

CONTROL 3
Theatrical Control Console

Complete Technical Manual
including peripherals
and package

LIGHTING

-Dimmer Banks

- *8 individual channels
- *600 watt solid state dimmers
- *2 selectable outputs per channel
- *Non- dim switch on each channel
- *Individual channel and master power switches with indicators
- *Male 4- pin connectors on chassis side

-Pulse Banks

- *6 individual channels
- *1200 watts per channel
- *Individual power and trigger indicators for each channel
- *Variable threshold control
- *Each channel triggerable by: Off, 20Hz- 1KHz analog, 1KHz- 5KHz analog, 5KHz- 20KHz analog, static, manual
- *Individual momentary manual triggers for each channel
- *Female 4- pin matrix connectors on chassis side
- *Analog source selectable via patch panel
- *Analog source isolated by buffer amplifier
- *Master trigger level gain for analog
- *All channels solid state

AUDIO

- *Fully patchable matrix formation
- *Satellites linked by major cannon connectors
- *RCA connectors for line level throughout
- * $\frac{1}{4}$ " connectors for low level throughout
- *Expandable beyond standard package
- *All audio power both pos. and neg. fused
- *Audio master power switch with indicator
- *Power and high level signals through major cannon connectors
- *Seperate table power switches
- *Isolated RF antenna cable to satellite #1
- *Additional power available in all package locations
- *4- female $\frac{1}{4}$ " mic connectors on chassis side
- *Cue $\frac{1}{4}$ " female connector by main power key
- *Remote LED power level indicators
- *Remote "clipping" indicators

SUPPORT

- *Universal main power switch
- *Main power switch keyed
- *6 individual 20 amp power- in feeds
- *Variable cooling systems in each unit
- *Panel lights for main unit and satellite #1

DIAGNOSTIC

- *6 power failure indicators for power- in feeds
- *3 cooling system failure indicators
- *Pulse bank overheat indicator
- *Universal power failure indicator

MAIN FRAME

Power requirements	AC, 117V, 60 Hz (6 circuits)
Power consumption	12,870 Watts
Dimensions	48 3/8 x 38 x 24" (with wheels)
Weight	pounds without package pounds with package
Furnished parts	1-side shelf with hardware 1-cloth cover 1-technical manual 1-set of adapters 2-keys

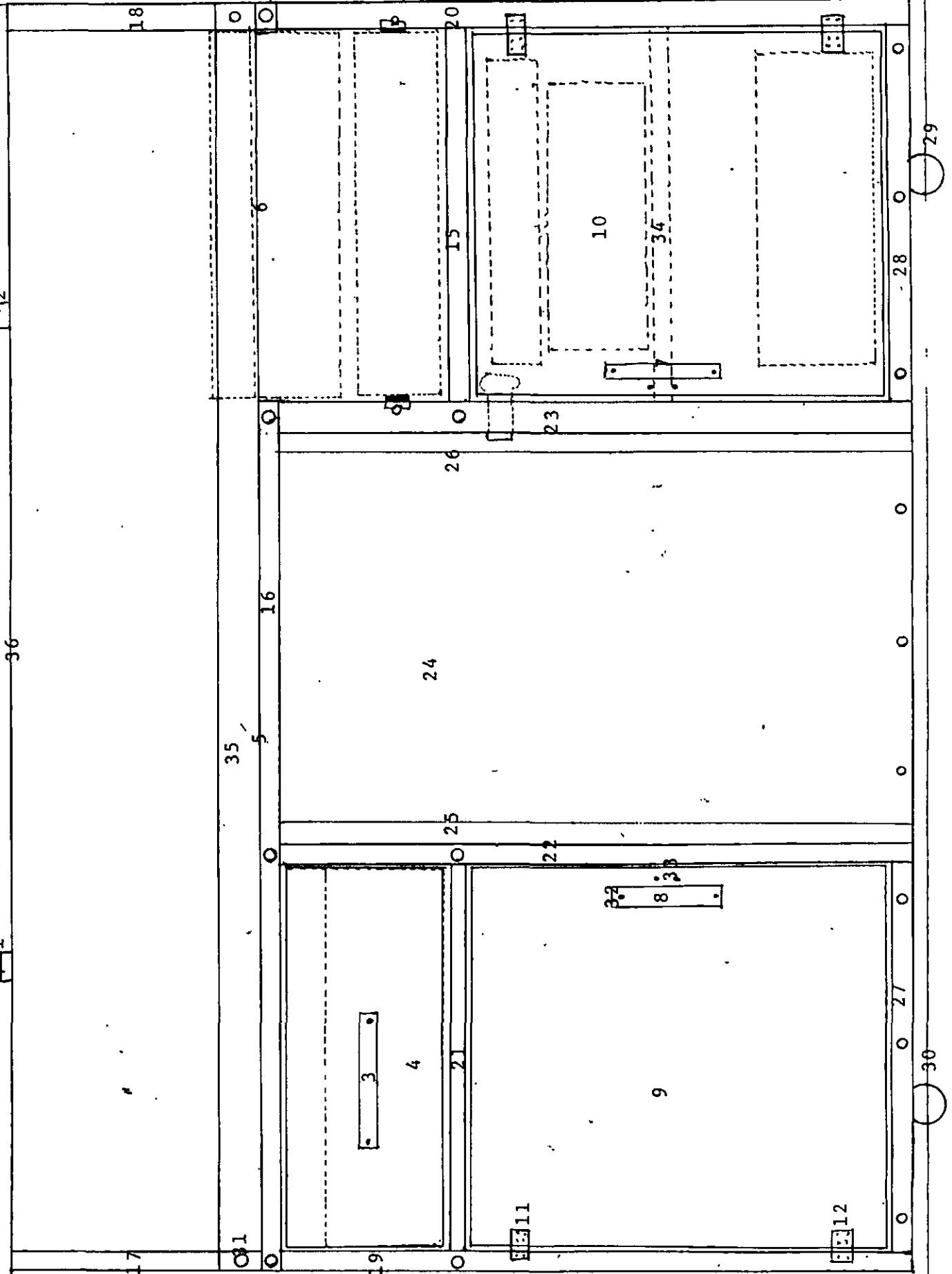
SATELLITE #1

Power requirements	AC, 117V, 60 Hz (supplied by main unit)
Power consumption	350 Watts (supplied by main unit)
Dimensions	37 x 17 x 28 1/2" (overall)
Weight	pounds without package pounds with package
Furnished parts	1-panel light w/connector 1-cloth cover

SATELLITE #2

Power requirements	AC, 117V, 60 Hz (supplied by main unit)
Power consumption	1400 Watts (supplied by main unit)
Dimensions	20 5/8 x 18 x 49 1/2" (with wheels)
Weight	pounds without package pounds with package
Furnished parts	1-cloth cover

<u>MISC.</u>					
41100	not shown	Main frame cover			1
41101	not shown	Satellite #1 cover			1
41102	not shown	Satellite #2 cover			1
41103	not shown	Technical manual			1
41104	not shown	Side shelf			1
41105	not shown	Remote panel light			1
41106	not shown	Adapter, 4 pin M-M			1
41107	not shown	Adapter, 4 pin F- edison F			2
41108	not shown	Adapter, 4 pin M- bare wire			1



3.1M2

12"

16 1/2"

3"

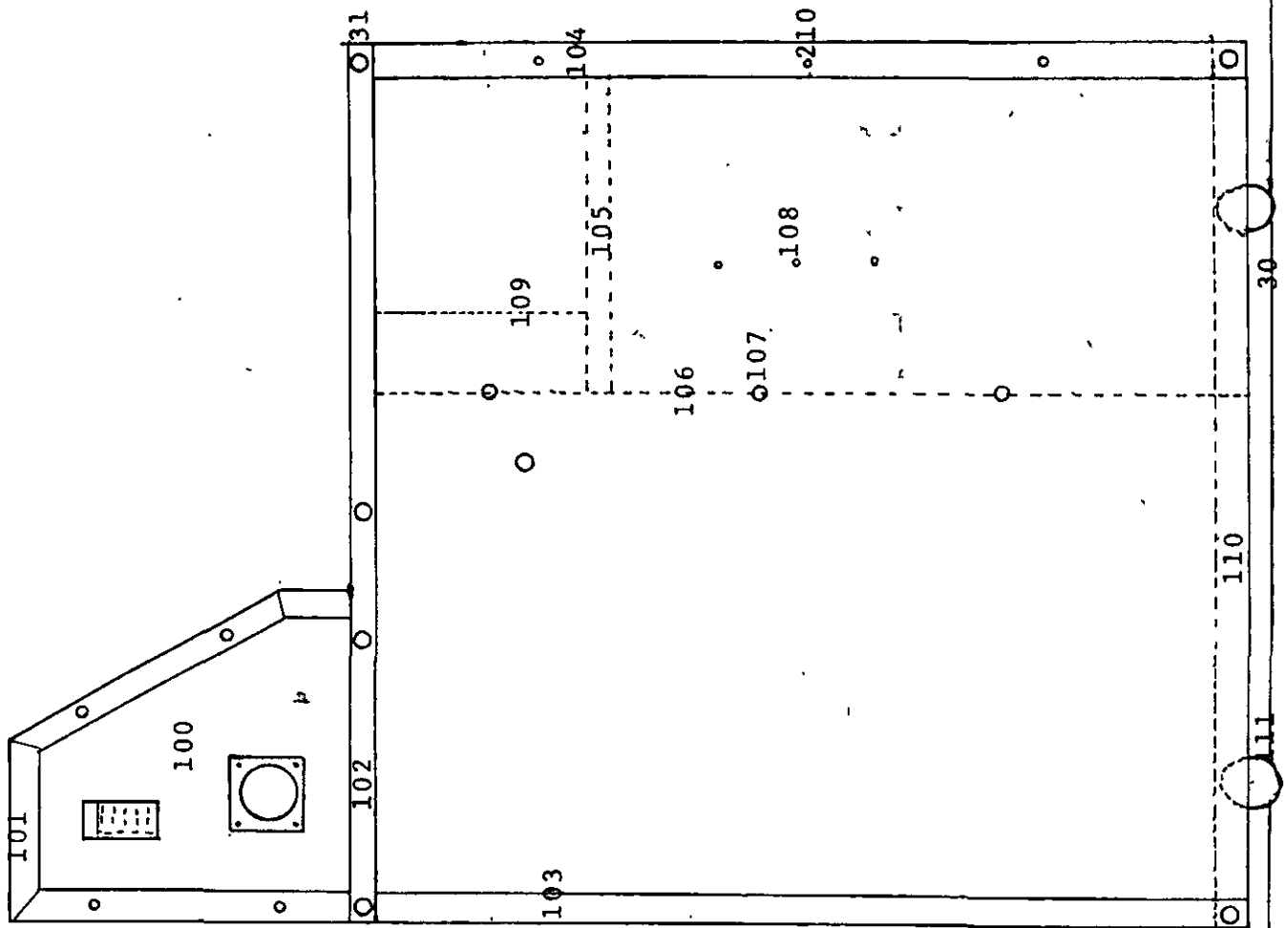
15 1/2"

16 1/2"

24 1/2"

16 3/4" 5 1/2" 5/8" 1"

		<u>CHASSIS</u>		
55100	1, 2	Blocks, wooden, 1x1x3/4", plywood		2
55101	3, 8, 7	Handle, metal		3
55102	4	Drawer, aluminum, stainless front		1
55103	5	Formica, brown, 34x11 1/2"		1
55104	6	Formica, brown, 15x1"		1
55105	9	Door, left hinged, stainless		1
55106	10	Door, right hinged, stainless		1
55107	11,12,13,14	Hinge, 1 1/4"		4
55108	15,21,27,28	Aluminum, 1 1/4x3/4x1 1/4"		4
55109	16	Aluminum, angle, 7/8x3/4"		1
55110	19,20,22,23, 25,26	Aluminum, angle, 24x7/8"		6
55111	24	Aluminum, sheet, 24x49"		1
55112	29,30,111,212	Castors, rubber, 3 1/2"		4
55113	29, 30	Bolts, hex, 1 x 1/4"	REP	16
55114	29, 30	Nuts, hex, 1/4"	REP	16
55115	31	Bolt, phillips, 3/4 x 1/4"	REP	16
55116	31	Nut, 1/4"	REP	16
55117	32, 33	Bolt, phillips, 1/8 x 1"	REP	4
55118	32, 33	Nut, 1/8"	REP	4
55119	34	Shelf, aluminum, 17x11"		1
55120	35	Aluminum, angle, 1 1/4x49"		1
55121	36	Stainless steel, 1 1/4x49		1
55122	37, 38	Steel mesh, 9x235/8"		2
55123		Screws, patch panel		50

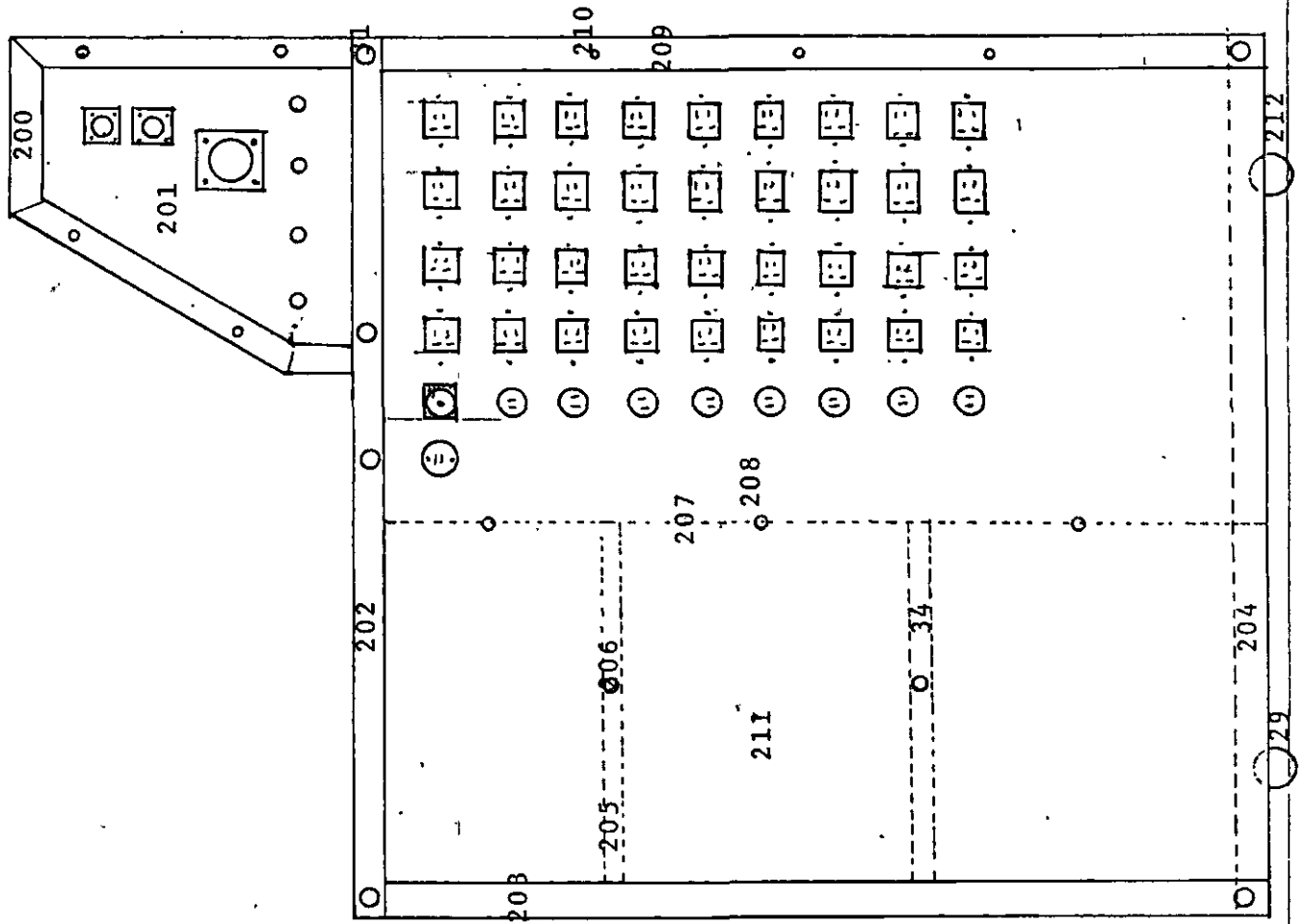


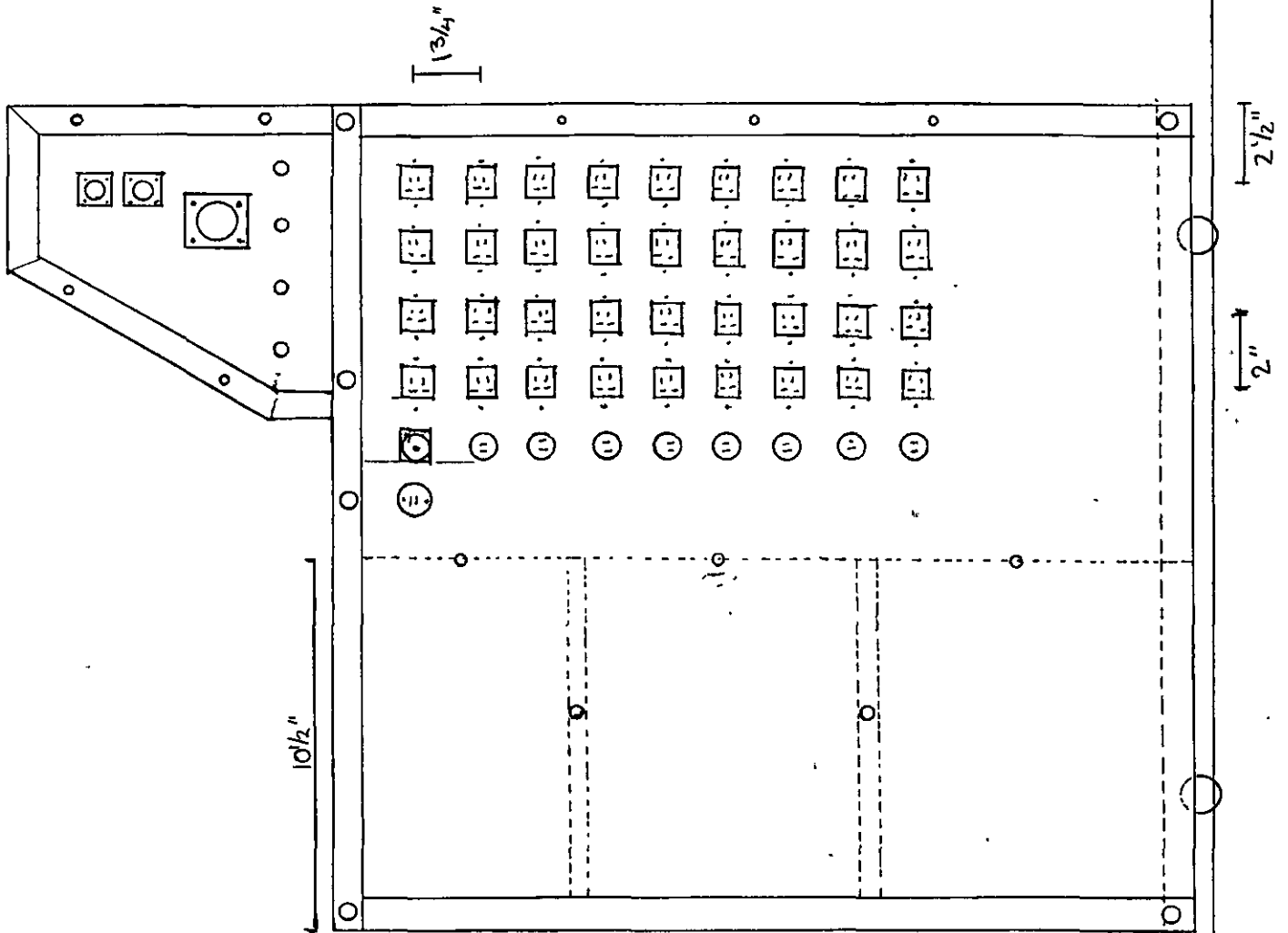
<u>CHASSIS</u>					
55200	100	Stainless steel, 9x9, angle left			1
55201	101	Aluminum angle, 23 $\frac{1}{2}$ "			1
55202	102	Aluminum angle, 24 3/8"			1
55203	103	Aluminum angle, 24"			1
55204	105	Aluminum shelf, 16 $\frac{1}{2}$ " x 9 $\frac{1}{2}$ "			1
55205	106	Insulated mat, black, 24 x 24"			1
55206	107	Bolt, $\frac{1}{4}$ " x $\frac{1}{2}$ "	REP		10
55207	108	Screw, #5	REP		6
55208	109	Aluminum, 5 x 16"			1
55209	110	Aluminum angle, 24 3/8"			1
55210	112	Stainless steel, 24 3/8 x 24 3/8"			1

42-381 50 SHEETS 5 SQUARE
42-382 100 SHEETS 5 SQUARE
42-389 200 SHEETS 5 SQUARE

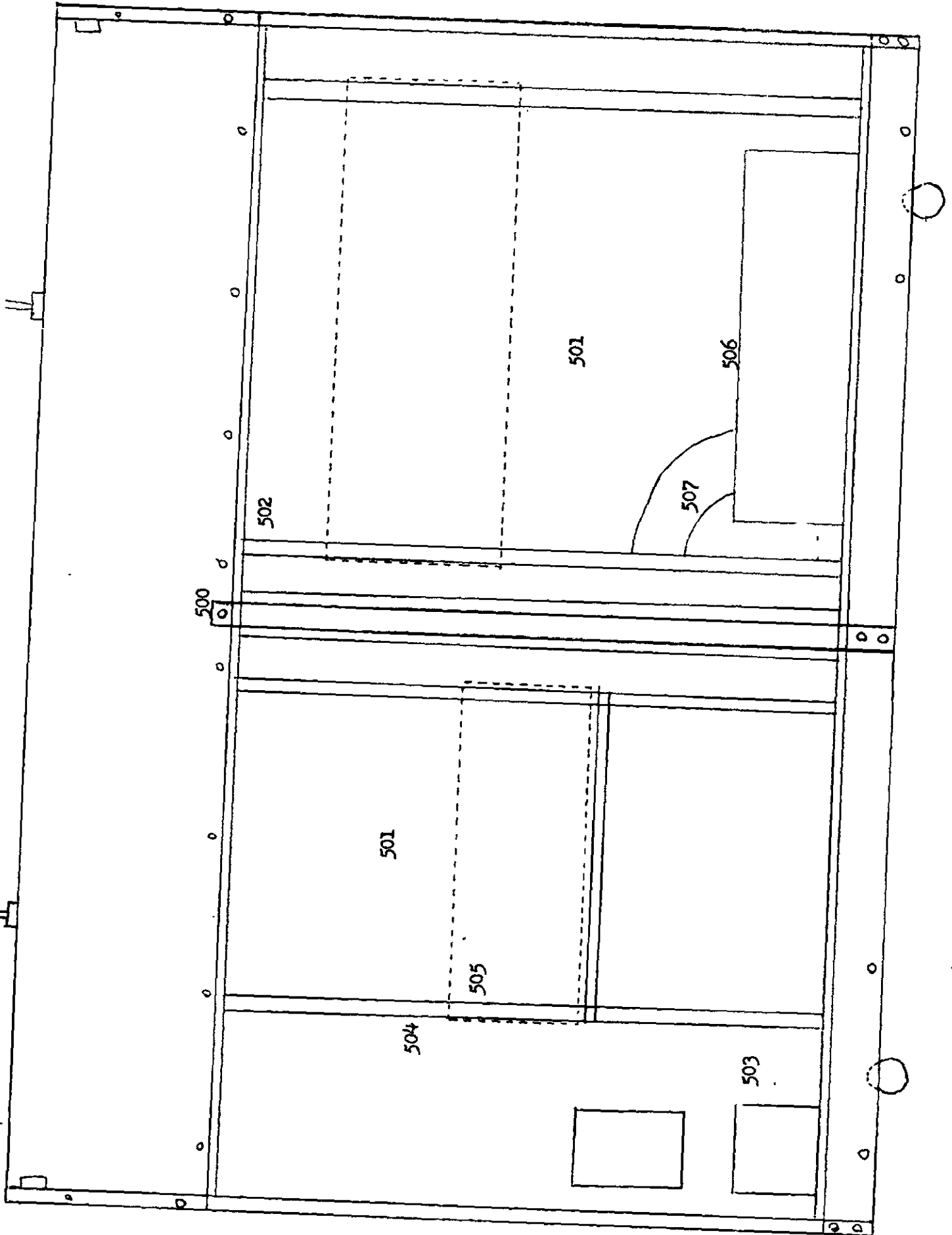


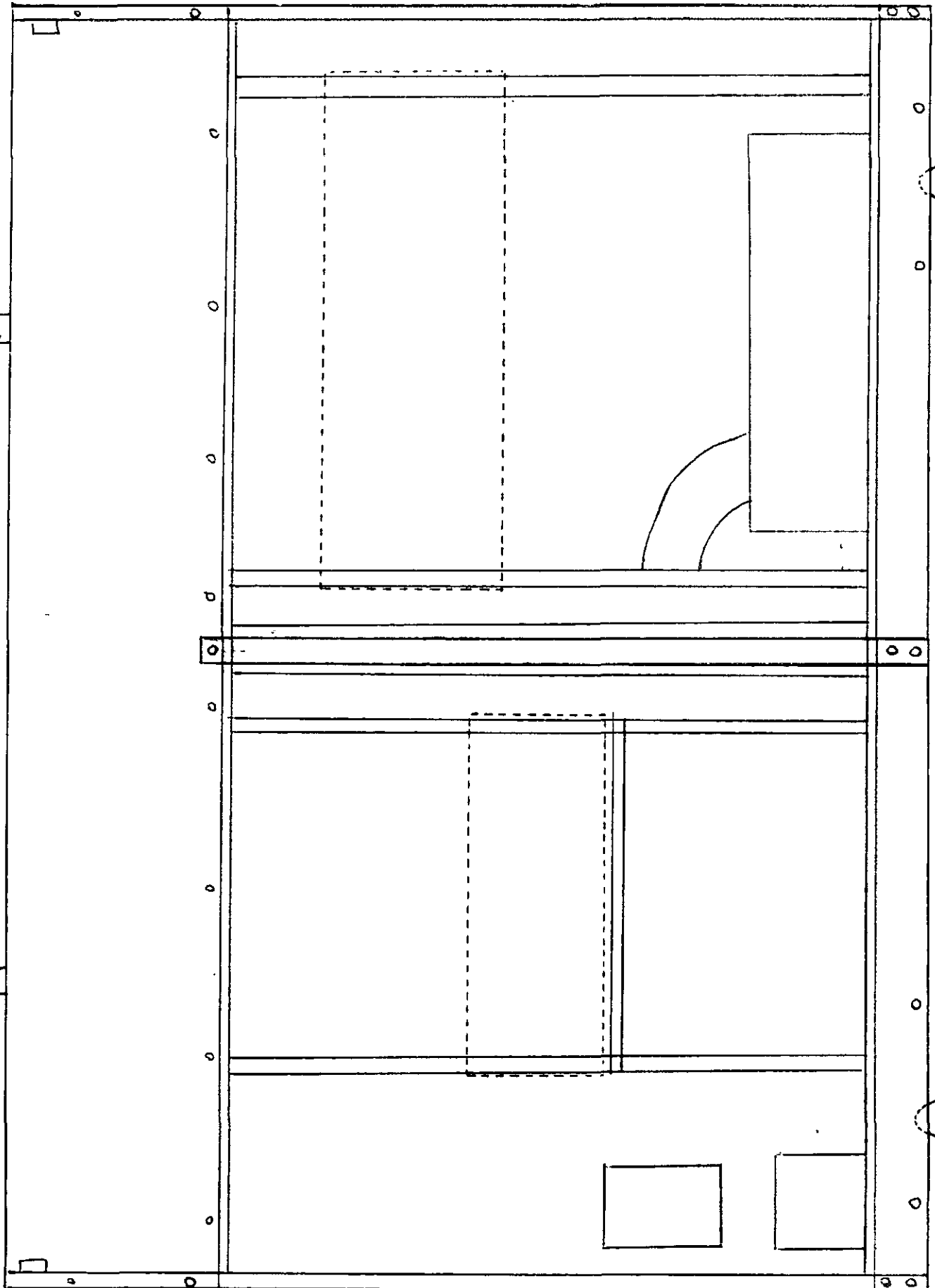
3.3M1



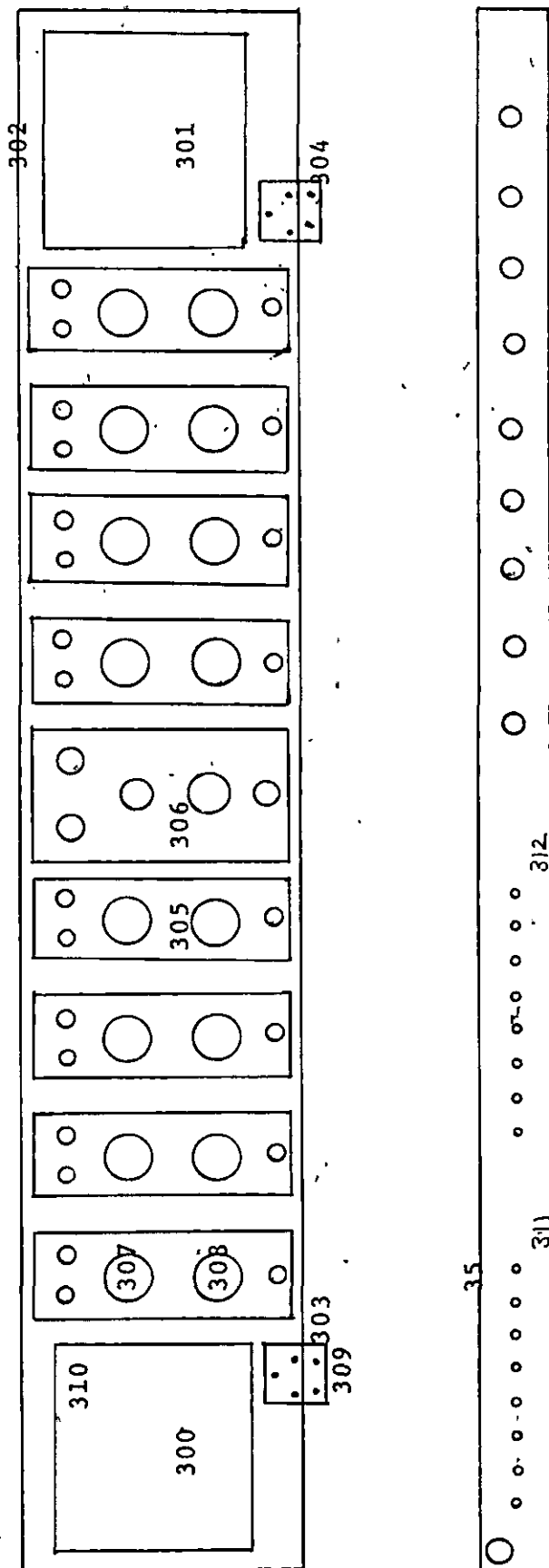


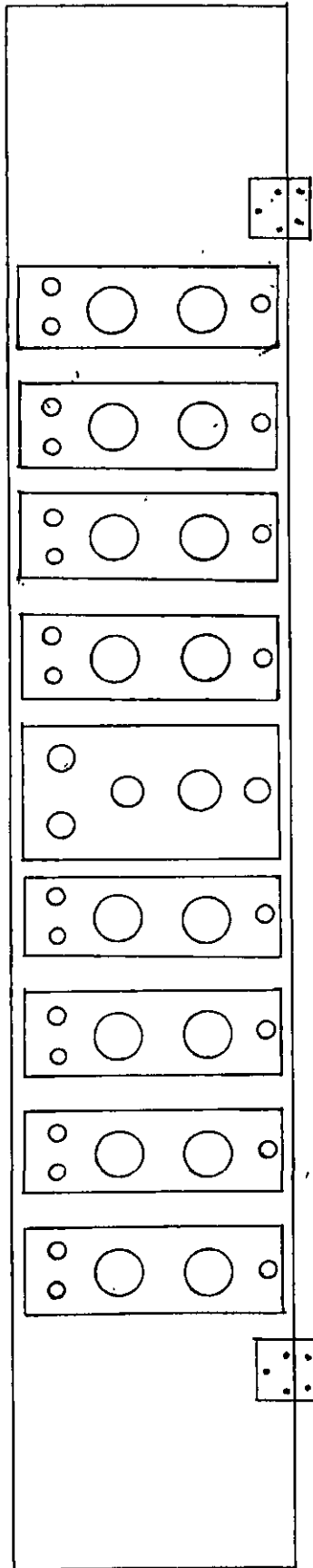
		<u>CHASSIS</u>			
55300	200	Aluminum, angle, 23 $\frac{1}{2}$ "			1
55301	201	Aluminum, 9x9, angle cut, right			1
55302	202	Aluminum, angle, 24 3/8"			1
55303	204	Aluminum, angle, 24 3/8"			1
55304	205	Shelf, aluminum, 17 x 11"			1
55305	206	Screw, #4			1
55306	207	Insulate mat, black, 24 x 24"			1
55307	208	Bolt, $\frac{1}{4}$ x 1"			1
55308	210	Bolt, 1/8 x 3/4"			1
55309	210	Nut, 1/8"			1
55310	211	Stainless steel, 24 3/8 x 24 3/8"			1





		<u>MECHANICAL</u>		
55400	500	Aluminum, 3/4 x 26"		1
55401	501	Aluminum, perforated panel		2
55402	502	Angle irons, 3 x 3		8
55403	503	Acrylic, 10 x 20		1
55404	504	Aluminum, 3/4 x 3/4 x 30		4
55405	505	Bolts, 1/4 x 2"		12
55406	506	Fan hoods		2
55407	507	Aluminum duct, 5"		2



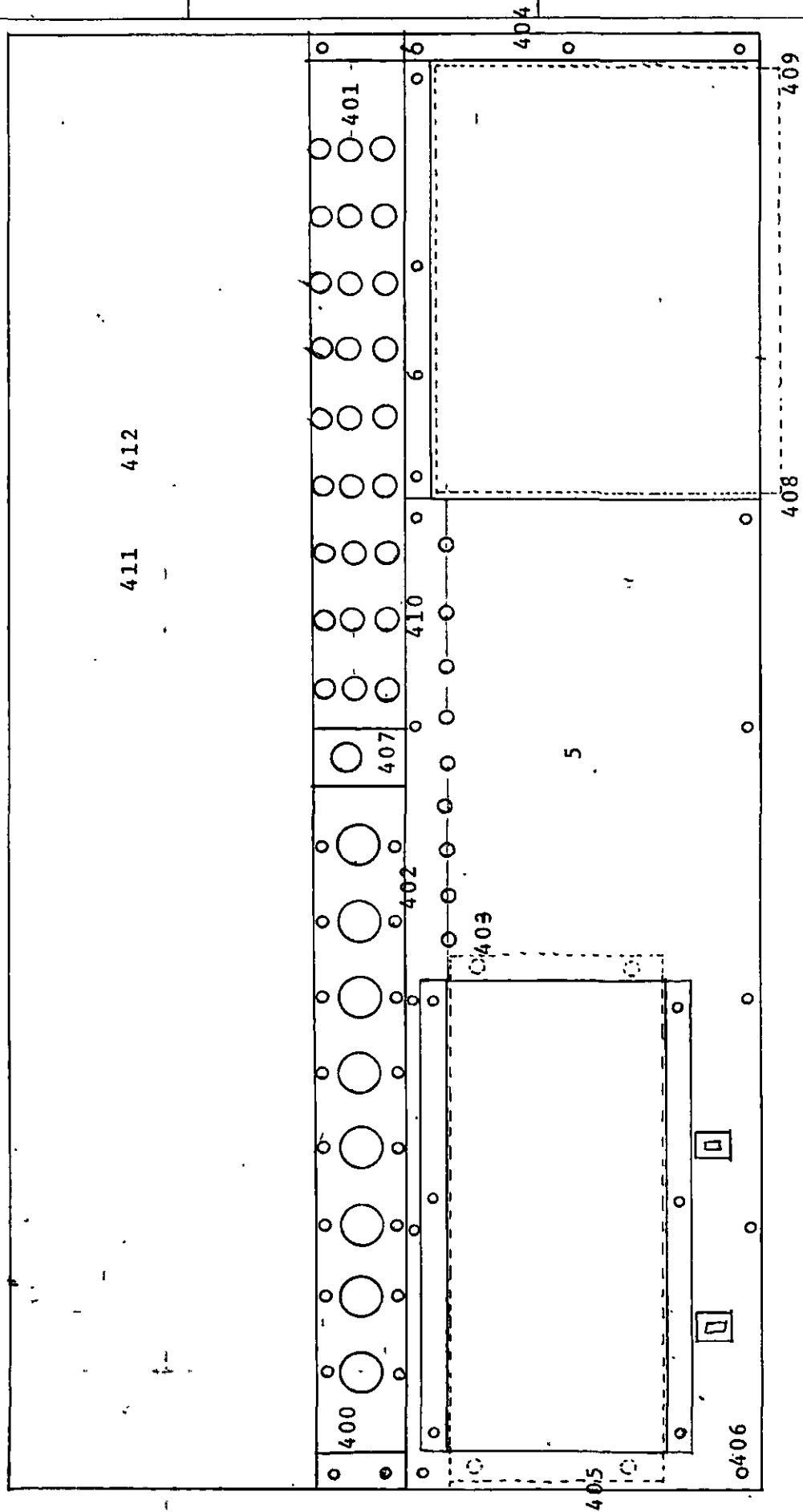


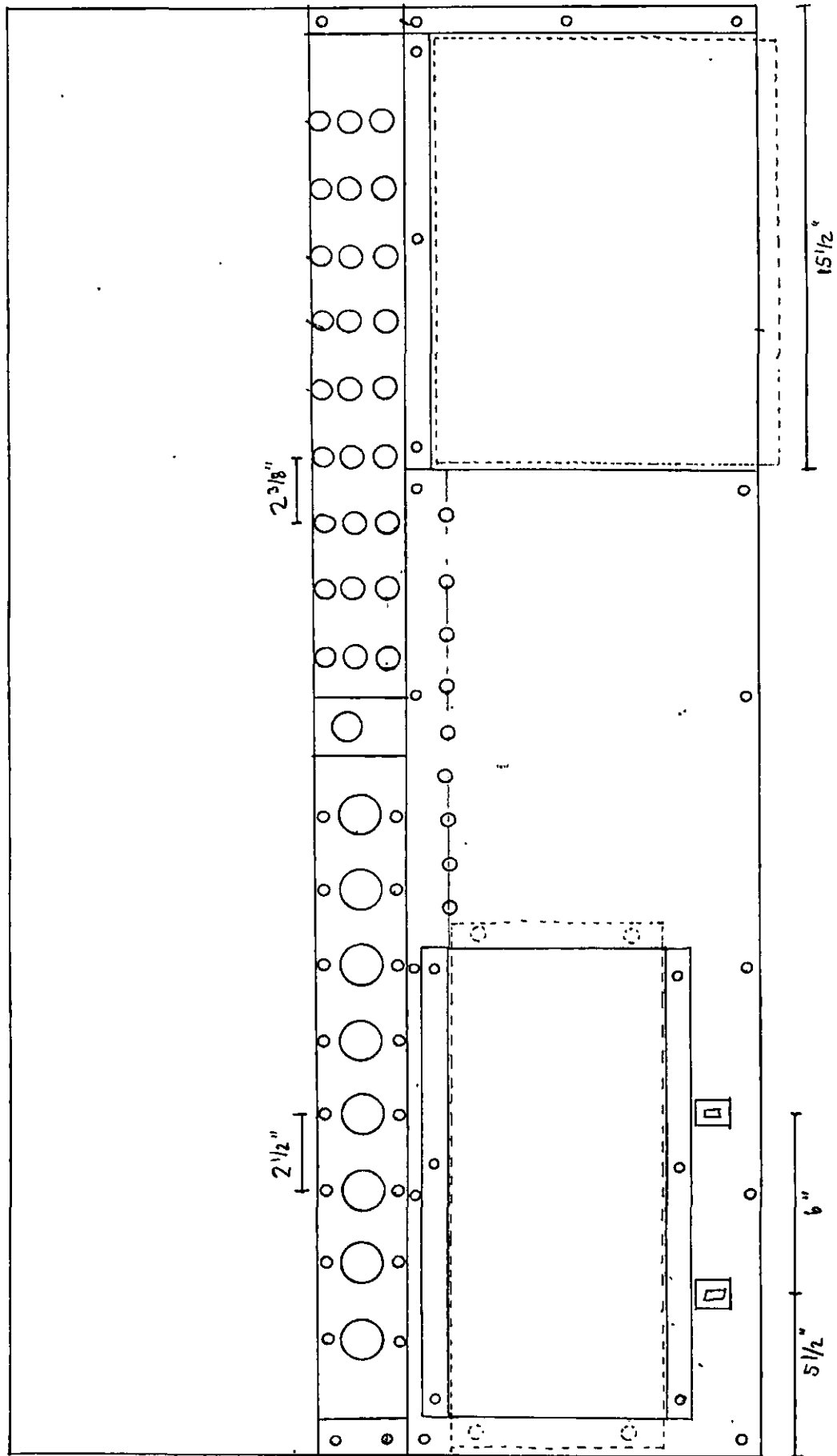
		<u>CHASSIS</u>		
55500	300,301	Plate, $5\frac{1}{2}$ x $5\frac{1}{2}$ "		2
55501	302	Dash plate, 46 x 8"		1
55502	303, 304	Hinge, box		2
55503	305	Faceplate, dimmer, $2\frac{1}{2}$ x $7\frac{1}{4}$ "	REP	8
55504	306	Faceplate, general		1
55505	307,308	Knob, black	REP	20
55506	309,310	Bolt, $1/8$ x $\frac{1}{2}$ "	REP	18
55507	309,310	Nut, $1/8$ "	REP	18
55508	311,312	LED mounting plate, wood		2

12.31 100 SHEETS 3 SQUARE
42.36 100 SHEETS 3 SQUARE

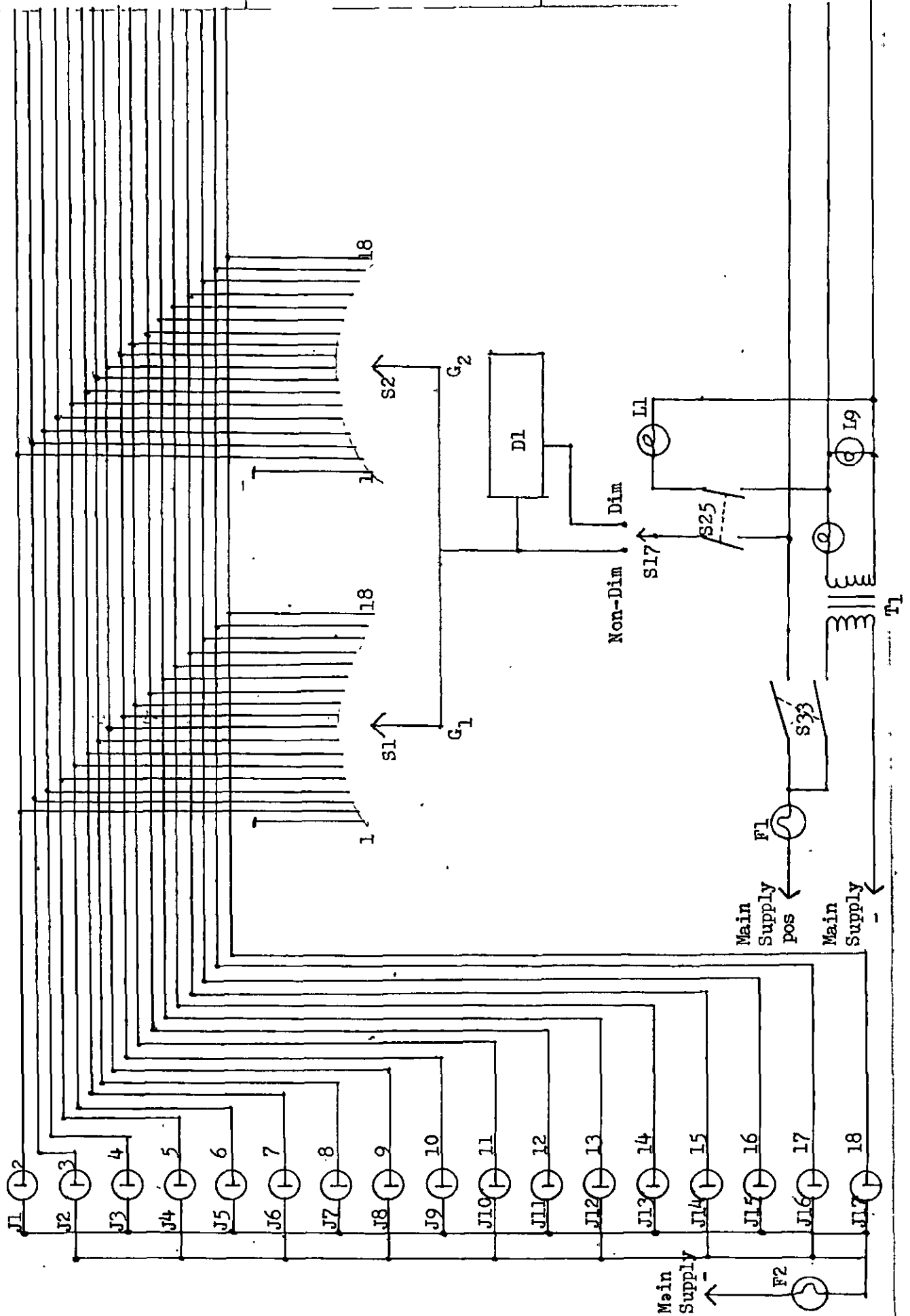


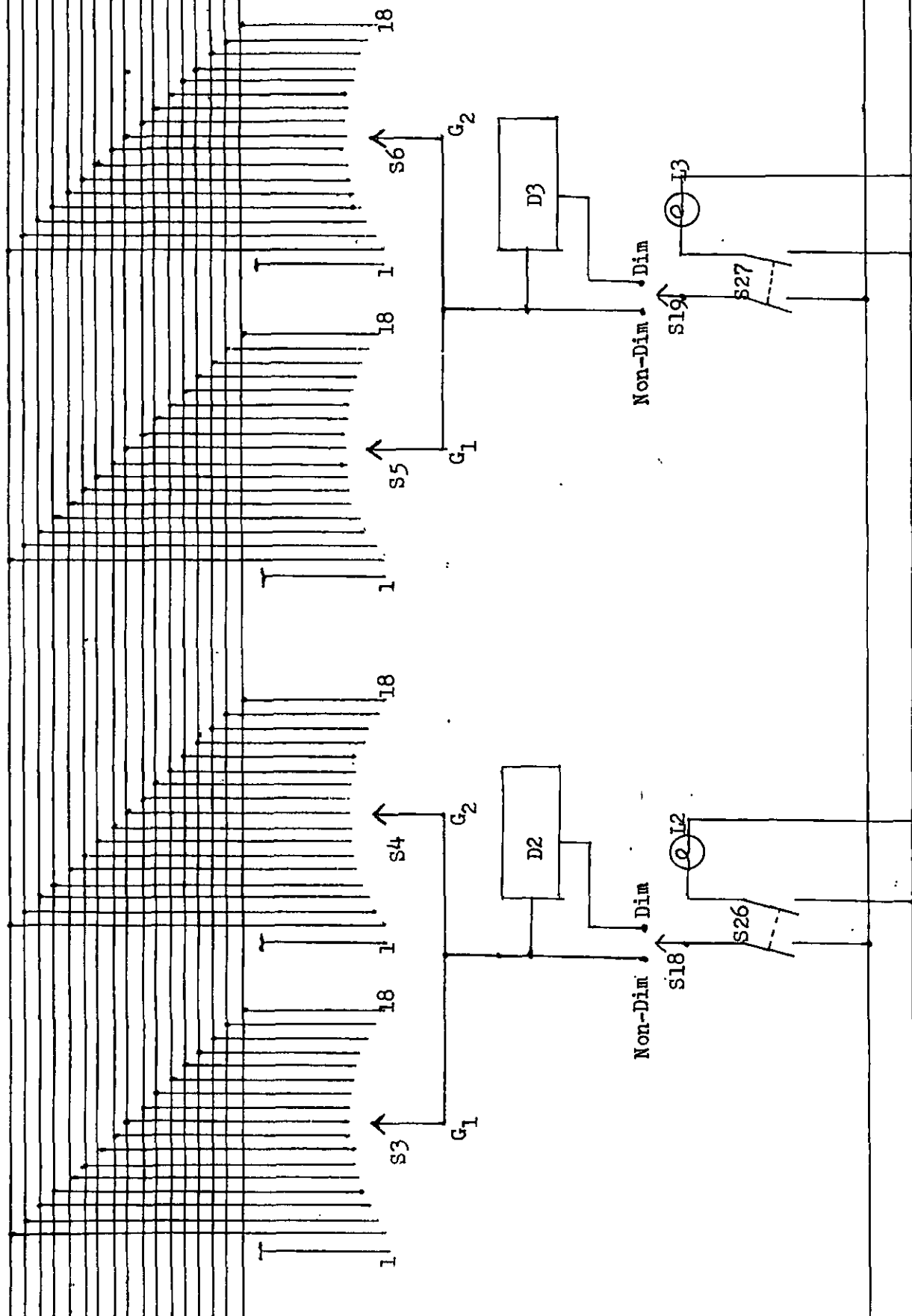
3.6M1

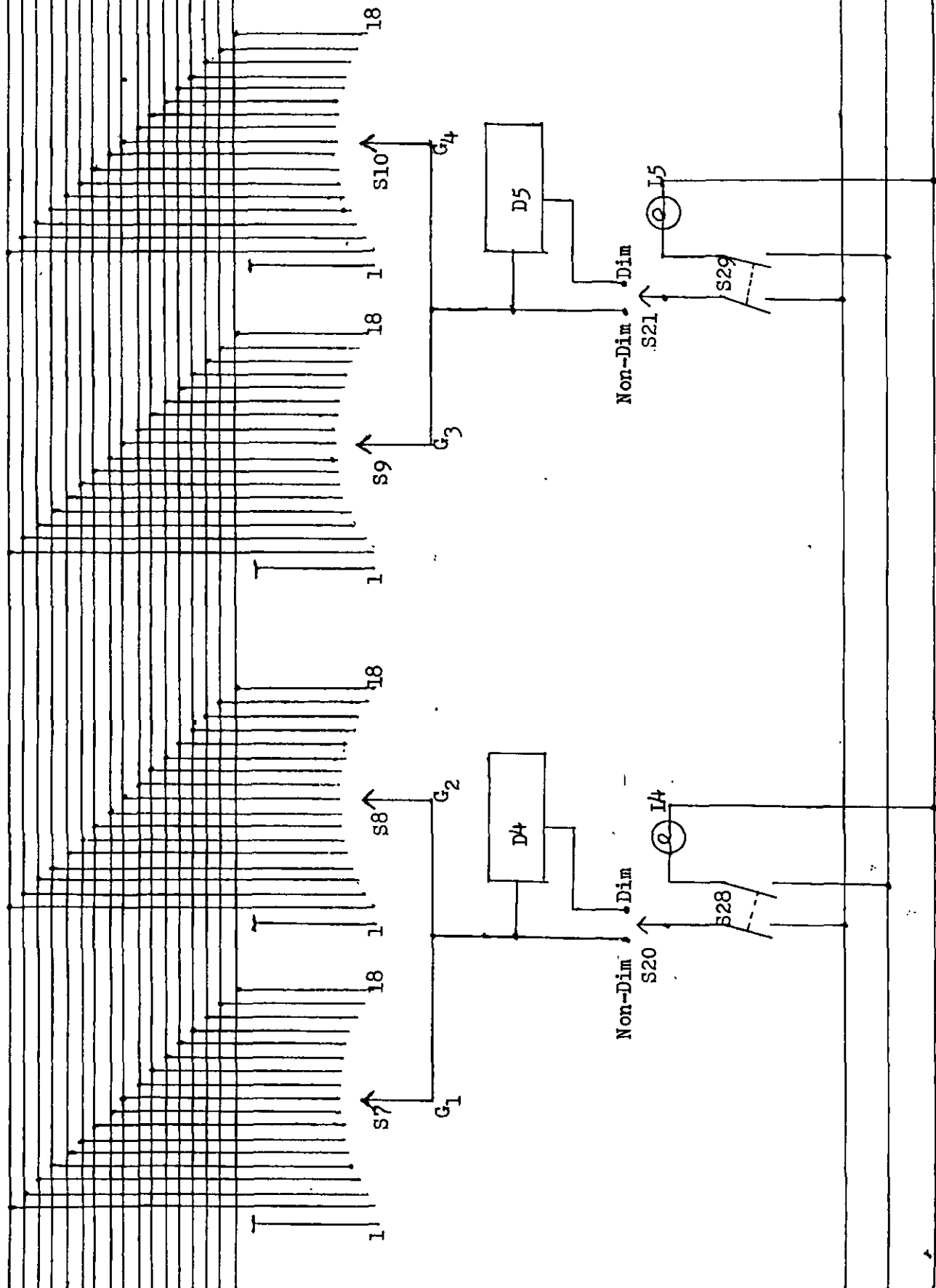




		<u>CHASSIS</u>		
55600	400	Panel, aluminum, 22x7", dim punch		1
55601	401	Panel, aluminum, 22x7", pulse punch		1
55602	402	Bolt, $\frac{1}{4}$ " x $1\frac{1}{2}$ "		8
55603	402	Nut, $\frac{1}{4}$ "		8
55604	403	Screw, #10		4
55605	404	Formica, 1" x $10\frac{1}{2}$ "		1
55606	405	Formica, 1" x $2\frac{3}{4}$ "		1
55607	406	Screw, #5	REP	16
55608	407	Faceplate, $2\frac{3}{4}$ " x $1\frac{1}{2}$ ", audio		1
55609	408, 409	Rack rails, EIA standard		2
55610	410	Aluminum angle, $48\frac{1}{2}$ "		1
55611	411	Steel, $9\frac{3}{4}$ x 48 x $1/8$ "		1
55612	412	Insulate mat, 9 x 46"		1







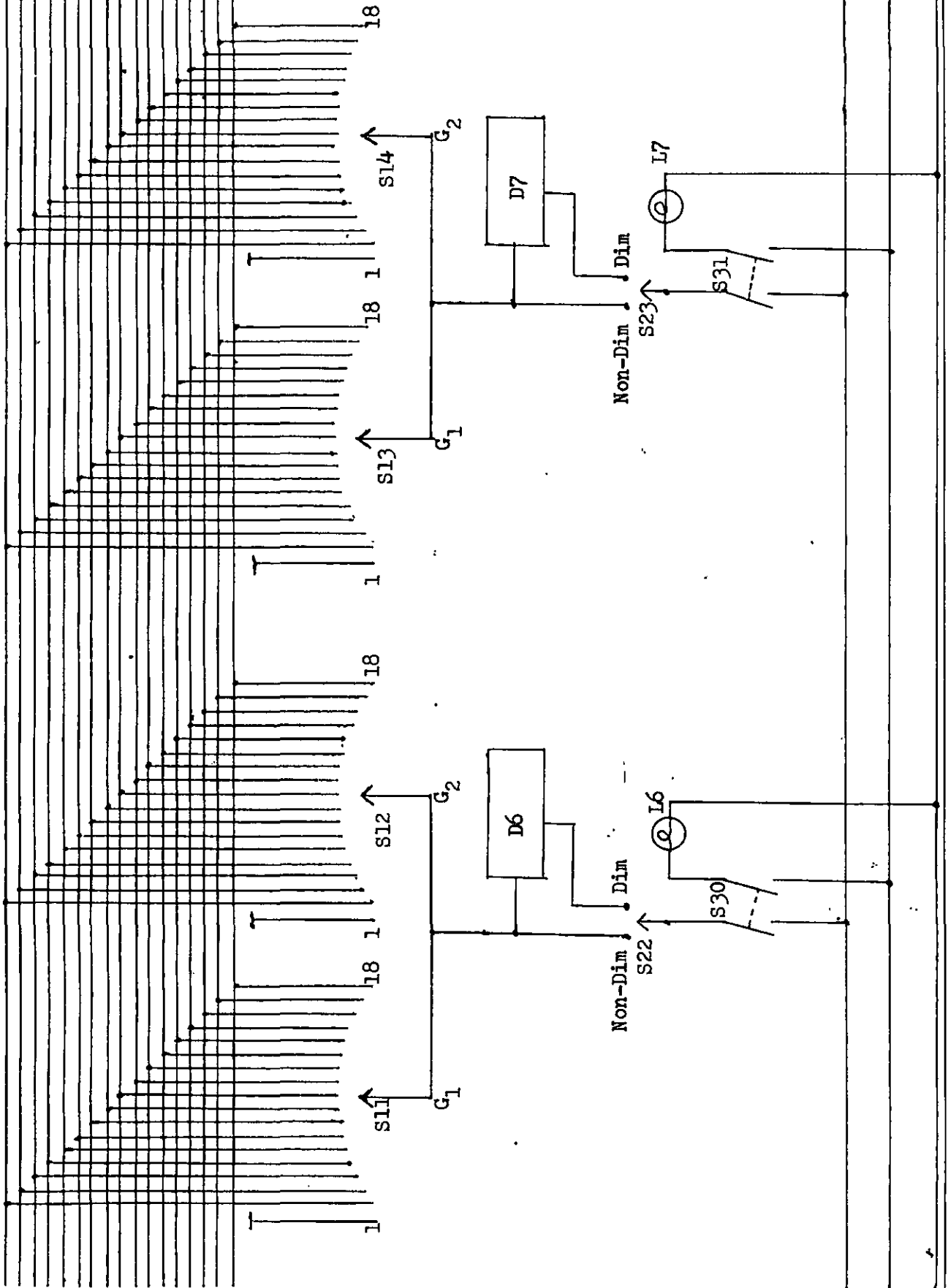
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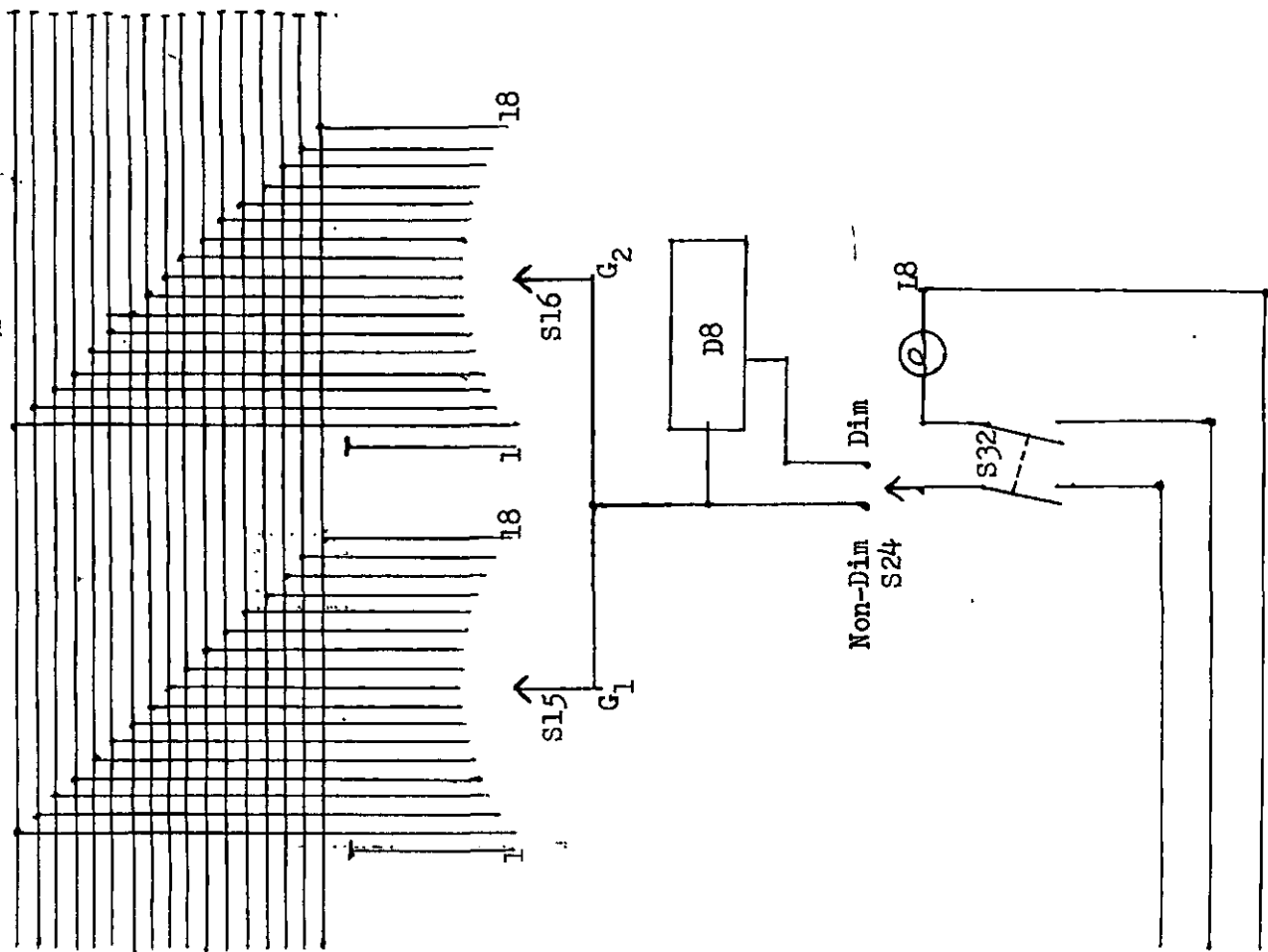
NOT USED

C

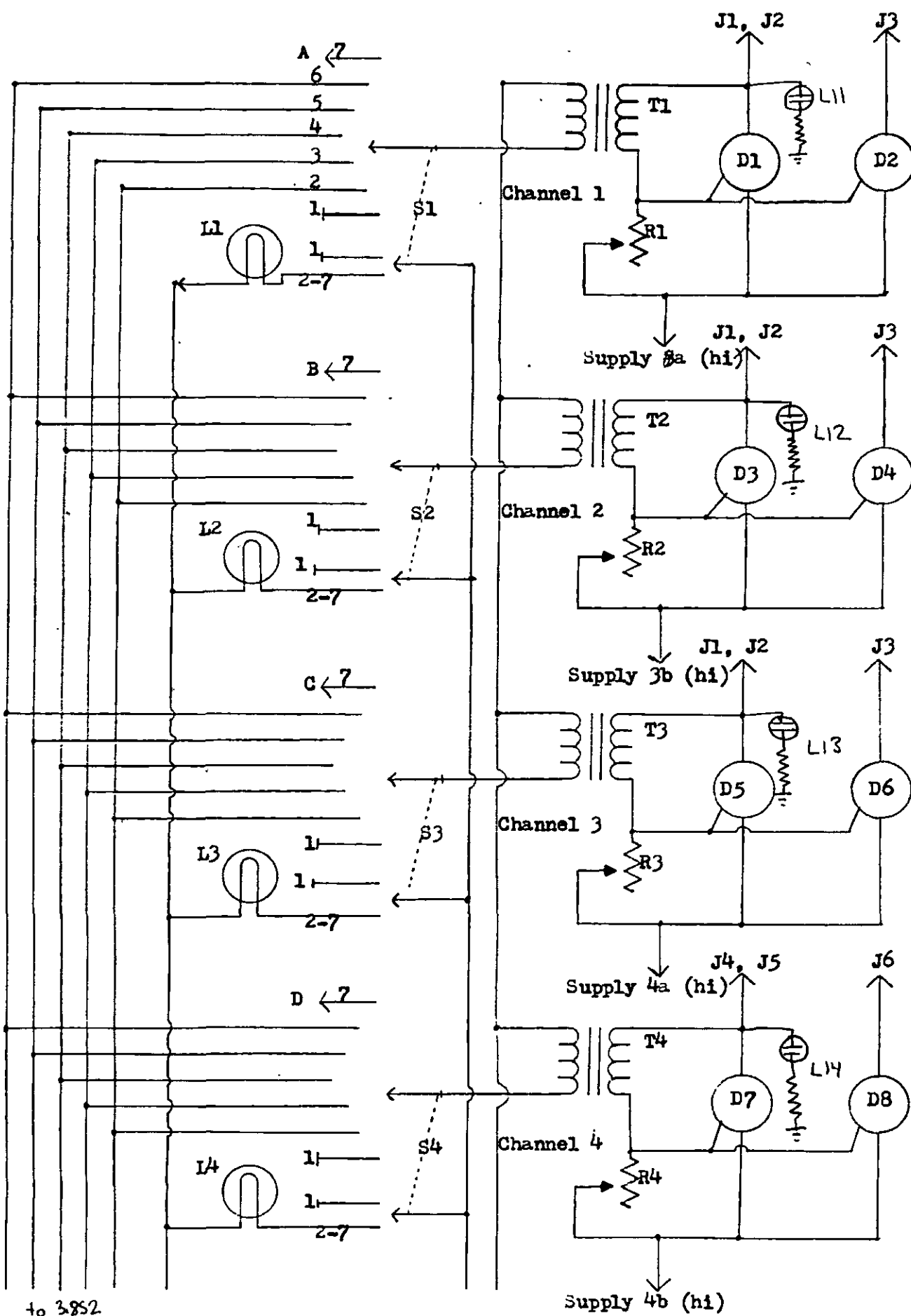
0X

3.784





<u>ELECTRONICS</u>				
46900	D1 - D8	Dimmer, prepackaged, 600 watt	61- 2699	8
46901	J1 - J17	Jack, 4-pin, male, chassis mt.	274- 206	17
46902	J18	Jack, twist- lock, female, chassis		1
46903	L1 - L8	Lamp, bayonet panel assembly, red		8
46904	L9	Lamp, bayonet panel assembly, green		1
46905	S1 - S16	Switch, wafer, 18 pos		16
46906	S17 - S24	Switch, toggle, DPDT		8
46907	S25 - S32	Switch, toggle, DPST, 20 amp		8
46908	S33	Switch, toggle, DPST, 20 amp		1
46909	T1	Transformer, 6.3V, 1.0 A	273- 050	1



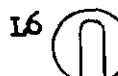
to 3.8S1

E ← 7

F ← 7

1
1
2-7

S5

1
1
2-7

S6

G
H
dimmer circo.

X1

hi mid lo



F1

S7

S8

S9

S10

S11

S12

S13

A

B

C

D

E

F

J4, J5

J6

T5

L15

D9

D10

R5

Supply 5a (hi)

J4, J5

J6

T6

L16

D11

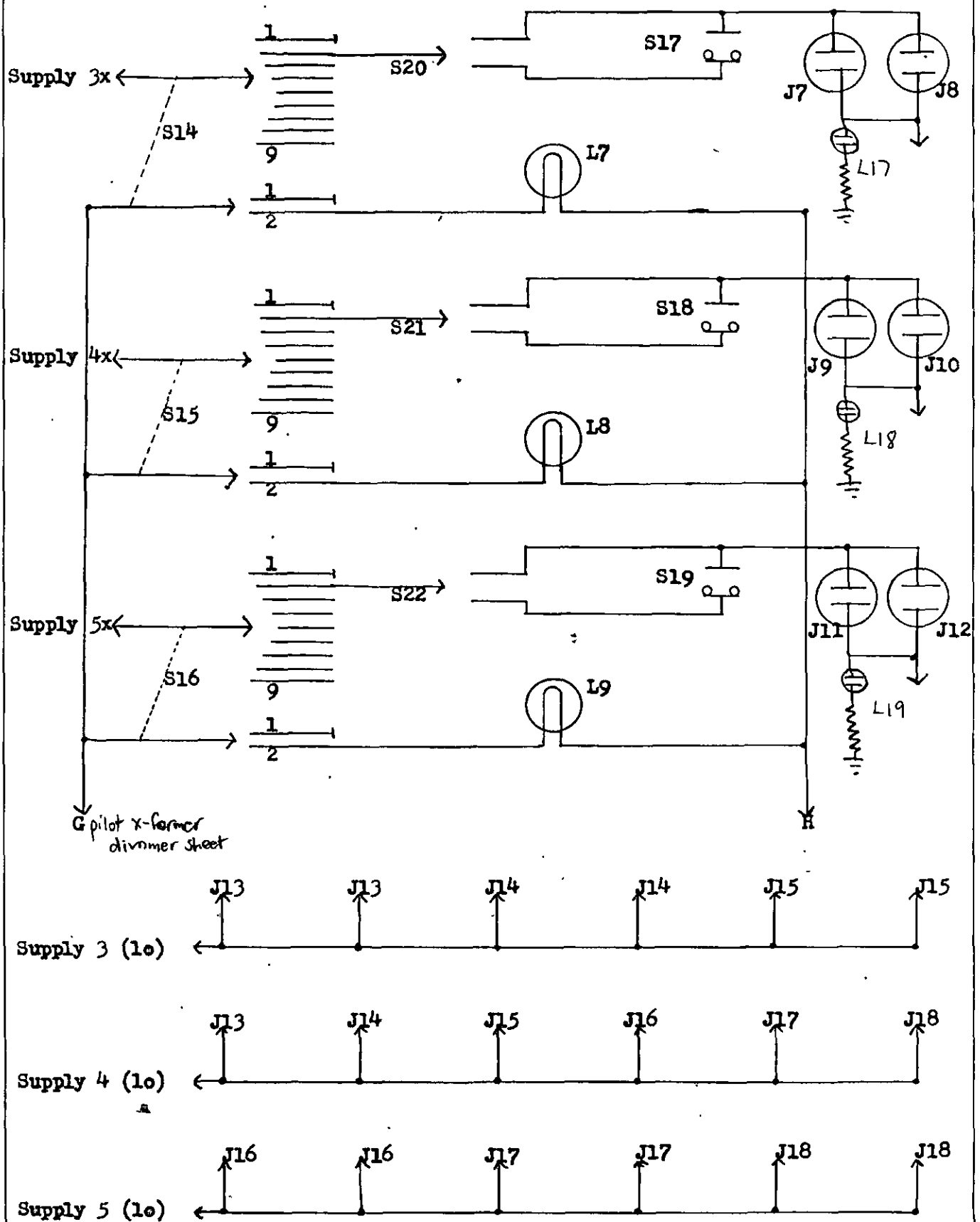
D12

R6

Supply 5b (hi)

T7

Sub supply 1



<u>ELECTRONICS</u>					
46100	D1 - D12	Triac, 6-amp, 400 v	276-1000	12	
46101	J1 - J18	Jack, 4-pin, chassis mt., female	274-206	18	
46102	L1 - L9	Lamp, bayonet, panel assembly, red		9	
46103	L10	Lamp, bayonet panel assembly, green		1	
46104	P1	Plug, miniature, male	274-286	1	
46105	R1 - R7	Resistor, variable, 100K, 10T		7	
46106	S1 - S6 S14 - S16	Switch, wafer, 9 pos, 2-pole		9	
46107	S7 - S13 S17 - S19	Switch, momentary, SPST, NO		10	
46108	S20 - S22	Switch, toggle, SPST		3	
46109	T1 - T6	Transformer, 12.6v, 1.2 a		6	
46110	T7	Transformer, 6.3v, 300ma		1	
46111	X1	Crossover network, 3-way, prepack		1	
46112	L11 - L19	Lamp, neon assembly		9	
46113	not shown	Nylon mounting assemblies		12	
46114	not shown	Triac mounting bolts/hardware		12	

POSITIVE

CH: 1 (triac 1) | — CH: 3 (triac 5)
 CH: 2 (triac 3) | — X
 J1

CH: 1 (triac 1) | — CH: 3 (triac 5)
 CH: 2 (triac 3) | — X
 J2

CH: 1 (triac 2) | — CH: 3 (triac 6)
 CH: 2 (triac 4) | — X
 J3

CH: 4 (triac 7) | — CH: 6 (triac 11)
 CH: 5 (triac 9) | — X
 J4

CH: 4 (triac 7) | — CH: 6 (triac 11)
 CH: 5 (triac 9) | — X
 J5

CH: 4 (triac 8) | — CH: 6 (triac 12)
 CH: 5 (triac 10) | — X
 J6

COMMON

CH: 1 (supply 3) | — CH: 3 (supply 4)
 CH: 2 (supply 3) | — X
 J13

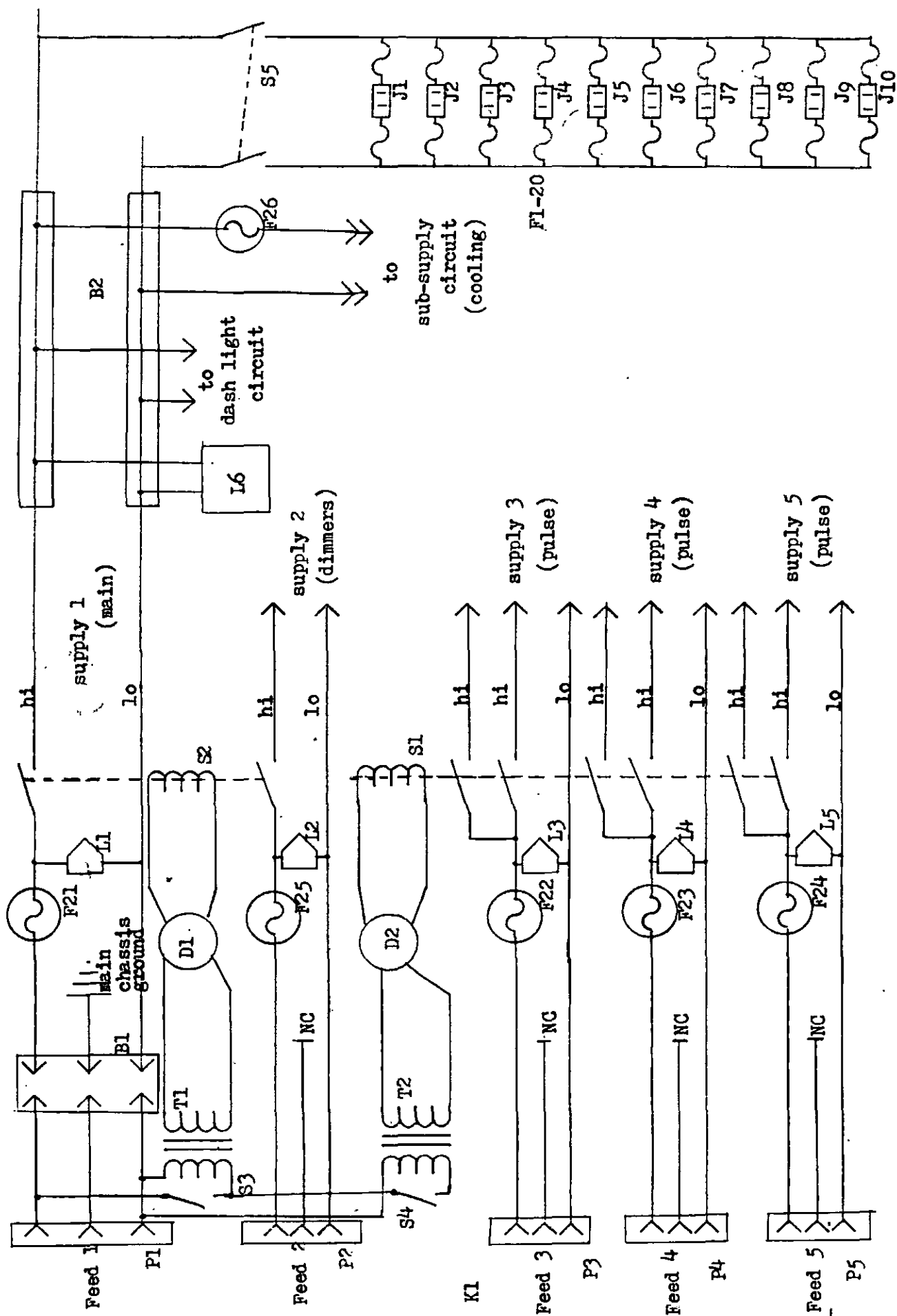
CH: 1 (supply 3) | — CH: 3 (supply 4)
 CH: 2 (supply 3) | — X
 J14

CH: 1 (supply 3) | — CH: 3 (supply 4)
 CH: 2 (supply 3) | — X
 J15

CH: 4 (supply 4) | — CH: 6 (supply 5)
 CH: 5 (supply 5) | — X
 J16

CH: 4 (supply 4) | — CH: 6 (supply 5)
 CH: 5 (supply 5) | — X
 J17

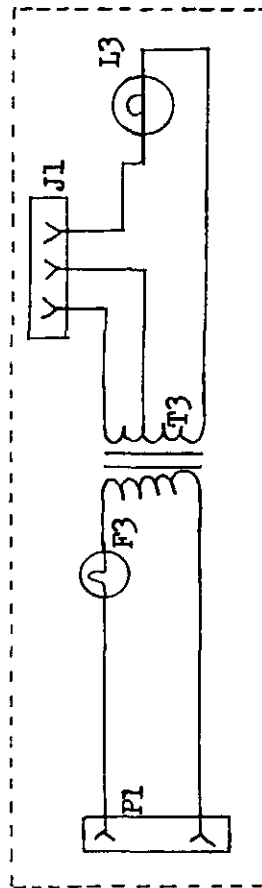
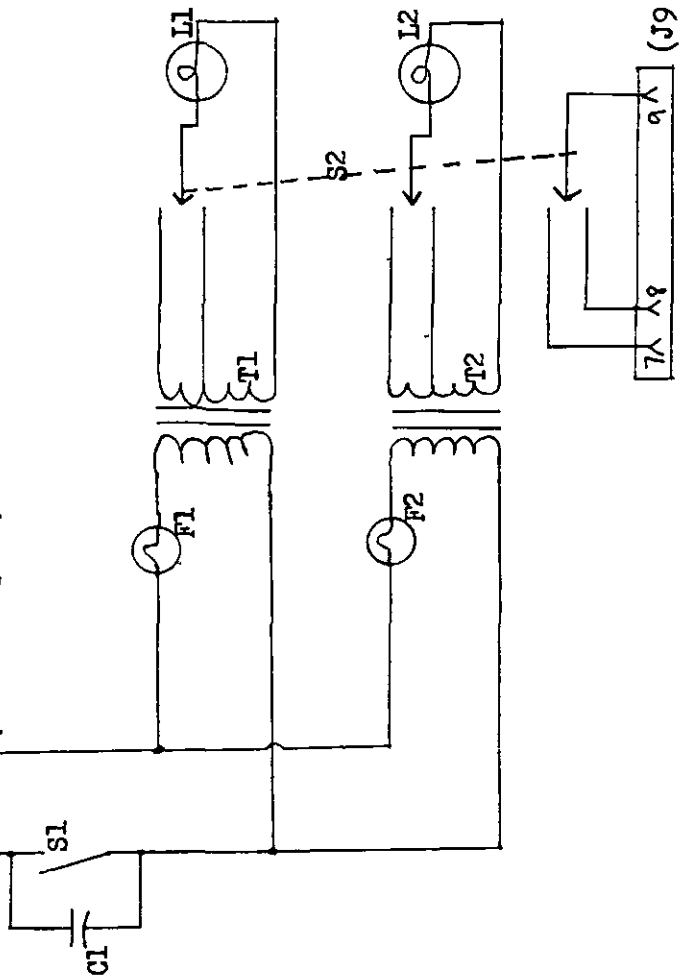
CH: 4 (supply 4) | — CH: 6 (supply 5)
 CH: 5 (supply 5) | — X
 J18



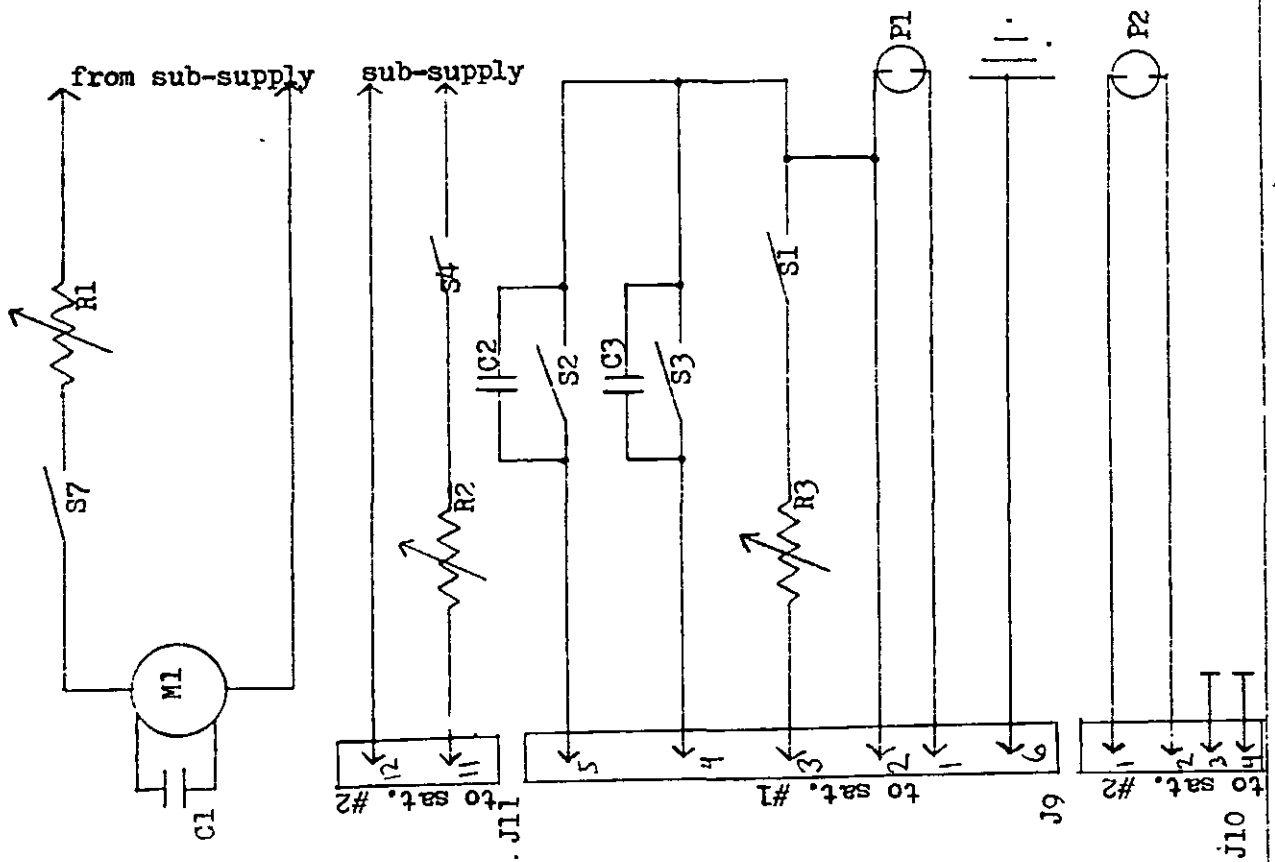
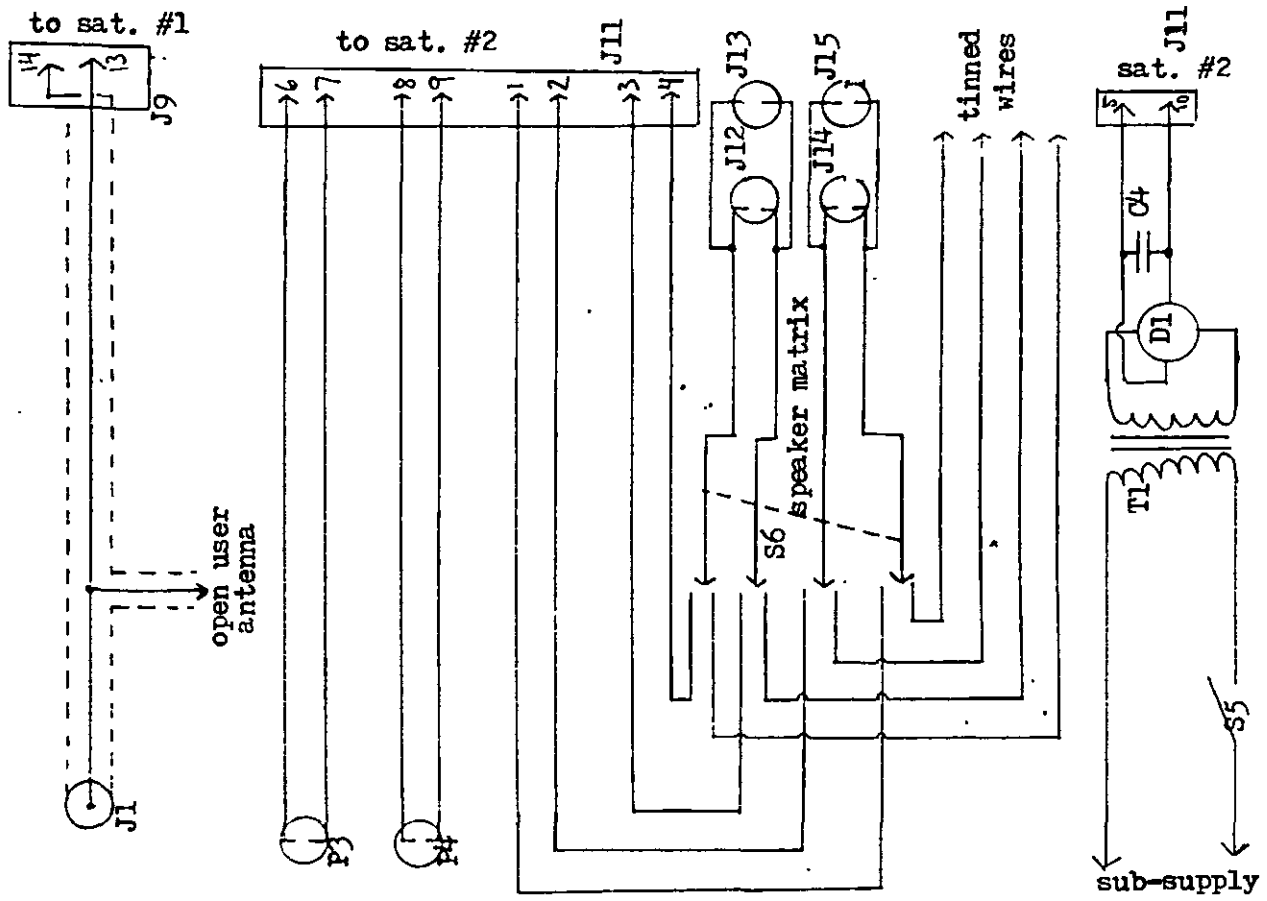
		<u>ELECTRONICS</u>		
46500	B1	Barrier strip, 6 terminal	TRW 28F715	1
46501	B2	Barrier strip, 9 terminal		2
46502	D1 - D2	Diode, full wave bridge, 1.4A		2
46503	F1 - F20	Fuse holder, AGC, chassis		20
46504	F21 - F24	Fuse holder, EON, block		4
46505	F25	Fuse holder, 13/32"		1
46506	F26	Fuse holder, AGC, block		1
46507	J1 - J10	Jack, edison, female		10
46508	L1 - L5	Lamp assembly, neon		5
46509	P1 - P5	Plug, 20 amp, edison		5
46510	S1	Switch, 90 amp, relay		1
46511	S2	Switch, 60 amp, relay		1
46512	S3	Switch, 3 amp, keyed		1
46513	S4	Switch, toggle, SPST		1
46514	S5	Switch, 20 amp, DPDT		1
46515	T1	Transformer, 28V, 1.0 A		1
46516	T2	Transformer, 30V, 1.5 A		1
46517	K1	Cable, 12 guage, 15 conductor		1
46518	L6	Lamp assembly, tubular w/switch		1
46519	not shown	Bolts, nylon		3

From main

power schematic
(dash lt. pwr.)



<u>ELECTRONICS</u>				
46600	C1	Capacitor, .01 MFD, 200 V		1
46601	F1 - F3	Fuse holder, inline		3
46602	J1	Jack, 6- pin, female, inline		1
46603	L1 - L3	Lamp socket, bayonet		3
46604	P1	Plug, edison		1
46605	S1	Switch, wafer, 2 pole		1
46606	S2	Switch, wafer, 3 pole		1
46607	T1 - T3	Transformer, 12.6 V, @ 1.0 A		3



<u>ELECTRONICS</u>					
48800	C1	Capacitor, fixed, electrolytic			1
48801	C2, C3	Capacitor, fixed, ceramic, .01MFD			2
48802	C4	Capacitor, electrolytic, 1000 MFD			1
48803	D1	Diode, full wave bridge, 2 Amp			1
48804	J1	Jack, RF, female, chassis mt.			1
48805	J10	Jack, 4- pin, female, chassis mt.	Cannon		1
48806	J11	Jack, 12- pin, female chassis mt.	Cannon		1
48807	J12 - J15	Jack, 3- pin, female, chassis mt.	Cannon		4
48808	J9	Jack, 15- pin, female, chassis mt.			1
48809	M1	Motor, 1/20 HP			1
48810	P1, P2	Plug, edison, male			2
48811	P3, P4	Plug, 2- pin, male			2
48812	R1	Rheostat, 100 Watt			1
48813	R2, R3	Rheostat, 25 Watt			2
48814	S1, S4, S5, S7	Switch, toggle, SPST			4
48815	S2, S3	Switch, rocker, DPDT	275- 691		2
48816	S6	Switch, knife, DP4T			1
48817	T1	Transformer, 12.6v @ 2 Amp			1

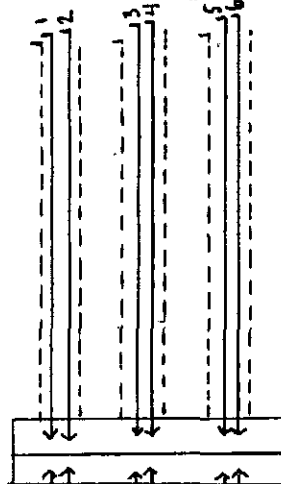
LED VU Meters (2 channels)

((TBA))

Delcon

<u>ELECTRONICS</u>				
46200	C1,C2	Capacitor, disc, .01 MFD	272-131	4
46201	C3,C5,C6	Capacitor, printed circuit, .22MFD	272-1070	6
46202	C4	Capacitor, elect., 10 MFD	272-952	2
46203	C7	Capacitor, 1000 MFD, 25 volt		1
46204	CR1,CR2	1N914/1N4148 Diodes	276-1122	4
46205	DL ₁	Diode, full wave bridge		1
46206	LED1-8	Light Emitting Diode	276-042	16
46207	R1-R8,R28	Resistor, 470 ohm, $\frac{1}{4}$ watt, 5%	271-1300	18
46208	R9	Resistor, 4.7K ohm, $\frac{1}{4}$ watt, 5%	271-1300	2
46209	R10,11,14,17, 18,20,21	Resistor, 270 ohm, $\frac{1}{4}$ watt, 5%	271-1300	14
46210	R12,13,15,16, 19,22,23	Resistor, 2.2K ohm, $\frac{1}{4}$ watt, 5%	271-1300	14
46211	R24,29	Resistor, 10K ohm, $\frac{1}{4}$ watt, 5%	271-1300	4
46212	R25	Resistor, 1K ohm, $\frac{1}{4}$ watt, 5%	271-1300	2
46213	R26,27,30,31, 34,35,36,37	Resistor, 100K ohm, $\frac{1}{4}$ watt, 5%	271-1300	16
46214	R32	Resistor, 27K ohm, $\frac{1}{4}$ watt, 5%	271-1300	2
46215	R33	Resistor, 33K ohm, $\frac{1}{4}$ watt, 5%	271-1300	2
46216	R38	Resistor, 100H ohm, $\frac{1}{4}$ watt, 5% trim	271-1300	2
46217	R39	Resistor, 1MEg ohm, $\frac{1}{4}$ watt, 5%	271-1300	2
46218	S1	Switch, wafer, 7 pole, 3 deck		1
46219	T1	Transformer, 12 6v, .3 amp		1
46220	Z1,Z2	IC, quad op-amp 324		2
46221	Z3	IC, comparator, 339		4
46222	A16	LED cable extender		2
46223	A17	Printed circuit card	277-116	2

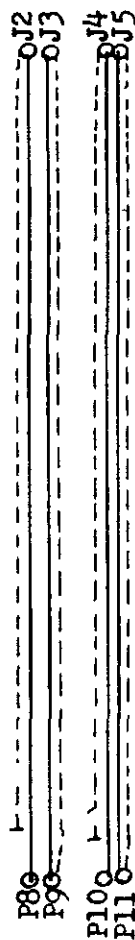
internal tapco



P2
P3
P4
P5
P6
P7
to mixer #2

P1 J1

main chassis



mixer #2

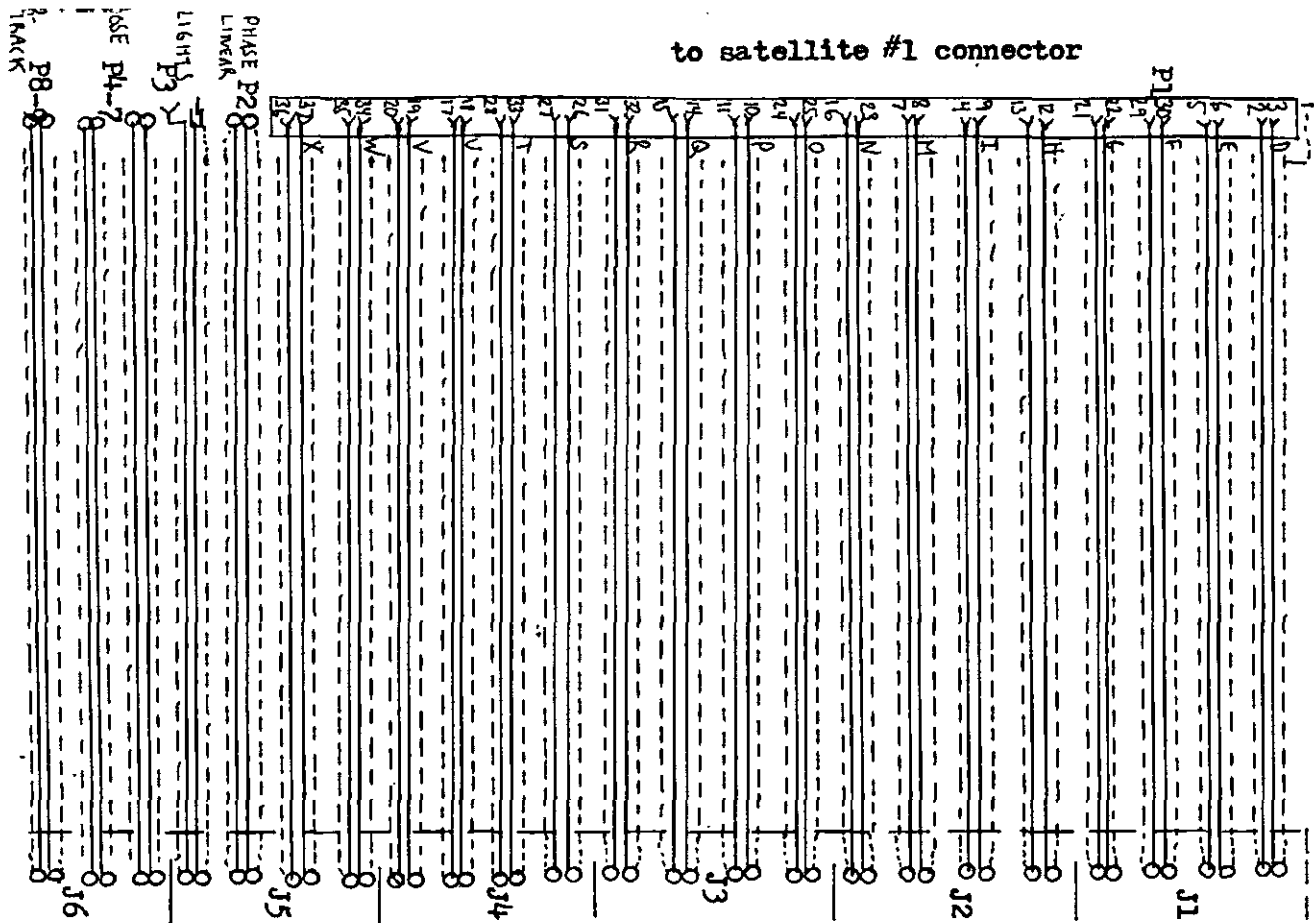


mixer #2
gnd. terminal

main patch
panel ground

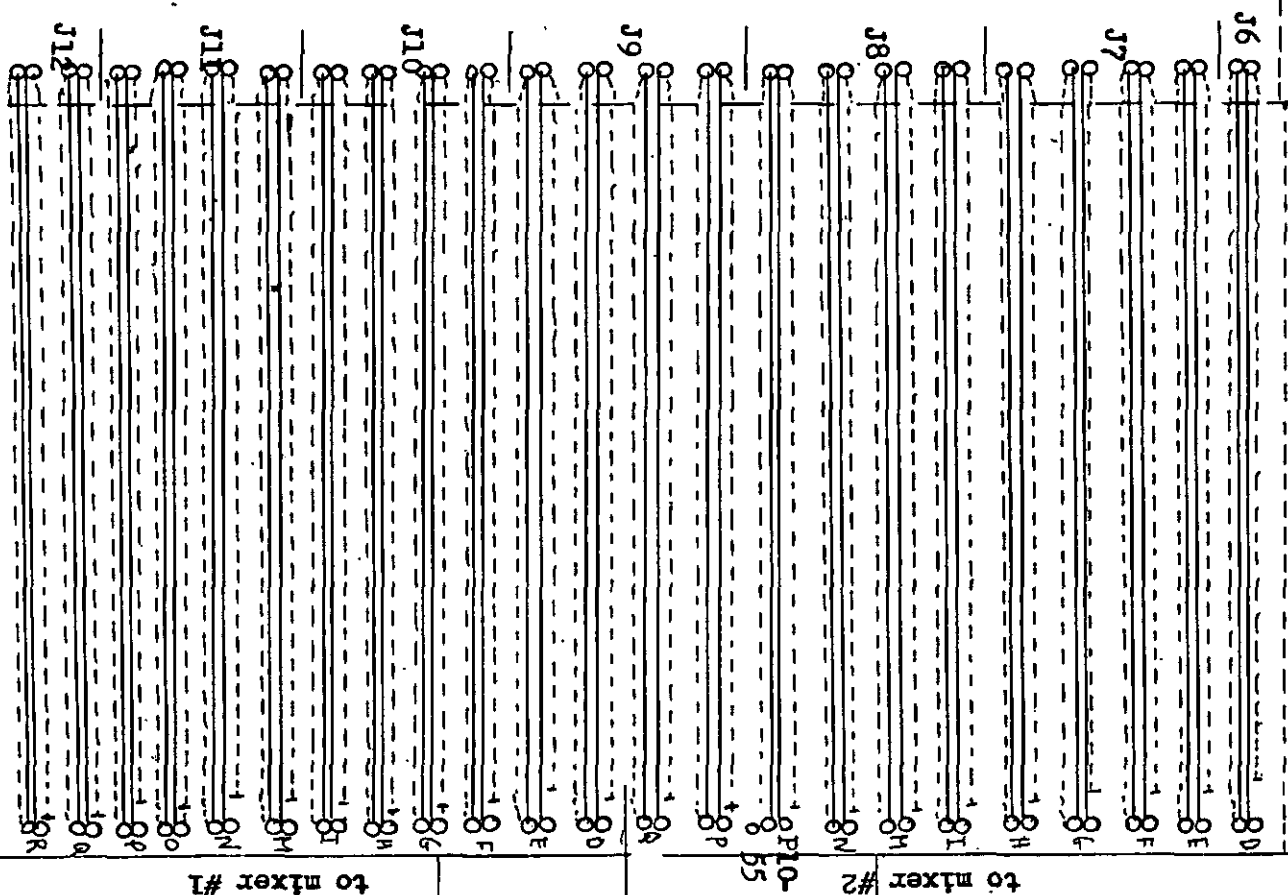
<u>ELECTRONICS</u>				
44900	J1	Jack, 6- pin, inline	Cannon	1
44901	P1	Plug, 6- pin, inline	Cannon	1
44902	P2 - P7	Plug, RCA, male		6
44903	P8 - P11	Plug, $\frac{1}{4}$ ", male		4
44904	J2 - J5	Jack, $\frac{1}{4}$ ", female, chassis mt.		4

to satellite #1 connector



patch panel

SINCE
POINT
GROUND

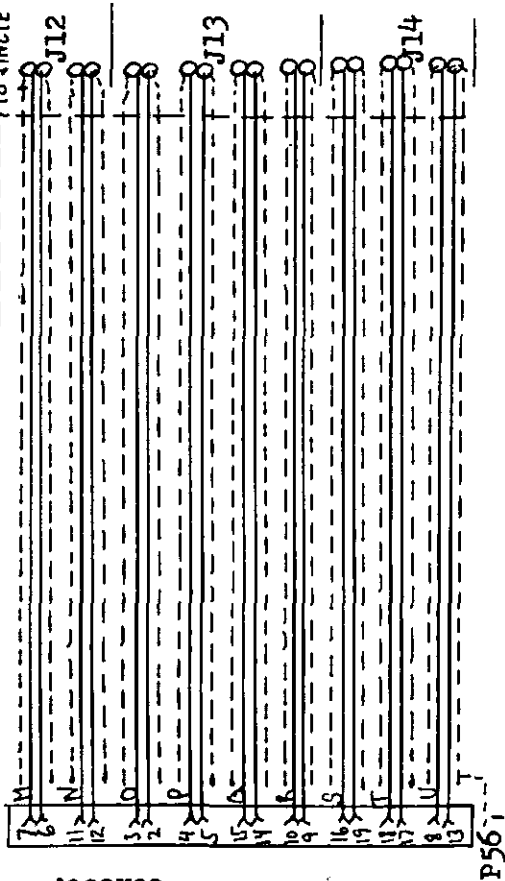


#2 2x1x2 07

95

1# 10X1W 07

to satellite #2 connect.



patch panel

<u>ELECTRONICS</u>				
48900	P1	Plug, 37 pin, female chassis	cannon	1
48901	P2	Plug, RCA assembly	pioneer	1
48902	P3	Plug, mini, male		1
48903	P4 - P55	Plug, RCA, male		52
48904	P56	Plug, 19 pin, female chassis	cannon	1
48905	J1 - J14	Jack, RCA, female, octal	276- 370	14

MIXER #1 -- CABLE HARNESS

<u>CABLE</u>	<u>TERMINATION</u>	<u>DESTINATION</u>
D.	1 IN	Patch Panel
E.	2 IN	Patch Panel
F.	3 IN	Patch Panel
G.	4 IN	Patch Panel
H.	5 IN	Patch Panel
I.	6 IN	Patch Panel
M.	7 IN	Patch Panel
N.	8 IN	Patch Panel
O.	EFF SEND	Patch Panel
P.	EFF REC	Patch Panel
Q.	1 OUT	Patch Panel
R.	2 OUT	Patch Panel
S.	CTL ROOM OUT	CTL Room Amp
T.	STUDIO OUT	STUDIO Amp

Red or grounded wire is channel "R"

MIXER #2 -- CABLE HARNESS

<u>CABLE</u>	<u>TERMINATION</u>	<u>DESTINATION</u>
D.	A & B IN	Patch Panel
E.	C & D IN	Patch Panel
F.	E & F IN	Patch Panel
G.	1 & 2 OUT	Patch Panel
H.	3 & 4 OUT	Patch Panel
I.	1- Send/ Rec	Patch Panel
M.	1 & 2 Aux.	Patch Panel
N.	3 & 4 Aux.	Patch Panel
O.	2- Send/ Rec	Patch Panel
P.	3- Send/ Rec	Patch Panel
Q.	4- Send/ Rec	Patch Panel
R.	A & B CUE	Mixer #3- 1 & 2 IN
S.	C & D CUE	Mixer #3- 3 & 4 IN
T.	E & F CUE	Mixer #3--5 & 6 IN
U.	A & B MIC	MIC Input 1 & 2
V.	C & D MIC	MIC Input 3 & 4
W.	E & F MIC	-

Red or grounded wire is channel "R"

AUDIO POWER STRIP ASSIGNMENTS

1. Satellite #1 Power
2. Satellite #2 Power
3. LED Indicators Power
4. Mixer #1 Power
5. Mixer #2 Power
6. 4-Split Small Power Taps
7. Tapco Mixer
8. Radio/Amp Pulse Banks Power
9. Heathkit Power Amp Power
10. Phase Linear Power Amp Power

MAIN UNIT FUSE SCHEDULE

FEED-INS

Feed #1	20A NON Buss
Feed #2	20A NON Buss
Feed #3	20A NON Buss
Feed #4	20A NON Buss
Feed #5	20A NON Buss
Feed #6	12A NON Buss

SUB-SUPPLY

Cooling/Aux.	1.2A
--------------	------

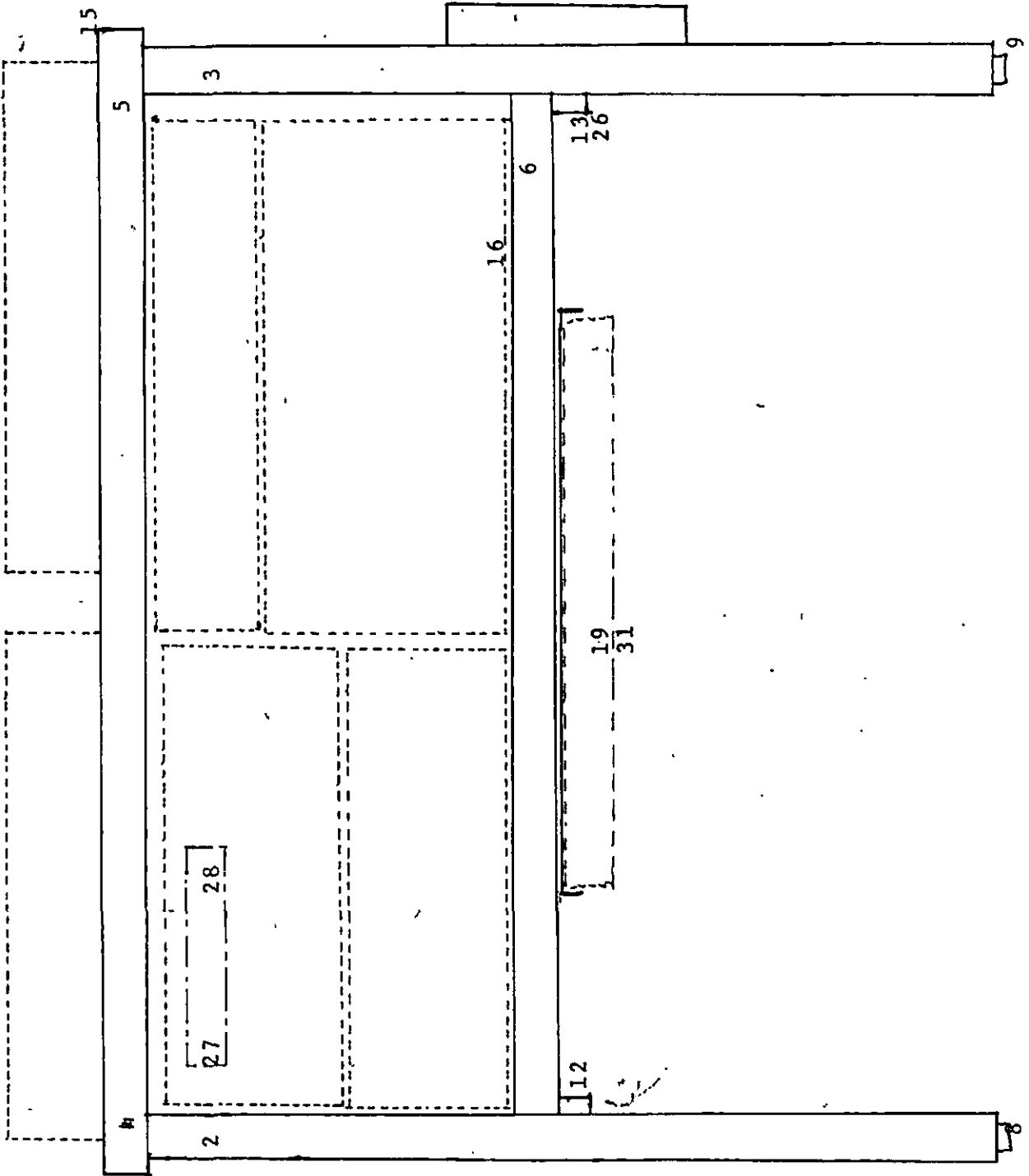
AUDIO STRIP

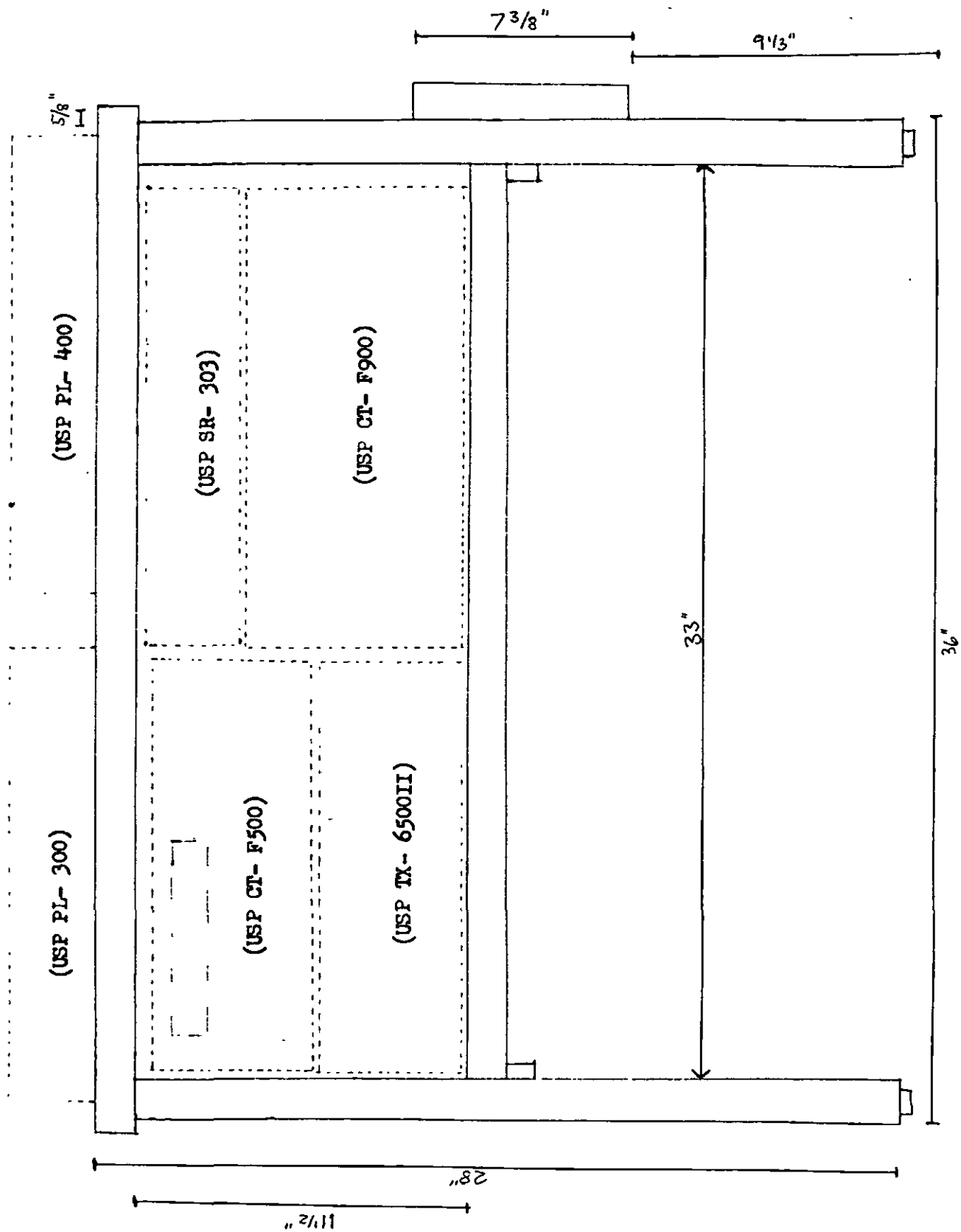
Pos. #1	3.5A
Pos. #2	4.0A
Pos. #3	.033A
Pos. #4	.20A
Pos. #5	.30A
Pos. #6	.30A
Pos. #7	.10A
Pos. #8	.10A
Pos. #9	2.5A
Pos. #10	10.A (2)

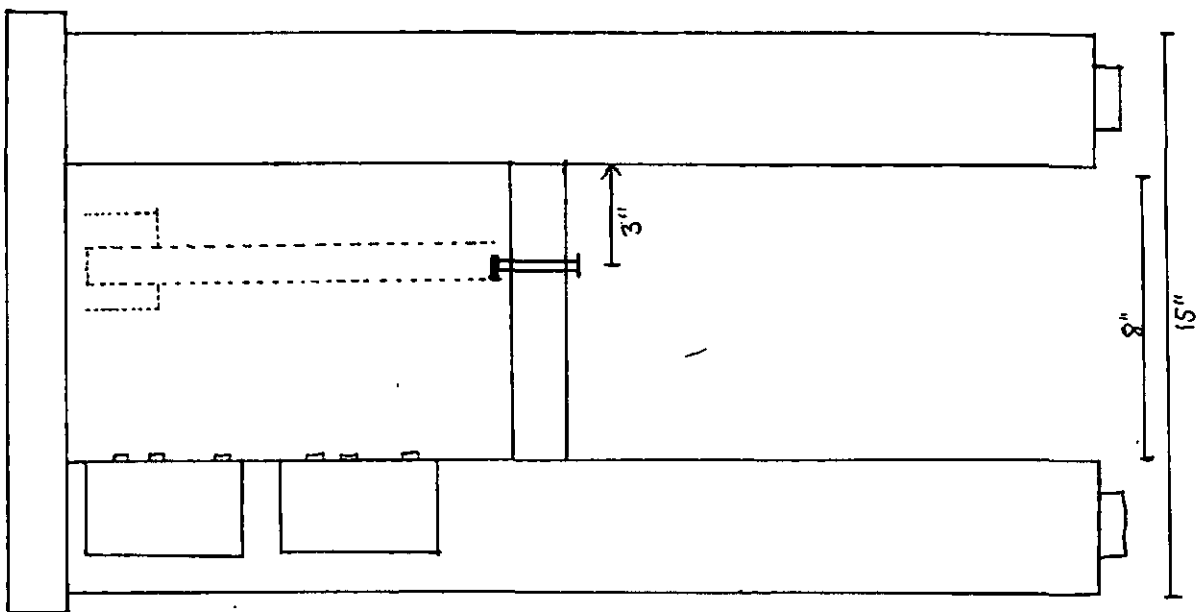
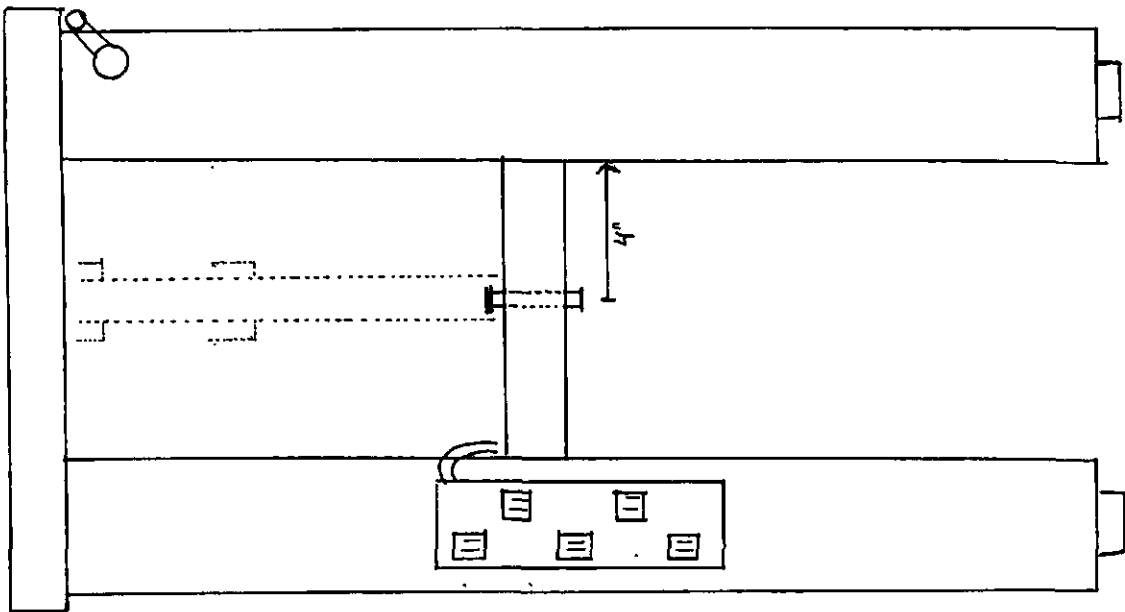
DASHLIGHTS

Dashlights	.3A (3)
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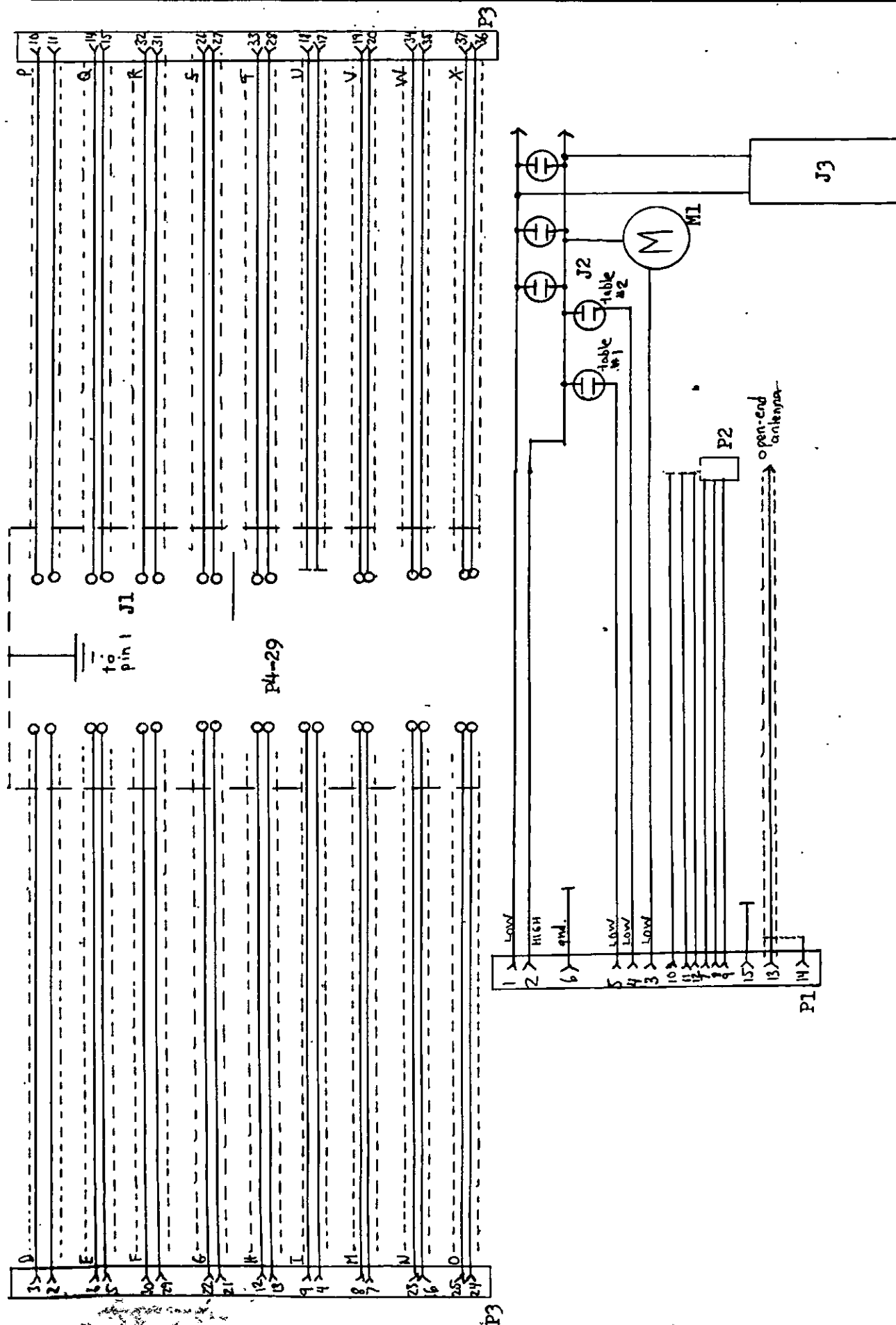
42-381 50 SHEETS 5 SQUARE
42-382 100 SHEETS 5 SQUARE
42-383 100 SHEETS 5 SQUARE







<u>CHASSIS</u>					
56123	38	Screw, #2, 2"			1
56124	-	Spiral wrap, 5' black, 3/8"			1
56125	-	Bolt, 3 $\frac{1}{2}$ "			2
56126	-	Nut, $\frac{1}{4}$ "			8
56127	-	Washer, flat, 1"			8



<u>ELECTRONICS</u>					
56200	J1	Jack, RCA, female, octal			1
56201	J2	Jack, 5 outlet gnded strip			1
56202	J3	Jack, 6 outlet fused strip			1
56203	K1	Cable, 26 pair shielded, 5 feet		Beldon	1
56204	M1	Motor, muffin fan			1
56205	P1	Plug, 15-pin, male			1
56206	P2	Plug, 6-pin, male			1
56207	P3	Plug, 37-pin, male			1
56208	P4 - P29	Plug, RCA, male			26
56209	not shown	Preamp, phono, Herald			2

SATELLITE #1 CABLE CONNECTIONS

<u>LETTER</u>	<u>WIRE COLOR</u>	<u>SHIELD COLOR</u>	<u>CHANNEL</u>	<u>PIN.##</u>
U.	Blue	Blue	Left	18
U.	Yellow	Blue	Right	17
V.	White	Blue	Left	19
V.	Red	Blue	Right	20
W.	Blue	Red	Left	34
W.	Black	Red	Right	35
X.	Orange	Red	Left	37
X.	Red	Red	Right	36
-	Red	Blue	Left	-
-	Brown	Brown	Right	-
-	Blue	Blue	Left	-
-	Green	Blue	Right	-
-	Blue	Blue	Left	-
-	White	Blue	Right	-
-	Green	Green	Left	-
-	White	Green	Right	-
-	Brown	Blue	Left	-
-	Green	Blue	Right	-
-	Orange	Blue	Left	-
-	Green 1.	Blue	Right	-

SATELLITE #1 -- POWER CABLE CONNECTIONS
-15 pin-

<u>PIN #</u>	<u>FUNCTION</u>	<u>COLOR</u>
1.	AC- main	
2.	AC- main	
3.	AC- fan	black
4.	AC- table #2	blue
5.	AC- table #1	brown
6.	Ground	red
7.	Panel light	red
8.	Panel light	black
9.	Panel light	green
10.	Spare	brown
11.	Spare	blue
12.	Spare	white
13.	Antenna	
14.	Antenna ground	
15.	Open	

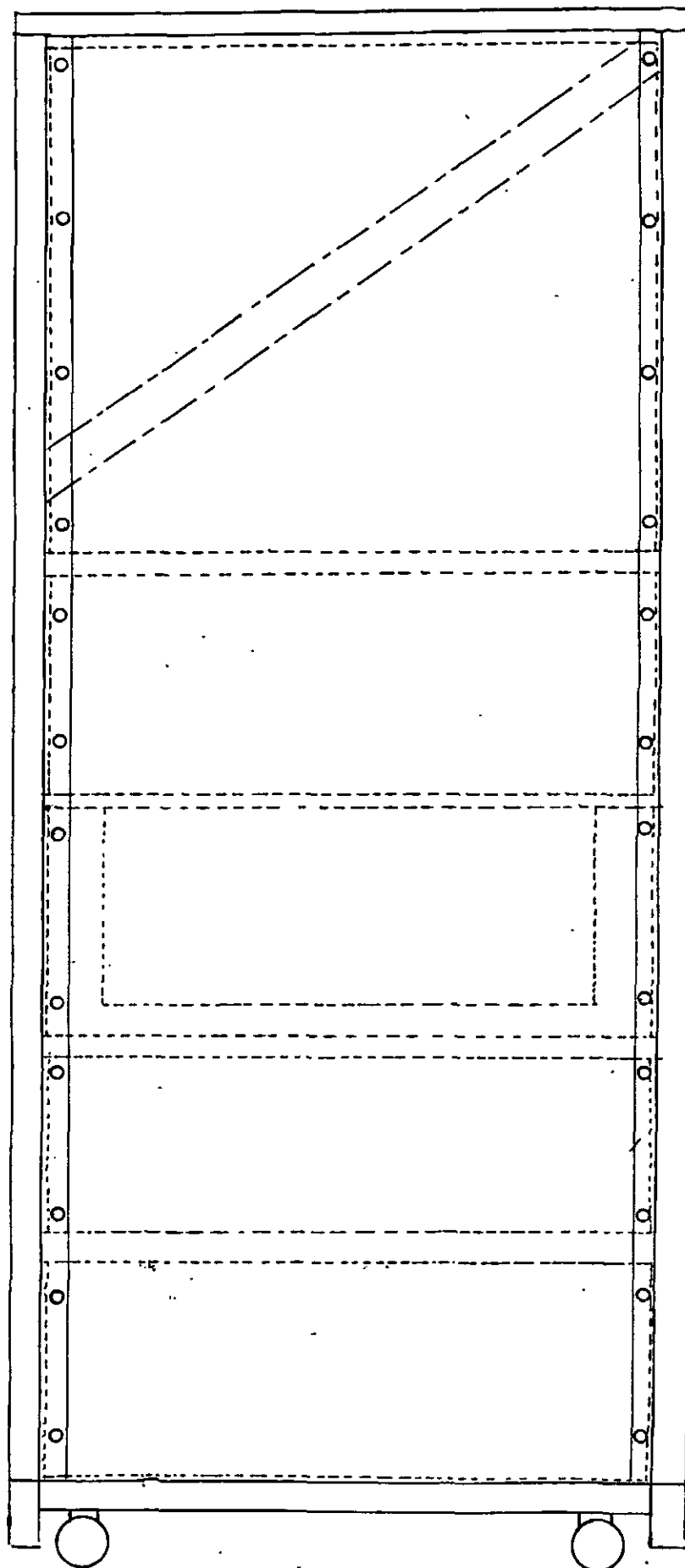
SATELLITE #1 -- PACKAGE CABLE ASSIGNMENT

<u>CABLE</u>	<u>PACKAGE</u>
D.	USP TX-6500II OUT
E.	USP CT- F500 IN
F.	USP CT- F500 OUT
G.	USP CT- F900 IN
H.	USP CT- F900 OUT
I.	USP SR- 303 IN
M.	USP SR- 303 OUT
N.	USP PL- 300 OUT
O.	USP PL- 400 OUT
P.	LINK 1
Q.	LINK 2
R.	LINK 3
S.	LINK 4
T.	DBX 224 AMP IN
U.	Spare
V.	DBX 224 REC OUT
W.	DBX 224 AMP OUT
X.	DBX 224 REC IN

SATELLITE #1 FUSE SCHEDULE

Audio Power Strip	10 Amps
-------------------	---------

25 SHEETS 1 SQUARE
25 SHEETS 1 SQUARE
25 SHEETS 1 SQUARE
25 SHEETS 1 SQUARE



5.1M2

20⁵/₈"

48¹/₂"

(USP RT- 1050)

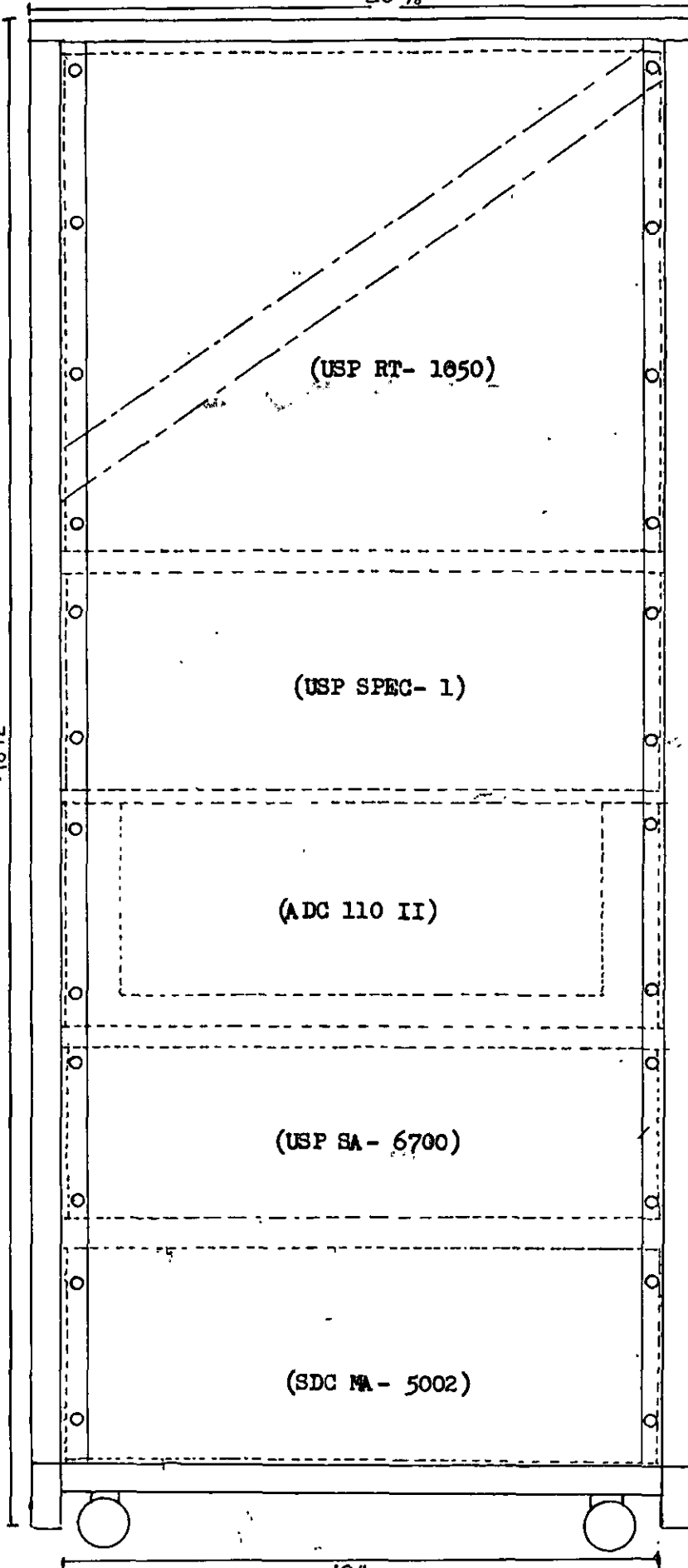
(USP SPEC- 1)

(ADC 110 II)

(USP SA - 6700)

(SDC MA - 5002)

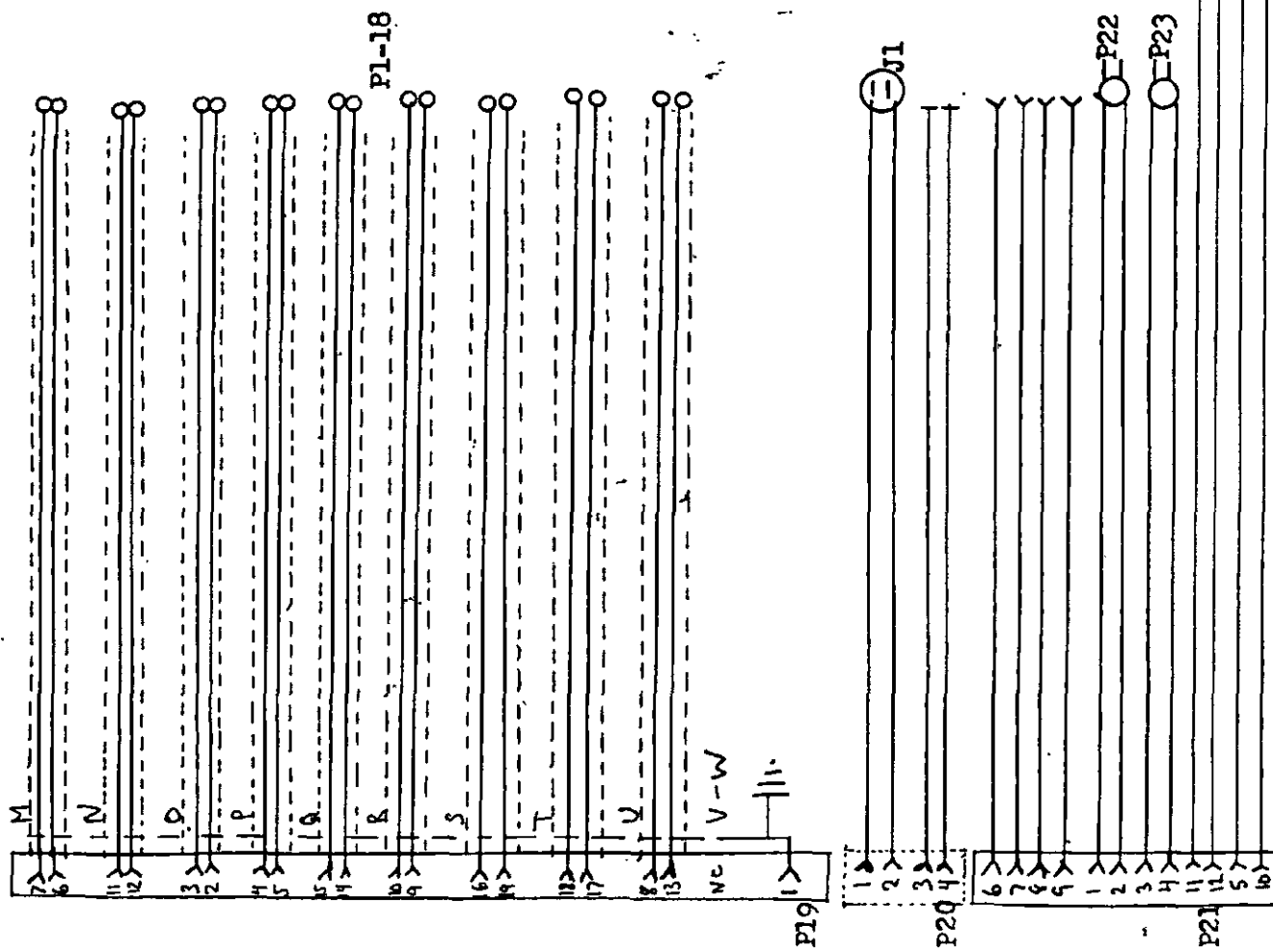
19"



<u>CHASSIS</u>					
57100	1, 2	Side, wooden			2
57101	3	Top, formica, black			1
57102	4	Bottom, steel, black			1
57103	5, 6	Castors, plastic, black	REP		4
57104	7, 8	Rails, rack mounting	REP		4
57105	9	Brace, stabalizer			1
57106		Bolts, hex			22
57107	10	Angle irons, 20"	REP		4
57108		Outlet box			1
57109		Outlet cover, screw			1
57110	11	Bracket, ADC LI package mounting			1
57111		Bracket, fan mounting, 19"			1
57112	12	Nut mounting, package mounting	REP		24
57113	12	Washer, package mounting	REP		24
57114	12	Bolt, package mounting	REP		24
57115	12	Plate, recessed, package mounting	REP		24
57116		Bolt, 1/8" x 2", fan mounting			2
57117		Nut, 1/8", fan mounting			2
57118		Washer, #8, fan mounting			2
57119		Foam, 2x2x1, fan mounting			2
57120		Washer, rubber, fan mounting			2
57121		Screw, #8, fan mounting			2
57122		Screw, #5, outlet box mounting			2

<u>CHASSIS</u>					
57123		Screw, #20			1
57124		Screen, fine, fans, 20x6			1
57125	13	Ears, L, RT- 1050 package mtg			1
57126	13	Ears, R, RT- 1050 package mtg			1
57127	14	Ears, L, SA- 6700 package mtg			1
57128	14	Ears, R, SA- 6700 package mtg			1
57129	Spiral wrap	Spiral wrap, 5' clear, 3/8"		278- 1638	1
57130		Fan blades, 4- blade			2

42-381 80 SHEETS 3 SQUARE
42-382 100 SHEETS 3 SQUARE
42-383 100 SHEETS 3 SQUARE
NATIONAL
MADE IN U.S.A.



<u>ELECTRONICS</u>					
57200	J1	Jack, outlet duplex			1
57201	J2	Jack, outlet single			1
57202	K1	Cable, 9-pair shielded, 5 feet			1
57203	M1 - M2	Motor, fan			2
57204	P1 - P18	Plug, RCA, male	. 274- 321		18
57205	P19	Plug, 19- pin, male	Cannon		1
57206	P20	Plug, 4- pin, male	Cannon		1
57207	P21	Plug, 12- pin, male	Cannon		1
57208	P22 - P23	Plug, banana, dual			2
57209	P24	Plug, edison, male			1

SATELLITE #2 CABLE CONNECTORS

<u>LETTER</u>	<u>WIRE COLOR</u>	<u>SHIELD COLOR</u>	<u>CHANNEL</u>	<u>PIN #</u>
M.	Blue	Blue	Left	7
M.	Red	Blue	Right	6
N.	Green	Blue	Left ↗	11
N.	Red	Blue	Right ↘	12
O.	Yellow	Blue	Left	3
O.	Red	Blue	Right	2
P.	Brown	Blue	Left	4
P.	Red	Blue	Right	5
Q.	White	Green	Left	15
Q.	Black	Green	Right	14
R.	Black	Blue	Left	10
R.	Green	Blue	Right	9
S.	Red	Blue	Left	16
S.	White	Blue	Right	19
T.	Orange	Blue	Left	18
T.	Black	Blue	Right	17
U.	Brown	Blue	Left	8
U.	Black	Blue	Right	13
V.	Blue	Red	Left	-
V.	Black	Red	Right	-
W.	Yellow	Green	Left	-
W.	Black	Green	Right	-

SATELLITE #2 CABLE CONNECTIONS
-12 pin-

<u>Pin #</u>	<u>Function</u>	<u>Color</u>
1.	Major power amp left, neg	
2.	Major power amp left, pos	
3.	Major power amp right, pos	
4.	Major power amp right, neg	
5.	Relay pos	
6.	Minor power amp right, pos	brown
7.	Minor power amp right, neg	green
8.	Minor power amp left, neg	blue
9.	Minor power amp left, pos	white
10.	Relay neg	
11.	Fan pos	
12.	Fan neg	

SATELLITE #2 CABLE CONNECTIONS
4 pin-

<u>Pin #</u>	<u>Function</u>
1.	AC pos
2.	AC neg
3.	Open
4.	Open

SATELLITE #2 -- PACKAGE CABLE ASSIGNMENT

<u>CABLE</u>	<u>PACKAGE</u>
M.	USP RT- 1050 IN
N.	USP RT- 1050 OUT
O.	USP SPEC- 1 IN
P.	USP SPEC- 1 OUT
Q.	USP SA- 6700 IN
R.	ADC 110 II IN
S.	ADC 110 II OUT
T.	Usable
U.	Usable

SATELLITE #2 FUSE SCHEDULE

No Harness Fuses Utilized

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 1

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
44900		1			5.75	5.75
44901		1			5.75	5.75
44902		6	0.21	1.26	0.21	1.26
44903		4			1.25	5.00
44904		4			1.25	5.00
46100		12	1.25	15.00	1.25	15.00
46101		18			1.10	19.80
46102		9			1.89	17.01
46103		1			1.89	1.89
46104		1			0.89	0.89
46105		1			8.25	57.75
46106		9			4.80	43.20
46107		10	0.52	5.23	0.52	5.23
46108		3			1.25	3.75
46109		6	3.98	23.88	3.98	23.88
46110		1			4.50	4.50
46111		1	9.44	9.44	9.44	9.44
46112		9	1.15	6.90	1.15	6.90
46113		12	0.60	7.20	0.60	7.20
46114		12	0.25	3.00	0.25	3.00
PAGE TOTALS				71.91		242.20

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 2

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
46200		4	0.21	0.82	0.21	0.82
46201		6	0.47	2.80	0.47	2.80
46202		2	0.62	1.24	0.62	1.24
46203		1	1.67	1.67	1.67	1.67
46204		4	0.26	1.04	0.26	1.04
46205		1	1.25	1.25	1.25	1.25
46206		16	0.47	7.48	0.47	7.48
46207		18	0.09	1.64	0.09	1.64
46208		2	0.21	0.41	0.21	0.41
46209		14	0.09	1.23	0.09	1.23
46210		14	0.09	1.23	0.09	0.09
46211		4	0.10	0.41	0.10	0.41
46212		2	0.10	0.41	0.10	0.41
46213		16	0.10	1.64	0.10	1.64
46214		2	0.20	0.41	0.20	0.41
46215		2	0.20	0.41	0.20	0.41
46216		2	0.51	1.02	0.51	1.02
46217		2	0.20	0.41	0.20	0.41
46218		1			4.50	4.50
46219		1	3.35	3.35	3.35	3.35
46220		4	1.56	6.24	1.56	6.24
46221		2	1.35	2.70	1.35	2.70
46222		2			1.00	1.00
46223		2	4.19	8.38	4.19	8.38
PAGE TOTALS				46.19		50.55

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 3

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
46500		1			2.10	2.10
46501		2	2.39	4.78	2.39	4.78
46502		2	1.25	2.50	1.25	2.50
46503		20			0.50	10.00
46504		4	0.50	2.00	0.50	2.00
46505		1			2.50	2.50
46506		1	0.25	0.25	0.25	0.25
46507		10			0.80	8.00
46508		5	1.15	4.60	1.15	5.75
46509		5			1.25	6.25
46510		1	7.50	7.50	23.50	23.50
46511		1	5.20	5.20	18.75	18.75
46512		1	4.50	4.50	4.50	4.50
46513		1			1.60	1.60
46514		1			1.75	1.75
46515		1	9.42	9.42	9.42	9.42
46516		1	6.29	6.29	6.29	6.29
46517		1	15.00	15.00	15.00	15.00
46518		1			3.50	3.50
46519		3	0.65	1.95	0.65	1.95
PAGE TOTALS				63.99		130.39

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 4

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
46600		1	0.41	0.41	0.41	0.41
46601		3			0.25	0.75
46602		1			1.19	1.19
46603		3			0.80	2.40
46604		1			0.60	0.60
46605		1			1.65	1.65
46606		1			1.80	1.80
46607		3			3.25	9.75
46900		8			4.93	39.44
46901		17			1.25	21.25
46902		1			1.80	1.80
46903		8			1.65	13.20
46904		1			1.65	1.65
46905		16			5.15	82.40
46906		8			1.60	12.80
46907		8			1.60	12.80
46908		1			3.25	3.25
46909		1			3.15	3.15
PAGE TOTALS				0.41		210.33

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 5

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
48800		1			2.45	2.45
48801		2	0.41	0.82	0.41	0.82
48802		1			2.50	2.50
48803		1	1.25	1.25	1.25	1.25
48804		1			1.35	1.35
48805		1			2.45	2.45
48806		1			5.65	5.65
48807		1			3.15	9.45
48808		1			3.75	3.75
48809		1			28.50	28.50
48810		2			1.10	2.20
48811		2			1.25	2.50
48812		N/U				
48813		N/U				
48814		4			1.60	6.40
48815		2	2.62	5.23	2.62	5.23
48816		N/U				
48817		N/U				
PAGE TOTALS				7.30		74.50

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 6

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
48900		1			18.05	18.05
48901		1			2.45	2.45
48902		1			0.65	0.65
48903		52	0.21	10.92	0.21	10.92
48904		1			9.15	9.15
48905		14	1.25	17.50	1.25	17.50
55100		2			0.10	0.20
55101		3			0.65	1.95
55102		1			5.25	5.25
55103		1			3.90	3.90
55104		1			0.95	0.95
55105		1			4.80	4.80
55106		1			4.80	4.80
55107		4	1.45	2.90	1.45	5.80
55108		4			0.80	3.20
55109		1			2.25	2.25
55110		6			0.80	4.80
PAGE TOTALS				31.32		96.62

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 7

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
55111		1			6.25	6.25
55112		4			5.25	21.00
55113		16			0.04	0.64
55114		16			0.02	0.32
55115		16			0.04	0.64
55116		16			0.02	0.32
55117		4			0.05	0.20
55118		4			0.02	0.08
55119		1			2.90	2.90
55120		1			1.85	1.85
55121		1			2.40	2.40
55122		2			3.65	3.65
55123		50	0.02	1.05	0.02	1.05
55200		1			2.10	2.10
55201		1			1.60	1.60
55202		1			1.60	1.60
55203		1			1.70	1.70
55204		1			2.80	2.80
PAGE TOTALS				1.05		51.10

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
55205		1			0.80	0.80
55206		10			0.04	0.40
55207		6			0.03	0.18
55208		1			3.80	3.80
55209		1			1.60	1.60
55210		1			9.25	9.25
55300		1			1.60	1.60
55301		1			2.10	2.10
55302		1			1.60	1.60
55303		1			1.70	1.70
55304		1			2.80	2.80
55305		1			0.02	0.02
55306		1			0.80	0.80
55307		1			0.04	0.04
55308		1			0.04	0.04
55309		1			0.02	0.02
55310		1			9.25	9.25
PAGE TOTALS				0.00		36.00

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PAGE 9

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
55400		1			1.75	1.75
55401		2			3.80	7.60
55402		8	0.47	3.76	0.47	3.76
55403		1	1.05	1.05	1.05	1.05
55404		4	1.25	5.00	1.25	5.00
55405		12	0.05	0.60	0.05	0.60
55406		2			4.50	9.00
55407		2	1.65	3.30	1.65	3.30
PAGE TOTALS				13.71		32.06

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
55500		2			2.15	4.30
55501		1			5.65	5.65
55502		2			1.25	2.50
55503		8			1.50	12.00
55504		1			1.75	1.75
55505		20			0.60	12.00
55506		18			0.04	0.72
55507		18			0.02	0.36
55508		2			0.50	1.00
55600		1			1.25	1.25
55601		1	1.25	1.25	1.25	1.25
55602		8	0.18	3.24	0.18	3.24
55603		8	0.12	0.96	0.12	0.96
55604		4			0.02	0.08
55605		1			1.25	1.25
55606		1			1.60	1.60
55607		16			0.02	0.32
55608		1			1.10	1.10
PAGE TOTALS				5.45		51.33

P A R T S C O S T / P R I C E L I S T

PGE 11

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
55609		2			7.35	14.70
55610		1			2.12	2.12
55611		1			5.50	5.50
55612		1			0.80	0.80
56100		4			1.00	4.00
56101		1			3.00	3.00
56102		1			2.80	2.80
56103		4	0.39	1.56	0.39	1.56
56104		4			0.12	0.48
56105		1	1.56	1.56	1.56	1.56
56106		1	1.56	1.56	1.56	1.56
56107		1			1.25	1.25
56108		1			1.50	1.50
56109		1			4.95	4.95
56110		1	0.42	0.42	0.42	0.42
PAGE TOTALS				5.10		46.20

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PGE 12

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
56111		1	0.42	0.42	0.42	0.42
56112		1	0.42	0.42	0.42	0.42
56113		3			0.10	0.30
56114		20			0.01	0.20
56115		4	0.08	0.32	0.08	0.32
56116		8			0.02	0.16
56117		120				0.40
56118		4			0.02	0.08
56119		4			0.02	0.08
56120		4	0.08	0.32	0.08	0.32
56121		4	0.04	0.16	0.04	0.16
56122		1			0.04	0.04
56123		1			0.02	0.02
56124		1	1.15	1.15	1.15	1.15
56125		2	1.85	3.70	1.85	3.70
56126		8	0.08	0.64	0.08	0.64
45127		8	0.08	0.64	0.08	0.64
PAGE TOTALS				7.77		9.05

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
56200		1	1.25	1.25	1.25	1.25
56201		1			16.25	16.25
56202		1			6.05	6.05
56203		1			8.45	8.45
56204		1			18.00	18.00
56205		1			6.10	6.10
56206		1			1.25	1.25
56207		1			18.90	18.90
56208		26	0.21	5.46	0.21	5.46
56209		2	11.41	22.82	11.41	22.82
57100		2*			*	
57101		1 *			*	
57102		1 *			*	
57103		4 *		98.94	*	98.94
57104		4 *			*	
57105		1 *			*	
57106		22 *			*	
57107		4*			*	
PAGE TOTALS				128.47		203.47

C O N T R O L 3

P A R T S C O S T / P R I C E L I S T

PGE 14

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
57108		1	1.05	1.05	1.05	1.05
57109		1	0.20	0.20	0.20	0.20
57110		1	4.25	4.25	4.25	4.25
57111		1			0.25	0.25
57112		24			0.12	2.88
57113		24			0.02	0.48
57114		24			0.08	1.92
57115		24			0.06	1.44
57116		2			0.08	0.16
57117		2			0.02	0.04
57118		2			0.02	0.04
57119		2			0.08	0.16
57120		2			0.06	0.12
57121		2			0.05	0.10
57122		2			0.04	0.08
57123		1			0.05	0.05
57124		1			1.00	1.00
PAGE TOTALS				5.50		14.22

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
57125		1			4.35	4.35
57126		1			4.35	4.35
57127		1			2.85	2.85
57128		1			2.85	2.85
57129		1	1.15	1.15	1.15	1.15
57130		2			2.50	5.00
57200		1	0.40	0.40	0.40	0.40
57201		1			3.75	3.75
57202		1			6.50	6.50
57203		2			8.75	17.50
57204		18	0.21	3.78	0.21	3.78
57205		1			12.75	12.75
57206		1			4.80	4.80
57207		1			9.80	9.80
57208		2			0.24	0.48
57209		1			0.85	0.85
PAGE TOTALS				5.33		81.16

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
58100		1	4.19	4.19	4.19	4.19
58101		1	4.19	4.19	4.19	4.19
58102		1			5.00	5.00
58103		1	2.80	2.80	2.80	2.80
58104		1	12.70	12.70	12.70	12.70
PAGE TOTALS				23.88		28.88

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
STOCK EEG		1	5.20	5.20		
STOCK SOLDER		1	1.04	1.04	1.04	1.04
STOCK SOLDER		1	.93	.93	.93	.93
STOCK HEATSINK COMP		1	1.35	1.35	1.35	1.35
STOCK SOLDER		1	.93	.93	.93	.93
STOCK PAINT		1	1.25	1.25	1.25	1.25
STOCK SOLDER		1	.93	.93	.93	.93
STOCK LAMPS		1	.72	.72	.72	.72
STOCK PAINT		1	.83	.83	.83	.83
STOCK PAINT		1	2.09	2.09	2.09	2.09
STOCK SOLDER-5 LBS		1			17.00	17.00
STOCK WIRE-BAL AUD		150			0.10	15.00
STOCK WIRE-18G ZIP		200			0.07	14.00
STOCK WIRE-HOOKUP		50			0.06	3.00
STOCK WIRE-HOOKUP		30	3.29	3.29	3.29	3.29
STOCK		1				
STOCK		1				
STOCK		1				
STOCK						
PAGE TOTALS				18.56		62.36

		ORIGINAL			REPLACE	
PART #	DESCRIP	QTY	UNIT	EXT	UNIT	EXT
CON	MAIN FUSE	1	0.48	0.48		
CON	DRILL BITS	2	1.03	2.06		
CON	DUAL RCA PLT	1	0.93	0.93		
CON	SAW BLADES	1	2.09	2.09		
CON	IRON TIP/HEAT	1	9.55	9.55		
CON	SCR'S	6	1.25	7.50		
CON	10 WATT RES	1	0.93	0.93		
CON	QUAD RCA PLT	1	2.07	2.07		
CON	ENG NOTEBOOK	1	2.07	2.07		
CON	.01 MFD CAP	1	0.41	0.41		
CON	MOM SWITCHES	5	0.56	2.82		
CON	4 PIN CHASSI	1	1.03	1.03		
CON	QUAD RCA PLT	1	2.07	2.07		
CON	DUAL RCA PLT	1	0.93	0.93		
CON	SCR	1	1.25	1.25		
CON	POTENTIOMETR	1	1.14	1.14		
CON	IRON TIPS	1	3.66	3.66		
CON	TRIAC	3	1.25	3.75		
	PAGE TOTALS			44.74		

		O R I G I N A L			R E P L A C E	
PART #	DESCRIP	QTY	UNIT	EXT	UNIT	EXT
CON	OP-AMP	2	1.57	3.14		
CON	HARDWARE	1	1.04	1.04		
CON	S' 10G WIRE	1	5.50	5.50		
CON	LED'S	4	0.42	1.66		
CON	TRIACS	7	1.60	11.20		
	PAGE TOTALS			22.54		

PART #	DESCRIP	QTY	ORIGINAL		REPLACE	
			UNIT	EXT	UNIT	EXT
41100		1			4.57	4.57
41101		1	4.57	4.57	4.57	4.57
41102		1	4.57	4.57	4.57	4.57
41103		1	7.95	7.95	7.95	7.95
41104		1	1.44	1.44	2.75	2.75
41105		1			8.50	8.50
41106		1			2.65	2.65
41107		2			2.65	5.30
41108		1			1.85	1.85
PAGE TOTALS				18.53		42.71

CONTROL 3
PARTS COST / PRICE LIST
PAGE TOTALS

PGE 21

PAGE #	ORG PRICE	REP PRICE
1	71.91	242.20
2	46.19	50.55
3	63.99	130.39
4	0.41	210.33
5	7.30	74.50
6	31.32	96.62
7	1.05	51.10
8	0.00	36.00
9	13.71	32.06
10	5.45	51.33
11	5.10	46.20
12	7.77	9.05
13	128.47	203.47
14	5.50	14.22
15	5.33	81.16
16	23.88	28.88
17	18.56	62.36
18	44.74	0.00
19	22.54	0.00
20	18.53	42.71
GRAND TOTAL	521.75	1463.13