLATOR				DETECTORS AND PPB ISOLATION																								FUNCTIONS 1-CALL&EXTEND 2-CALL ONLY 3-EXTEND ONLY 4-CALL ONLY DEN 5-DLY CALL ONL 6-DLY CALL ONL 7-DLY CALL 8-TWED EXTEND 9-CARRY OVER 10-ADVISORY 11-SAMPLING 11-SPECIAL -SEE NOTE-	
				SA1			SA2			SA3			SA4			SA5			SA6			SA7			SA8				
				PHASE	FUNG	DET	PHASE	FUNG	DET	PHASE	FUNG	DET	PHASE	FUNG	DET	PHASE	FUNG	DET	PHASE	FUNG	DET	PHASE	FUNG	DET	PPB ISOLATION				
																									PHASE	FUNG	DET		
PIN RACK THARNISS	SA-PIN	CH 1	2	1	2-1	4	3	4-1	4	1	4-3	8	7	8-1									2	CH 1					
		CH 2	2	1	2-2	4	7	4-2	7	7	7-1	8	7	8-2									4	CH 2					
		CH 3	6	1	6-1																		6	CH 3					
		CH 4	6	1	6-2																		8	CH 4					
		MODEL	224		222T		222T		222T		222T													T-400A	MODEL				
1	A	DC GROUND	381B	4																			NC	SPARE	A				
1	B	24V DC+	384B	4																			NC	SPARE	B				
1	C	REMOTE RESET	597B	4																			NC	SPARE	C				
3	D-4	CH 1 LOOP	303A		345A		313A		355A		323A		365A		333A		301A							INPUT CH 1	D				
4	E-5	CH 1 LOOP	304A		346A		314A		356A		324A		366A		334A		379B							INPUT COMMON	E				
6	F	ADDRESS BI# 0	619B		SA1-15		SA2-10		SA3-15		SA4-15		SA5-10		SA6-15		NC												
5	F	CH 1 OUTPUT (+)	561B		563B		565B		567B		569B		571B		573B		577B							OUTPUT CH 1 (+)	F				
6	H	CH 1 OUTPUT (-)	501B		505B		509B		513B		517B		521B		525B		529B							OUTPUT CH 1 (-)	H				
7	J-8	CH 2 LOOP	306A		348A		316A		358A		326A		368A		336A		302A							INPUT CH 2	J				
8	K-9	CH 2 LOOP	307A		349A		317A		359A		327A		369A		337A		378B							INPUT COMMON	K				
10	L	ADDRESS BI# 1	619A		SA1-6		SA3-6		SA4-6		SA4-10		SA5-15		SA7-6		NC												
1	L	CHASSIS GROUND	340A	4																			NC	CHASSIS GROUND	L				
1	M	AC-	SA2-M	4																			378A	AC-(NEUTRAL)	M				
1	N	115V AC+	SA2-N	4																			380A	115V AC-	N				
9	P-13	LOOP CH 3	308A		350A		318A		360A		328A		370A		338A		343A							INPUT CH 3	P				
10	R-14	LOOP CH 3	309A		351A		319A		361A		329A		371A		339A		377B							INPUT COMMON	R				
15	S	ADDRESS BI# 2	SA1-10		SA2-6		SA2-15		SA3-10		SA5-6		SA6-10		SA7-10		NC												
11	S	CH 3 OUTPUT (+)	562B		564B		566B		568B		570B		572B		574B		579B							OUTPUT CH 3 (+)	S				
12	T	CH 3 OUTPUT (-)	503B		507B		511B		515B		519B		523B		527B		531B							OUTPUT CH 3 (-)	T				
13	U-17	CH 4 LOOP	311A		353A		321A		363A		331A		373A		341A		344A							INPUT CH 4	U				
14	V-18	CH 4 LOOP	312A		354A		322A		364A		332A		374A		342A		377A							INPUT COMMON	V				
19	W	DATA TRANSMIT	620A	4																			NC						
21	X	DATA RECEIVE	620B	4																			NC						
15	W	CH 2 OUTPUT (+)	601B		603B		605B		607B		609B		611B		613B		578B							OUTPUT CH 2 (+)	W				
16	X	CH 2 OUTPUT (-)	502B		506B		510B		514B		518B		522B		526B		530B							OUTPUT CH 2 (-)	X				
17	Y	CH 4 OUTPUT (+)	602B		604B		606B		608B		610B		612B		614B		580B							OUTPUT CH 4 (+)	Y				
18	Z	CH 4 OUTPUT (-)	504B		508B		512B		516B		520B		524B		528B		532B							OUTPUT CH 4 (-)	Z				
1	1	CH 1 GREEN	554A		555A		556A		557A		558A		559A		560A		---							SPARE					
2	2	CH 2 GREEN	554B		555B		556B		557B		558B		559B		560B		---							SPARE					

USE 754-20-2-10 CLAMPS



POWER SUPPLY			
Qty	Description	Mfr. P/N	Manufacturer
1	1bolt, 4-40x1/2", phillips	4-40x1/2 SS PH HD	Adams
1	1bolt, 6-32x3/4", phillips	6-32x3/4 Z F PH HD	Adams
4	4bolts, 6-32x3/8", phillips	6-32x3/8 SS PH HD	Adams
4	4bolts, 8-32x1/2", phillips	8-32x1/2 SS PH HD	Adams
1	1connector	260705-1	Ang
5	5contact, mole	66361-4	Ang
3	3cover, transistor	8909NH	Thermalloy
1	1crimp, 18-22AWG, #6, ring	A-220-06X	Molex-ETC
2	2wire, 2 amp, slo-blo	313002	Littlefuse
1	1fuseholder	34201A	Littlefuse
4	4nut, 4-40	4-40 NUT SS	Adams
1	1panel, base	909098	Excel
1	1panel, cover	920998	Excel
1	1power supply, 24VDC, 4.8	1HD24-4.8-512	1HD
4	4rubber feet	3PT 1331	SFC Products
1	1silkscreen base	32094-33	Silkscreen Sps
1	1silkscreen, #1, internal lock	#1 INT LOCK SS	Adams
4	4washer, #6, internal lock	#6 INT LOCK SS	Adams
4	4washer, #8, internal lock	#8 INT LOCK SS	Adams

WIRE = 60"	
SHEATHING = 50"	
BLK 380A	1 AC +
WHT 379A	2 AC - NEUTRAL
GRN 372A	3 CH GND
RED 384A	7 DC +
BLK/YEL 381A	8 DC -

PS
24VDC
DETECTOR
POWER SUPPLY

REV.	DATE	REVISION
DATE	07/10/97	
ISSUED	IND	



AC
Electronics, Inc.



ITEM

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