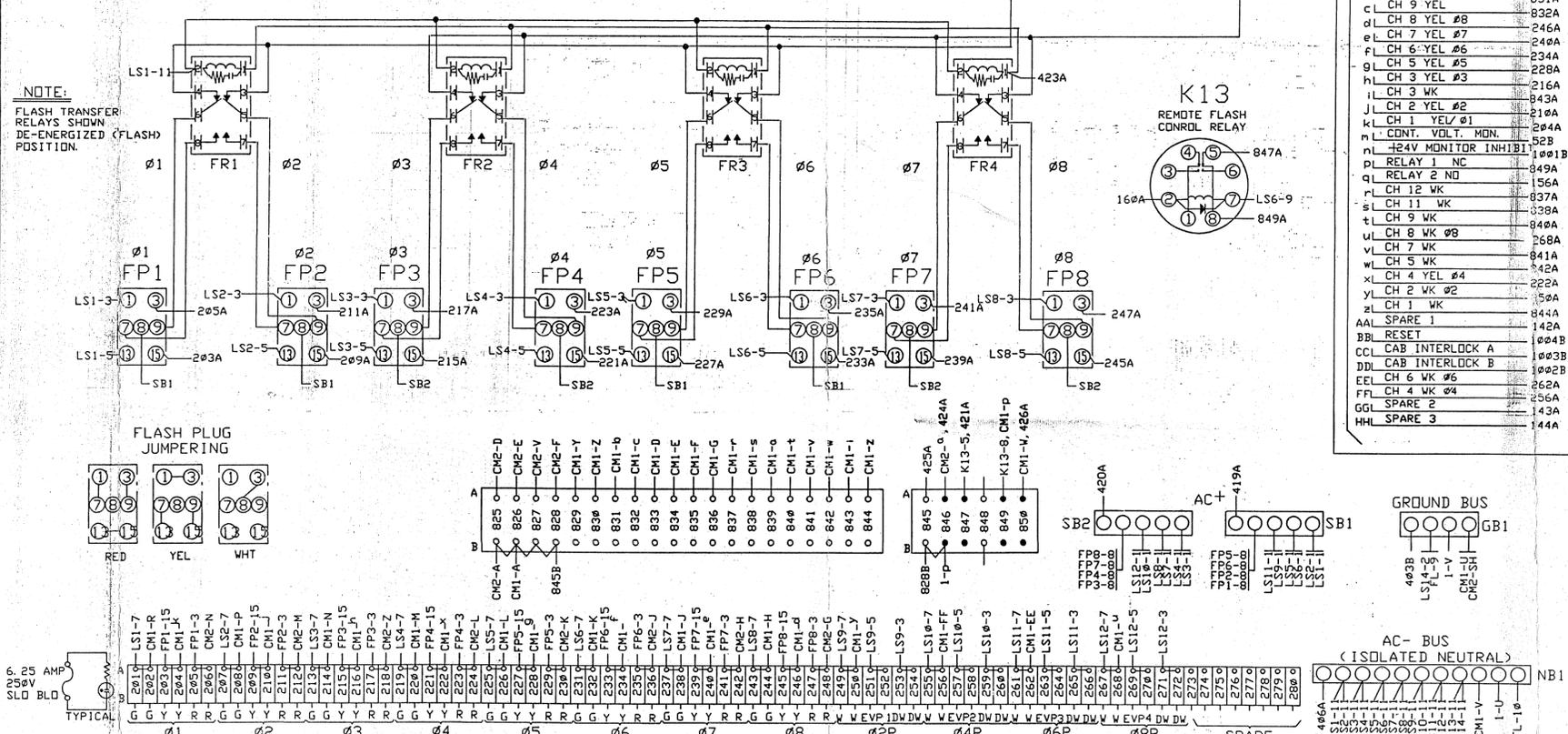


CONT PLAN	LS													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
GREEN / WALK	10	62A	69A	76A	82A	102A	109A	116A	122A	72A	85A	112A	125A	
YELLOW/PED CLR	8	63A	70A	77A	83A	103A	110A	117A	123A	142B	144B	146B	148B	
RED/DON'T WALK	6	64A	71A	78A	84A	104A	111A	118A	124A	73A	86A	113A	126A	
GREEN / WALK	7	201A	207A	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	
+24 VDC	9						K13-7							6PB
CHASSIS GROUND	2													GB1
AC NEUTRAL	11	NB1	FR1-2	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1	NB1
115 VAC	1	SB1	SB1	SB2	SB2	SB1	SB1	SB2	SB2	SB1	SB2	SB1	SB2	SB1



TIGHTENING TORQUE SPECIFICATIONS			VEHICLE SIGNALS			VEH DETECTORS			PED SIGNALS			PED PUSHBUTTONS		
SCREW SIZE	6-32	8-32	10-32	SIGNAL	GLTA	YLTA	RLTA	DET	TERMINAL	SIGNAL	TERMINAL	PPB	TERMINAL	
POUND INCHES	12	16	25.9	2-1				1-1	303-304	2-1	249	253	2-1, 2-2	301
BLOCK TYPE	SAK56	RK6-10	SAK35N	2-2				2-1	345-346	2-2	250	254	4-1, 4-2	302
POUND INCHES	18.5	16	35	2-3	225	227	207	2-2	348-349	4-1	255	259	6-1, 6-2	343
BLOCK TYPE	2B35	2B10		2-4	226	228	208	2-3	350-351	4-2	256	260	8-1, 8-2	344
POUND INCHES	35.5	17.75		4-1			219	4-1	355-356	6-1	261	265		
				4-2			220	4-2	323-324	6-2	262	266		
				4-3			219	4-3	326-327	8-1	267	271		
				6-1			231	5-1	306-307	8-2	268	272		
				6-2			232	6-1	313-314					
				6-3	201	203	231	6-2	316-317					
				6-4	202	204	232	6-3	318-319					
				8-1			243	8-1	358-359					
				8-2			244	8-2	365-366					
				8-3			243	8-3	368-369					

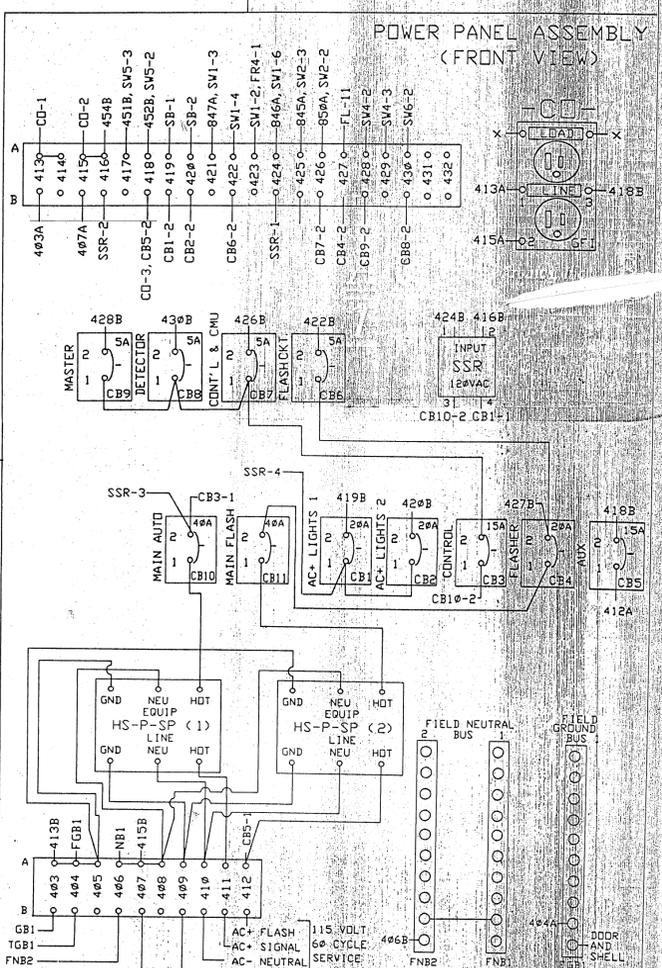
### NEMA 12CH CONFLICT MONITOR

CM1	CM2
SH1 SHELL GROUND	GB1
A1 AC+II	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 #8	244A
J1 CH 7 GRN #7	238A
K1 CH 6 GRN #6	232A
L1 CH 5 GRN #5	232A
M1 CH 4 GRN #4	226A
N1 CH 3 GRN #3	214A
P1 CH 2 GRN #2	208A
R1 CH 1 GRN #1	202A
S1 LOGIC GROUND	59B
UL CHASSIS GROUND	59B
VL AC-(NEUTRAL)	NB1
WL RELAY 1 COMMON (A)	850A
XL RELAY 2 COMMON (LG)	54B
YL CH 12 YEL	829A
ZL CH 11 YEL #1	830A
oL CH 10 YEL	339A
bL CH 9 YEL	831A
cL CH 8 YEL #8	832A
eL CH 7 YEL #7	246A
fL CH 6 YEL #6	240A
gL CH 5 YEL #5	228A
hL CH 3 YEL #3	216A
iL CH 3 WK	843A
jL CH 2 YEL #2	210A
kL CH 1 YEL #1	204A
m CONT. VOLT. MON.	52B
n +24V MONITOR INHIBIT	1001B
p RELAY 1 NC	849A
q RELAY 2 NO	156A
r CH 12 WK	837A
s CH 11 WK	338A
t CH 9 WK #8	840A
uL CH 7 WK #8	268A
vL CH 7 WK	841A
wL CH 4 YEL #4	242A
xL CH 4 YEL #4	222A
yL CH 1 WK	50A
zL CH 1 WK	844A
AA SPARE 1	142A
BB RESET	1004B
CC CAB INTERLOCK A	1003B
DD CAB INTERLOCK B	1002B
EEL CH 6 WK #6	262A
FFL CH 4 WK #4	256A
GG SPARE 2	143A
HH SPARE 3	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
CH1-0.1	CH2-0.2	CH3-0.3	CH4-0.4	CH5-0.5	CH6-0.6	CH7-0.7	CH8-0.8	CH9-0.9	CH10-1.0	CH11-1.1

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.



### NOTES

- IF EVF HEADS ARE INSTALLED JUMPER 367B TO 369B AND / OR 335B TO 337B

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

EVF CONFIRMATORY LIGHTS

CONTR. CHAN.	PHASES	POLE#	TERM
1	2	3	251
2	6	1	257
3	4	4	263
4	8	2	269

EVF TYPICAL SENSOR WIRE COLORS

SIGNAL	DC(+)	GND
YEL	GRN	BLK
CLR	RED	BLK
WHT	RED	BLK

REV. STATUS

SHEET	1	2	3
REV	D	C	C

DATE 10/10/97  
DRAWN MCD

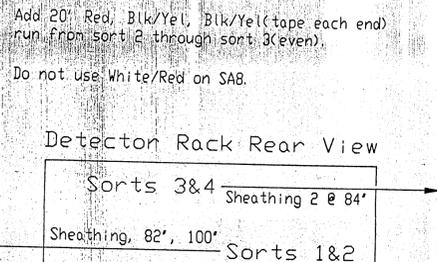
AC Electronics, Inc.

7TH AVE AT BUCHANAN ST



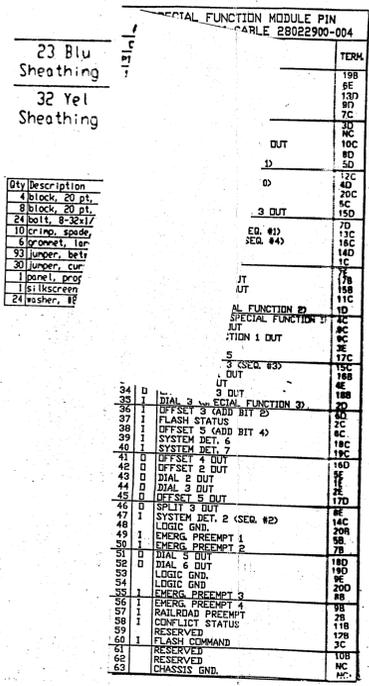
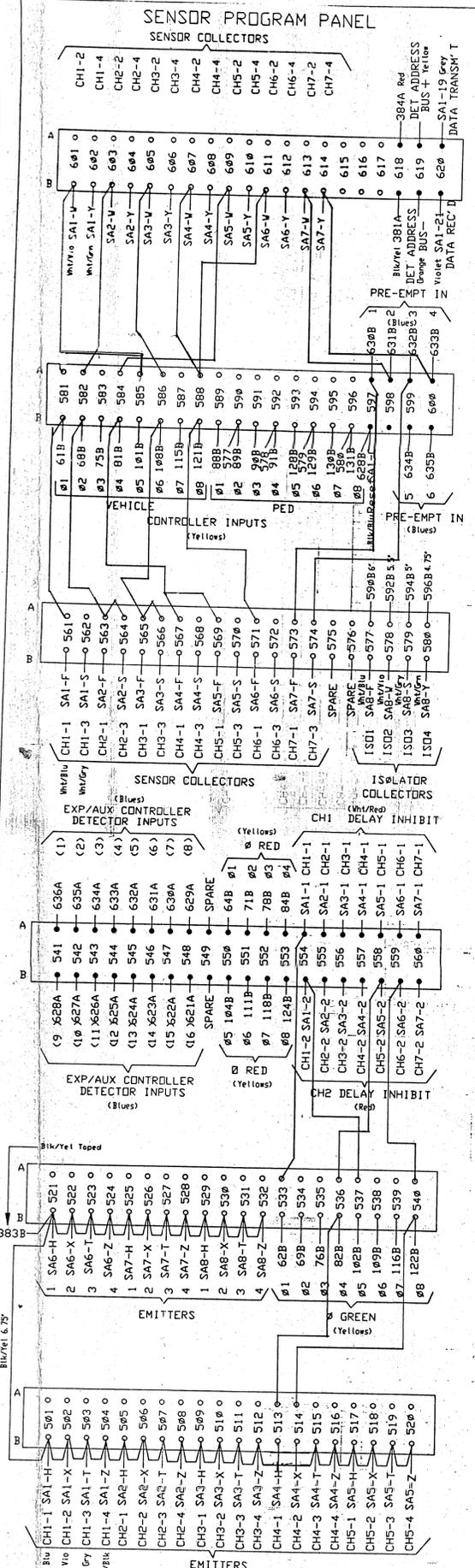
Point	Wire Color	SA I/O Terminals	Description	Sort#	Length
1	White/Red		CH1 Delay Inhibit	2	120'
2	Red		CH2 Delay Inhibit	2	120'
3	Brown		CH1 Loop Input	3 or 4	96'
4	White/Brown		CH1 Loop Input	3 or 4	96'
5	White/Blue		CH1 Output (C)	2	120'
6	Blue		CH1 Output (E)	1	120'
7	Black/Red		CH2 Loop Input	3 or 4	96'
8	Black/White		CH2 Loop Input	3 or 4	96'
9	Orange		CH3 Loop Input	3 or 4	96'
10	White/Orange		CH3 Loop Input	3 or 4	96'
11	White/Grey		CH3 Output (C)	2	120'
12	Grey		CH3 Output (E)	2	120'
13	Yellow		CH4 Loop Input	3 or 4	96'
14	White/Yellow		CH4 Loop Input	3 or 4	96'
15	White/Violet		CH2 Output (C)	2	120'
16	Violet		CH2 Output (E)	2	120'
17	White/Green		CH4 Output (C)	2	120'
18	White/Black		CH4 Output (E)	2	120'

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



Sort #	Length
Sort 1	82'
Sort 2	100'
Sort 3	84'
Sort 4	84'

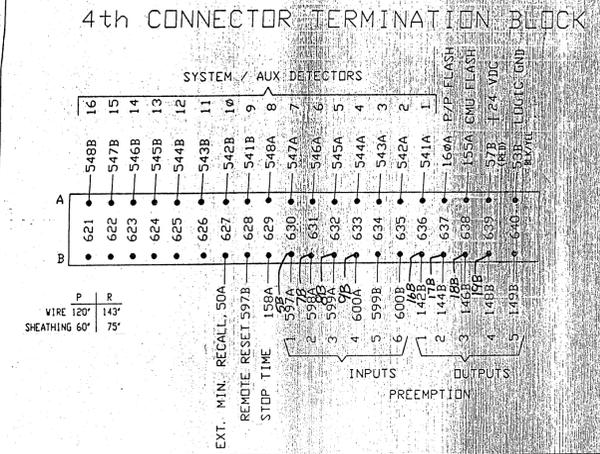
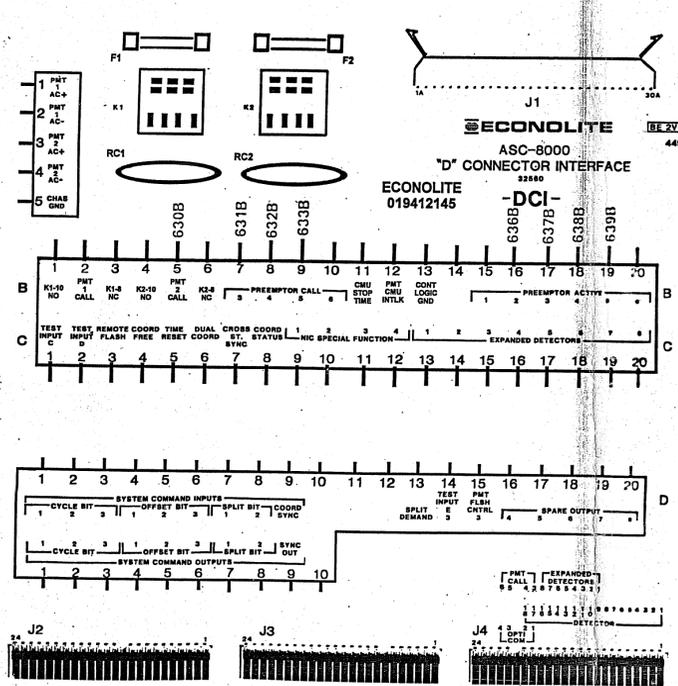
Qty	Description	Mfr. Pt. #	Manufacturer
18	bolt, 4-40x1/4", phillips	4-40x1/4 SS PH HD	Adams
18	washer, #4; internal lock	#4 INT LOCK SS	Adams
1	cover	9411	Excel
1	circuit board	DIRKSHHC	Aztec
2	mounts, cable tie, small	TCS828	T&B
2	clamps, wire	754-20-2-10	Adel
2	bolt, 10-32x5/8"	10-32x5/8 SS SPWS	Adams
2	nut, 10-32	10-32 NUT SS	Adams
15	connector, edge	2WH22-1A0D5	Viking
30	key, polarizing	091-0024-000	Viking
1	connector, 12 pt	32 D12	Altech
1	connector, 3pt	32 G03	Altech
8	connector, MK8/10 DG	30266	Weldmuller
16	connector, MK8/4 DG	30776	Weldmuller
1	labor,assy of PC board	ASSYPCBOARD	Production Tech.
2	cover, lexan, 1/8", 1-3/16"x22"	LEXANDET	Cadillac
2	washer, #10; internal lock	#10 INT LOCK SS	Adams



P/N	RACK HARNESS	SA-PIN	SA1		SA2		SA3		SA4		SA5		SA6		SA7		SA8		FUNCTIONS
			PHASE	FUNC	PHASE	FUNC	PHASE	FUNC	PHASE	FUNC	PHASE	FUNC	PHASE	FUNC	PHASE	FUNC	PHASE	FUNC	
1	A	DC GROUND																	CH 1
2	B	24V DC+																	CH 2
3	C	REMOTE RESET																	CH 3
4	D-4	CH 1 LOOP	303A	345A	313A	355A	323A	365A	333A	301A	INPUT CH 1								D
5	E-5	CH 1 LOOP	304A	346A	314A	356A	324A	366A	334A	379B	INPUT COMMON								E
6	F	CH 1 OUTPUT (+)	561B	563B	565B	567B	569B	571B	573B	577B	OUTPUT CH 1 (+)								F
7	J-8	CH 2 LOOP	306A	348A	316A	358A	326A	368A	336A	379B	INPUT CH 2								H
8	K-9	CH 2 LOOP	307A	349A	317A	359A	327A	369A	337A	378B	INPUT COMMON								J
9	L	ADDRESS BI# 0	619B	SA1-15	SA2-10	SA3-15	SA4-15	SA5-10	SA6-15	NC									K
10	M	CHASSIS GROUND	340A																L
11	N	115V AC+	SA2-M																M
12	P-13	LOOP CH 3	308A	350A	318A	360A	328A	370A	338A	343A	INPUT CH 3								P
13	R-14	LOOP CH 3	309A	351A	319A	361A	329A	371A	339A	377B	INPUT COMMON								R
14	S	CH 3 OUTPUT (+)	562B	564B	566B	568B	570B	572B	574B	579B	OUTPUT CH 3 (+)								S
15	T	CH 3 OUTPUT (-)	503B	507B	511B	515B	519B	523B	527B	531B	OUTPUT CH 3 (-)								T
16	U-17	CH 4 LOOP	311A	353A	321A	363A	331A	373A	341A	344A	INPUT CH 4								U
17	V-18	CH 4 LOOP	312A	354A	322A	364A	332A	374A	342A	377A	INPUT COMMON								V
18	W	CH 2 OUTPUT (+)	601B	603B	605B	607B	609B	611B	613B	578B	OUTPUT CH 2 (+)								W
19	X	CH 2 OUTPUT (-)	502B	506B	510B	514B	518B	522B	526B	530B	OUTPUT CH 2 (-)								X
20	Y	CH 4 OUTPUT (+)	602B	604B	606B	608B	610B	612B	614B	580B	OUTPUT CH 4 (+)								Y
21	Z	CH 4 OUTPUT (-)	504B	508B	512B	516B	520B	524B	528B	532B	OUTPUT CH 4 (-)								Z
22	1	CH 1 GREEN	554A	555A	556A	557A	558A	559A	560A		SPARE								
23	2	CH 2 GREEN	554B	555B	556B	557B	558B	559B	560B		SPARE								

USE 754-20-2-10 CLAMPS

7TH AVE AT BUCHANAN ST.



Qty	Description	Mfr. Pt. #	Manufacturer
4	bolt, 4-40x1/2", phillips	4-40x1/2 SS PH HD	Adams
1	bolt, 6-32x3/4", phillips	6-32x3/4 F PH HD	Adams
4	bolt, 6-32x3/8", phillips	6-32x3/8 SS PH HD	Adams
4	bolt, 8-32x1/2", phillips	8-32x1/2 SS PH HD	Adams
1	connector	206705-1	Ang
5	contact, male	66361-4	Ang
3	cover, transistor	8909NB	Thermalloy
1	crimp, 18-22AWG, #6, ring	A-220-06X	Mokey-Etc
1	fuse, 2 amp, 5/8" dia	313002	Littlefuse
1	fuseholder	342014A	Littlefuse
4	nut, 4-40	4-40 NUT SS	Adams
1	panel, base	9209A	Excel
1	panel, cover	9209B	Excel
1	power supply, 24VDC, 4.8	1H24-4.8-512	HPD
4	rubber feet	3271331	3PO Products
1	silkscreen base	9209A-S	STIKScreen/Spec
4	washer, #4, internal lock	#4 INT LOCK SS	Adams
4	washer, #6, internal lock	#6 INT LOCK SS	Adams
4	washer, #8, internal lock	#8 INT LOCK SS	Adams

