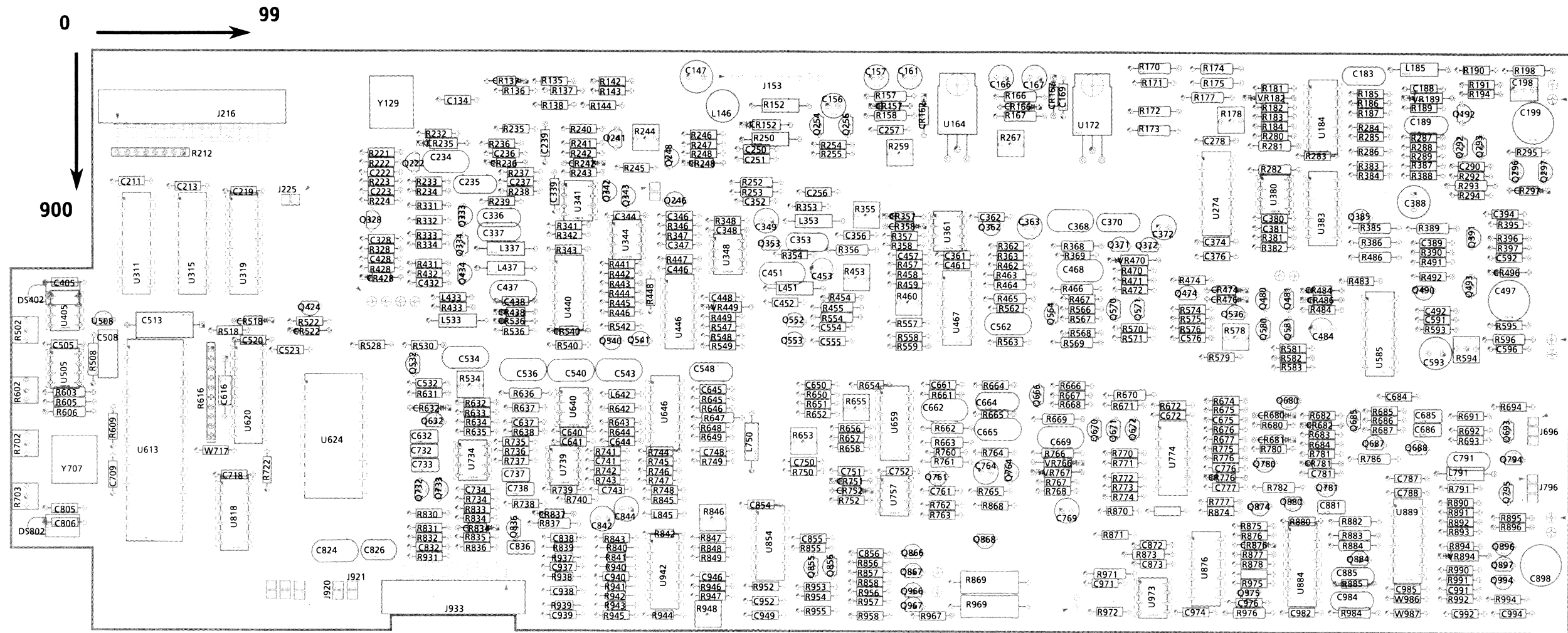


BLOCK DIAGRAM

1720 SERIES

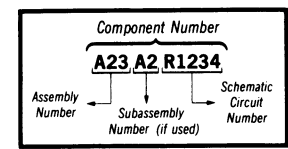
BLOCK DIAGRAM

A3 MAIN ETCHED CIRCUIT BOARD



A3 MAIN ETCHED CIRCUIT BOARD

COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

Static Sensitive Devices
See Maintenance Section

DIAGRAM 1

SCHEMATIC DIAGRAM LOOK-UP CHART

The schematic diagram has an alpha-numeric grid to assist in locating parts within that diagram. The etched circuit boards follow a numbering sequence starting with the lowest number at the upper left corner, as pictured in this manual.

Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location
C183	C3	CR484	H2	Q897	C3	R284	D3	R547	F5	R944	C5
C188	A2	CR486	H2	Q966	G4	R285	D3	R548	F5	R945	C5
C189	C2	CR496	B3	Q967	G4	R286	D2	R549	F4	R946	D5
C198	A2	CR518	F2	Q994	B3	R287	B2	R574	G3	R947	D5
C199	A2	CR522	E2	R135	F2	R288	B2	R575	G3	R948	D5
C239	E2	J216	A1	R137	F2	R289	B3	R576	G3	R952	G4
C290	B3	J920	C5	R170	B1	R292	B2	R578	G3	R953	G5
C349	F5	J921	C5	R171	A1	R293	B3	R579	H3	R954	G4
C380	C1	J933	C4	R172	B1	R294	C3	R581	G3	R955	G5
C381	C1	L185	C3	R173	B1	R295	B2	R582	G3	R956	H4
C388	B2	Q192	C2	R174	A1	R381	G2	R593	B3	R957	G4
C389	D1	Q248	F1	R175	B1	R382	G2	R594	A3	R958	H4
C394	A3	Q292	C2	R177	B1	R383	D2	R595	B3	R969	G4
C446	F4	Q293	B2	R178	B1	R384	D2	R596	A3	R990	B3
C448	F5	Q296	B2	R181	C2	R385	D1	R602	H3	R991	C3
C484	G3	Q297	B2	R182	C2	R386	D1	R702	A1	R992	C4
C492	E4	Q343	F1	R183	D3	R387	C2	R839	C4	R994	A3
C497	A3	Q385	D1	R184	D2	R388	B2	R840	C4	R184	D2
C591	F4	Q391	B2	R185	D2	R389	D1	R841	C4	U274	B1
C593	B3	Q424	F2	R186	D2	R390	D1	R842	C4	U380	C1
C596	A3	Q474	G3	R187	D2	R395	A3	R843	C4	U383	D1
C684	E5	Q480	G2	R189	C3	R396	A3	R846	D4	U446	F4
C838	C4	Q481	G2	R190	A2	R397	B2	R847	D4	U585	F5
C856	G4	Q490	D1	R191	B2	R445	F2	R848	D4	U942	C4
C898	A3	Q493	B3	R194	B2	R448	G2	R849	D4	VR182	C2
C937	C4	Q540	F2	R198	A2	R449	F4	R856	G4	VR189	C2
C938	C5	Q541	G2	R235	E1	R474	G2	R857	H3	VR449	F5
C939	C5	Q576	G3	R245	F1	R483	H2	R858	H4	VR894	C3
C991	C3	Q580	G2	R246	E2	R484	H3	R869	G4		
C992	C4	Q581	G3	R247	F1	R486	D1	R871	G1		
C994	A3	Q855	G5	R248	F2	R491	D1	R878	F1		
CR137	E1	Q856	G5	R280	D3	R492	D1	R894	C4		
CR297	B2	Q866	H4	R281	C2	R502	H4	R896	B4		
CR474	G2	Q867	G4	R282	C1	R522	F2	R937	C4		
CR476	G2	Q896	C3	R283	D3	R542	F1	R938	C5		

Input & Deflection Amplifiers

R939	C5
R940	C4
R941	C5
R942	C5
R943	C5

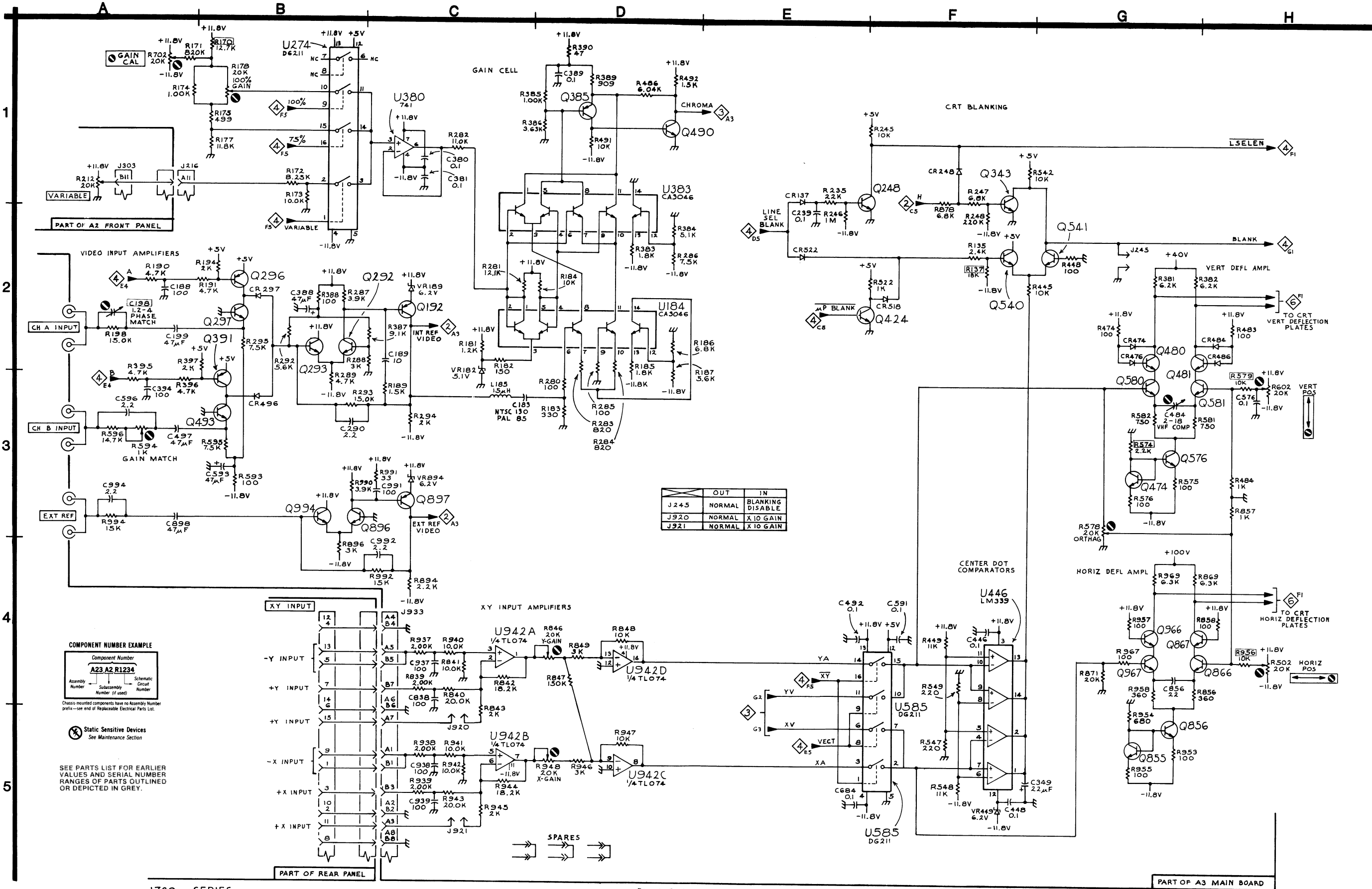
COMPONENT NUMBER EXAMPLE

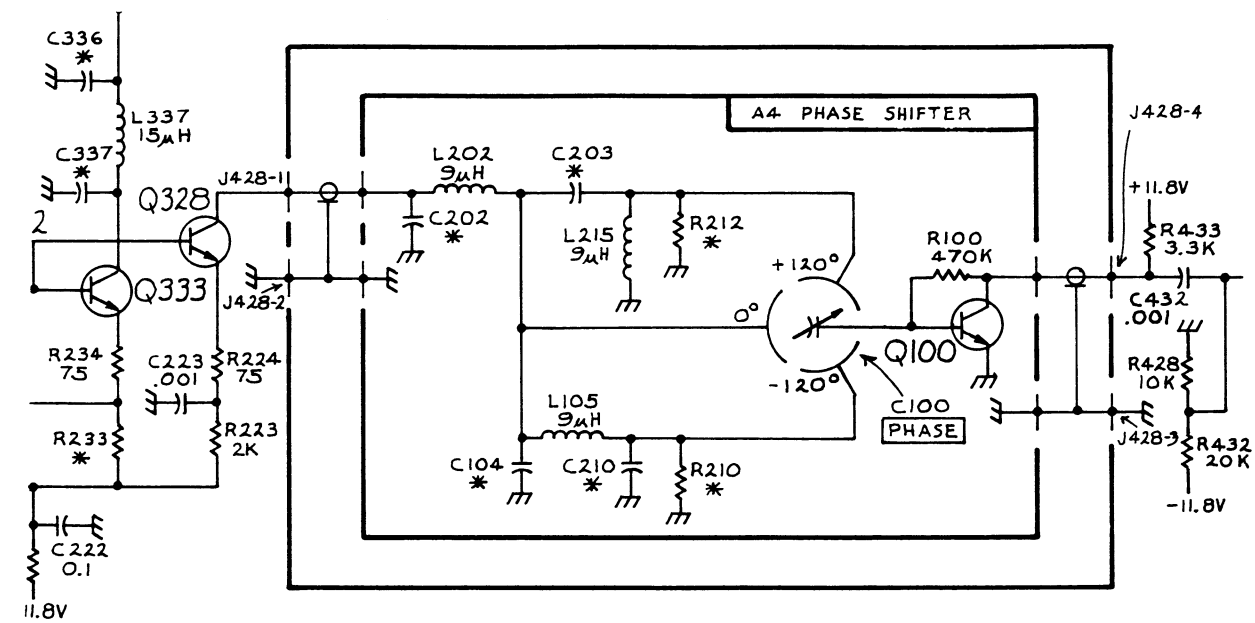
Component Number	A23 A2 R1234
Assembly Number	1234
Subassembly Number (if any)	5678
Schematic Circuit Number	91011

Obsolete components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

Static Sensitive Devices
See Maintenance Section

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.





A4 PHASE SHIFTER

* CIRCUIT NO	NTSC	PAL
C104	.001	020
C202	270	180
C203	150	95
C210	230	214
R210	232	287
R212	348	432

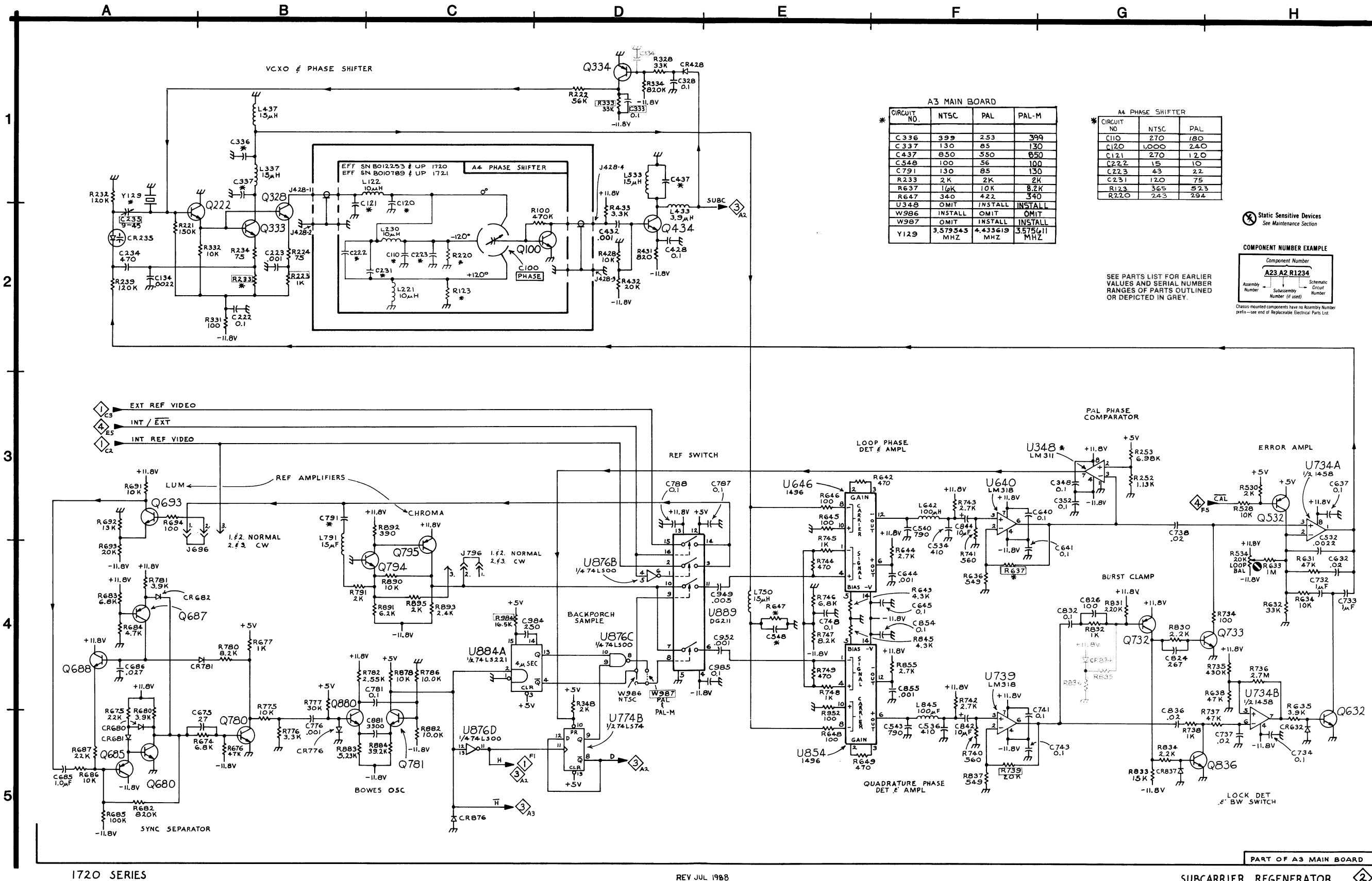
A4 Phase Shifter partial schematic
 EFF SN B012252 & Below 1720
 EFF SN B010788 & Below 1721



DIAGRAM 2
SCHEMATIC DIAGRAM LOOK-UP CHART

The schematic diagram has an alpha-numeric grid to assist in locating parts within that diagram. The etched circuit boards follow a numbering sequence starting with the lowest number at the upper left corner, as pictured in this manual.

Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location
C134	A2	C949	E4	R232	A1	R692	A3	U646	E3
C222	B2	C952	E4	R233	B2	R693	A4	U734A	H3
C223	B2	C984	C4	R234	B2	R694	A3	U739	F4
C234	A2	C985	E4	R234	B2	R734	H4	U774B	D5
C235	A2	CR235	A2	R239	A2	R735	H4	U854	E5
C328	D1	CR248	D1	R252	G3	R736	H4	U876B	D4
C336	B1	CR428	D1	R253	G3	R737	H4	U884A	C4
C336	B1	CR632	H5	R328	D1	R738	G5	U889	E4
C337	B1	CR680	A5	R331	B2	R739	F5	W986	D4
C337	B1	CR681	A5	R332	B2	R740	F5	W987	D4
C348	G3	CR682	A4	R333	D1	R741	F4	Y129	A1
C352	G3	CR776	B5	R334	D1	R742	F4	R212	C1
C428	D2	CR781	B4	R348	D4	R743	F3	R210	C2
C432	D2	CR834	G4	R428	D2	R744	E4	R100	D2
C437	D1	CR837	G5	R431	D2	R745	E3	C203	C1
C437	D1	CR876	C5	R432	D2	R746	E4	C104	C2
C532	H3	J696	B3	R433	D2	R747	E4	C210	C2
C534	F3	J796	C4	R528	H3	R748	E4	C100	C2
C536	F5	L337	B1	R530	H3	R749	E4	Q100	C1
C540	F3	L433	D2	R534	H4	R775	B4		
C543	F5	L437	B1	R631	H4	R776	B5	U876C	D4
C548	E4	L533	D1	R632	H4	R777	B4	U876D	C5
C548	E4	L642	F4	R633	H4	R780	B4	U734B	H4
C632	H4	L750	E4	R634	H4	R781	A4	A4	B1
C637	H3	L791	B3	R635	H4	R782	C4	L122	B1
C640	F3	L845	F4	R636	F4	R786	C4	L230	C2
C641	G3	Q222	B1	R637	F4	R791	B4	L221	C2
C644	F4	Q328	B1	R637	F4	R830	G4		
C645	F4	Q333	B2	R638	H4	R831	G4		
C675	B5	Q334	D1	R642	F3	R832	G4	J428	B2
C685	A5	Q434	D2	R643	F4	R833	G5	J428	D2
C686	A4	Q532	H3	R644	F4	R834	G5	J428	D2
C732	H4	Q632	H4	R645	E3	R835*	G4		
C733	H4	Q680	A5	R646	E3	R836*	G4	C100	C2
C734	H5	Q685	A5	R647	E4	R837	F5	C110	C2
C737	H5	Q687	A4	R647	E4	R845	F4	C120	C2
C738	G3	Q688	A4	R648	E5	R855	F4	C121	B2
C741	F4	Q688	A4	R649	E5	R878	C4	C222	C2
C743	G5	Q693	A3	R674	B5	R882	C5	C223	C2
C748	E4	Q732	G4	R675	A4	R883	B5	C231	C2
C776	B5	Q780	B5	R676	B5	R884	C5		
C781	C4	Q781	C5	R677	B4	R890	C4	Q100	C2
C787	E3	Q781	C5	R680	A4	R891	C4		
C788	D3	Q794	C4	R682	A5	R892	C3		
C791	B3	Q795	C4	R683	A4	R893	C4	R100	C2
C824	G4	Q880	B4	R684	A4	R895	C4	R123	C2
C826	G4	R221	A2	R685	A5	R952	E4	R220	C2
C832	G4	R222	D1	R686	A5	R954	C4		
C836	G4	R223	B2	R691	A3	U348	G3		
C842	F5	R224	B2	U640	F3				
C844	F3								
C854	F4								
C855	F4								
C881	C5								



A3 MAIN BOARD

CIRCUIT NO.	NTSC	PAL	PAL-M
C336	339	253	399
C337	130	85	130
C437	850	550	850
C548	100	56	100
C791	130	85	130
R233	2K	2K	2K
R637	10K	10K	8.2K
R647	340	422	340
U348	OMIT	INSTALL	INSTALL
W986	INSTALL	OMIT	OMIT
W987	OMIT	INSTALL	INSTALL
Y129	3.579543 MHZ	4.433619 MHZ	3.575911 MHZ

A4 PHASE SHIFTER

CIRCUIT NO.	NTSC	PAL
C110	270	180
C120	1000	240
C121	270	120
C222	15	10
C223	43	22
C231	120	75
R123	365	523
R220	243	294

Static Sensitive Devices
See Maintenance Section

COMPONENT NUMBER EXAMPLE

Component Number
A23 A2 R1234

Assembly Number Subassembly Number (if used) Schematic Diagram Number

Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.

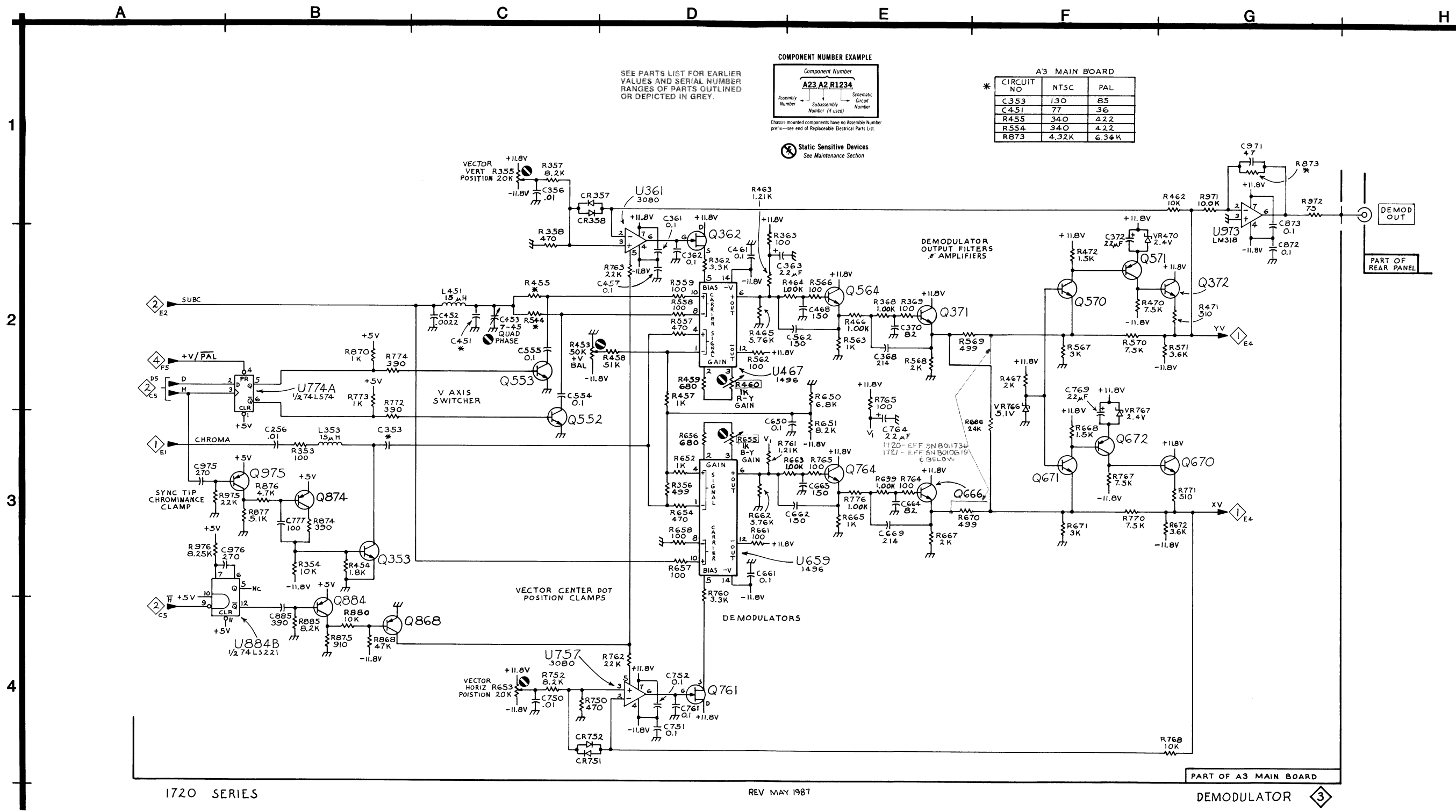
*See Parts List for serial number ranges.

DIAGRAM 3

SCHEMATIC DIAGRAM LOOK-UP CHART

The schematic diagram has an alpha-numeric grid to assist in locating parts within that diagram. The etched circuit boards follow a numbering sequence starting with the lowest number at the upper left corner, as pictured in this manual.

Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location
C256	B3	C885	B4	R362	D2	R651	E3	R774	B2
C353	B3	C971	G1	R363	D2	R652	D3	R868	B4
C353	B3	C975	A3	R368	E2	R653	C4	R870	B2
C356	C1	C976	B3	R369	E2	R654	D3	R873	G1
C361	D1	CR357	C1	R453	C2	R655	D3	R873	G1
C362	D2	CR358	C1	R454	B3	R656	D3	R874	B3
C363	D2	CR751	C4	R455	C2	R657	D3	R875	B4
C368	E2	CR752	C4	R455	C2	R658	D3	R876	B3
C370	E2	L353	B3	R457	D2	R661	D3	R877	B3
C372	F2	L451	C2	R458	D2	R662	D3	R880	B4
C451	C2	Q353	B2	R459	D2	R663	E3	R885	B4
C451	C2	Q362	D2	R460	D2	R664	E3	R971	G1
C452	C2	Q371	E2	R462	G1	R665	E3	R972	G1
C453	C2	Q372	G2	R463	D1	R666	E3	R975	B3
C457	D2	Q552	C3	R464	E2	R667	E3	R976	A3
C461	D2	Q553	C2	R465	D2	R668	F3	U361	D1
C468	E2	Q564	E2	R466	E2	R669	E3	U380	D1
C554	C2	Q570	F2	R467	F2	R670	E3	U467	D1
C555	C2	Q571	F2	R470	F2	R671	F3	U659	E3
C562	E2	Q666	E3	R471	G2	R672	G3	U757	C4
C650	D3	Q670	G3	R472	F2	R750	C4	U774A	B2
C661	D3	Q671	F3	R554	C2	R752	C4	U884B	B4
C662	E3	Q672	F3	R554	C2	R760	D3	U973	G1
C664	E3	Q761	D4	R557	D2	R761	D3	VR470	G2
C665	E3	Q764	E3	R558	D2	R762	D4	VR766	F2
C669	E3	Q868	C4	R559	D2	R763	D1	VR767	F2
C750	C4	Q874	B3	R562	D2	R764	E3	C353	B3
C751	D4	Q884	B4	R563	E2	R765	E2	C451	C2
C752	D4	Q975	B3	R566	E2	R766	E3	R455	C2
C761	D4	R353	B3	R567	F2	R767	F3	R554	C2
C764	E3	R354	B3	R568	E2	R768	G4	R873	G1
C769	F2	R355	C1	R569	F2	R770	F3		
C777	B3	R356	D3	R570	F2	R771	G3		
C872	G2	R357	C1	R571	G2	R772	B2		
C873	G1	R358	C2	R650	E2	R773	B2		



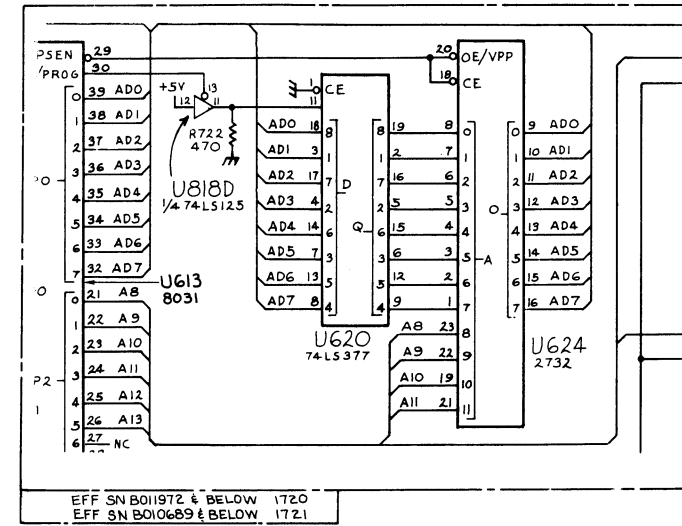
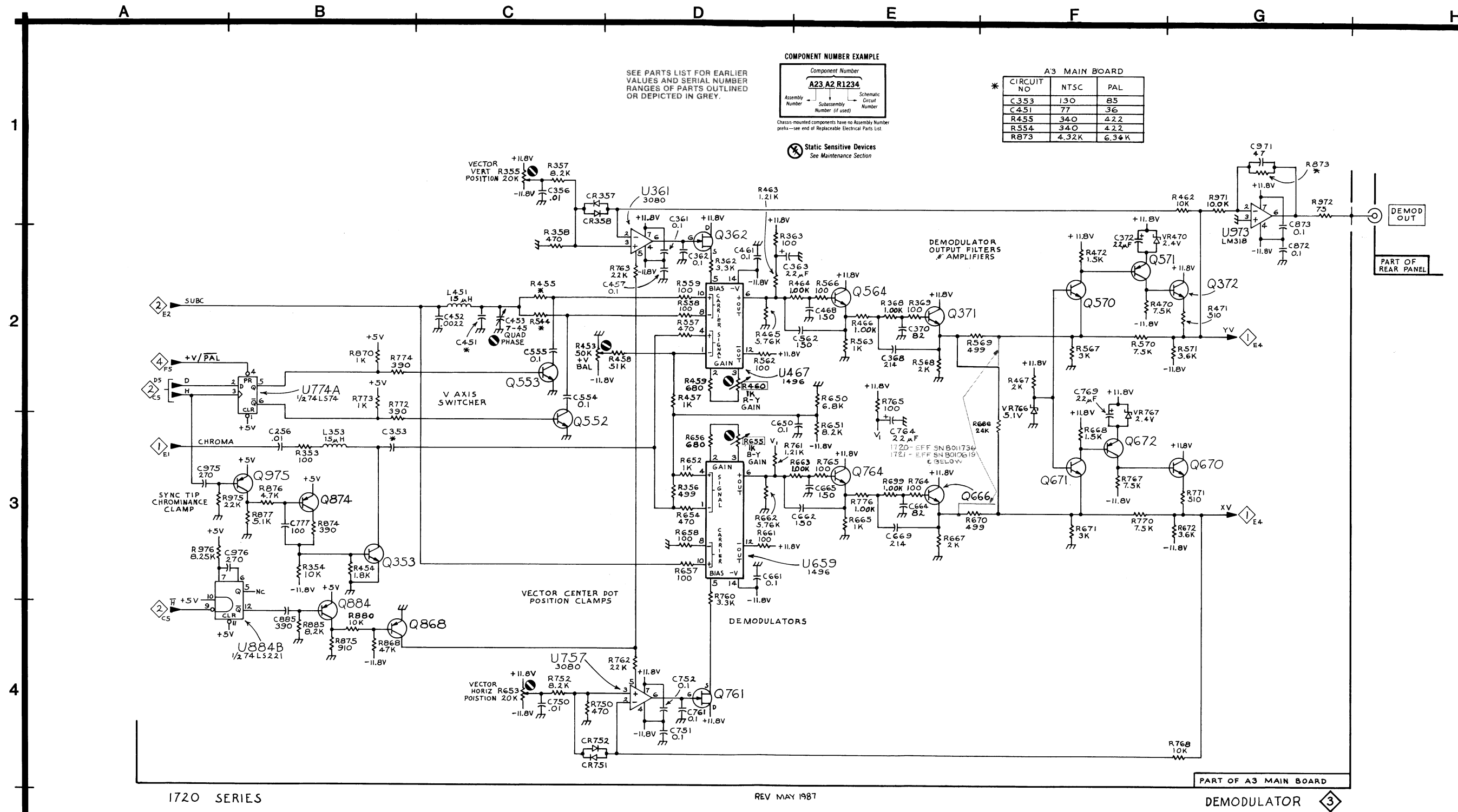


DIAGRAM 3

SCHEMATIC DIAGRAM LOOK-UP CHART

The schematic diagram has an alpha-numeric grid to assist in locating parts within that diagram. The etched circuit boards follow a numbering sequence starting with the lowest number at the upper left corner, as pictured in this manual.

Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location
C256	B3	C885	B4	R382	D2	R651	E3	R774	B2
C353	B3	C971	G1	R363	D2	R652	D3	R868	B4
C353	B3	C975	A3	R368	E2	R653	C4	R870	B2
C356	C1	C976	B3	R369	E2	R654	D3	R873	G1
C361	D1	CR357	C1	R453	C2	R655	D3	R873	G1
C362	D2	CR358	C1	R454	B3	R656	D3	R874	B3
C363	D2	CR751	C4	R455	C2	R657	D3	R875	B4
C368	E2	CR752	C4	R455	C2	R658	D3	R876	B3
C370	E2	L353	B3	R457	D2	R661	D3	R877	B3
C372	F2	L451	C2	R458	D2	R662	D3	R880	B4
C451	C2	Q353	B2	R459	D2	R663	E3	R885	B4
C451	C2	Q362	D2	R460	D2	R664	E3	R971	G1
C452	C2	Q371	E2	R462	G1	R665	E3	R972	G1
C453	C2	Q372	G2	R463	D1	R666	E3	R975	B3
C457	D2	Q552	C3	R464	E2	R667	E3	R976	A3
C461	D2	Q553	C2	R465	D2	R668	F3	U361	D1
C468	E2	Q564	E2	R466	E2	R669	E3	U380	D1
C554	C2	Q570	F2	R467	F2	R670	E3	U467	D1
C555	C2	Q571	F2	R470	F3	R671	F3	U659	E3
C562	E2	Q666	E3	R471	G2	R672	G3	U757	C4
C650	D3	Q670	G3	R472	F2	R750	C4	U774A	B2
C661	D3	Q671	F3	R554	C2	R752	C4	U884B	B4
C662	E3	Q672	F3	R554	C2	R760	D3	U973	G1
C664	E3	Q761	D4	R557	D2	R761	D3	VR470	G2
C665	E3	Q764	E3	R558	D2	R762	D4	VR766	F2
C669	E3	Q868	C4	R559	D2	R763	D1	VR767	F2
C750	C4	Q874	B3	R562	D2	R764	E3	C353	B3
C751	D4	Q884	B4	R563	E2	R765	E2	C451	C2
C752	D4	Q975	B3	R566	E2	R766	E3	R455	C2
C761	D4	R353	B3	R567	F2	R767	F3	R554	C2
C764	E3	R354	B3	R568	E2	R768	G4	R873	G1
C769	F2	R355	C1	R569	F2	R770	F3		
C777	B3	R356	D3	R570	F2	R771	G3		
C872	G2	R357	C1	R571	G2	R772	B2		
C873	G1	R358	C2	R650	E2	R773	B2		



SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.

COMPONENT NUMBER EXAMPLE
 Component Number: A23 A2 R1234
 Assembly Number: 1
 Schematic Number: 1
 Number (if used):

Chassis mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List

Static Sensitive Devices
 See Maintenance Section

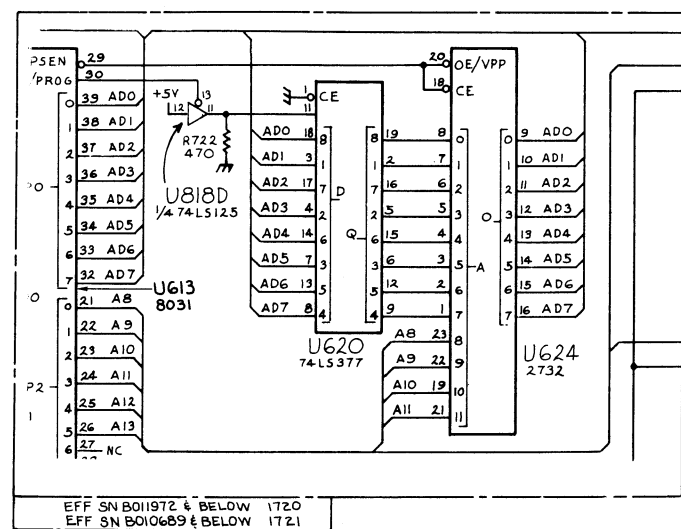
A3 MAIN BOARD

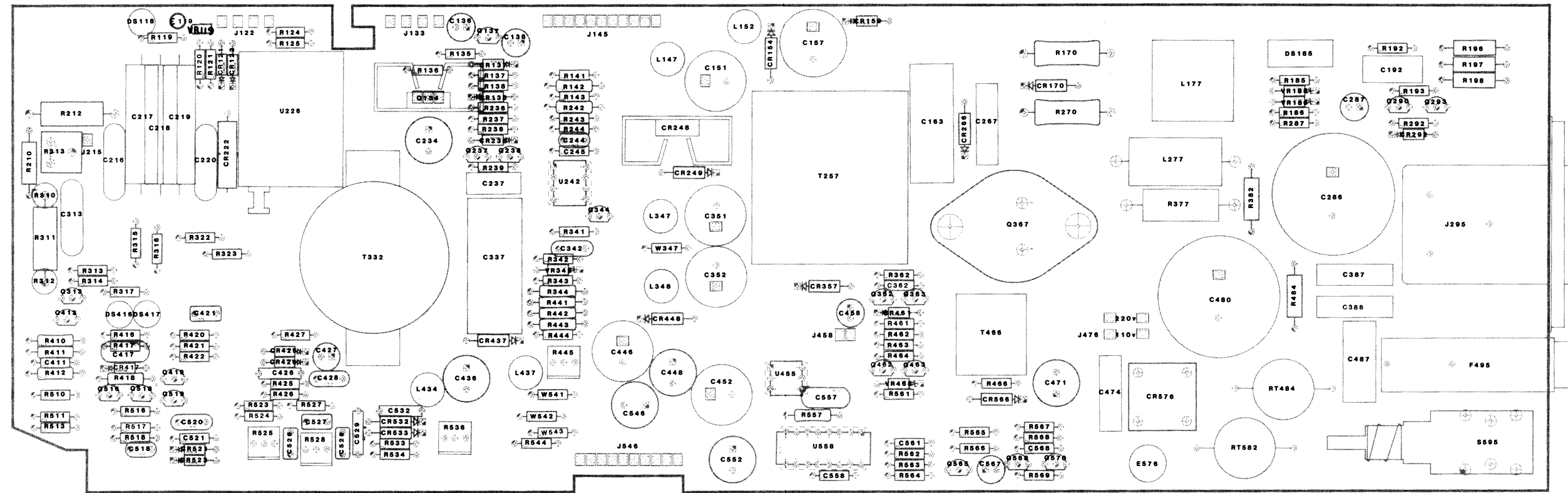
CIRCUIT NO	NTSC	PAL
C353	130	85
C451	77	36
R455	340	422
R554	340	422
R673	4.32K	6.34K

1720 SERIES

REV MAY 1987

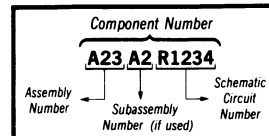
DEMULATOR





A1 POWER SUPPLY ETCHED CIRCUIT BOARD

COMPONENT NUMBER EXAMPLE



Chassis-mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List

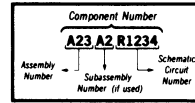
Static Sensitive Devices See Maintenance Section

DIAGRAM 5
SCHEMATIC DIAGRAM LOOK-UP CHART

The schematic diagram has an alpha-numeric grid to assist in locating parts within that diagram. The etched circuit boards follow a numbering sequence starting with the lowest number at the upper left corner, as pictured in this manual.

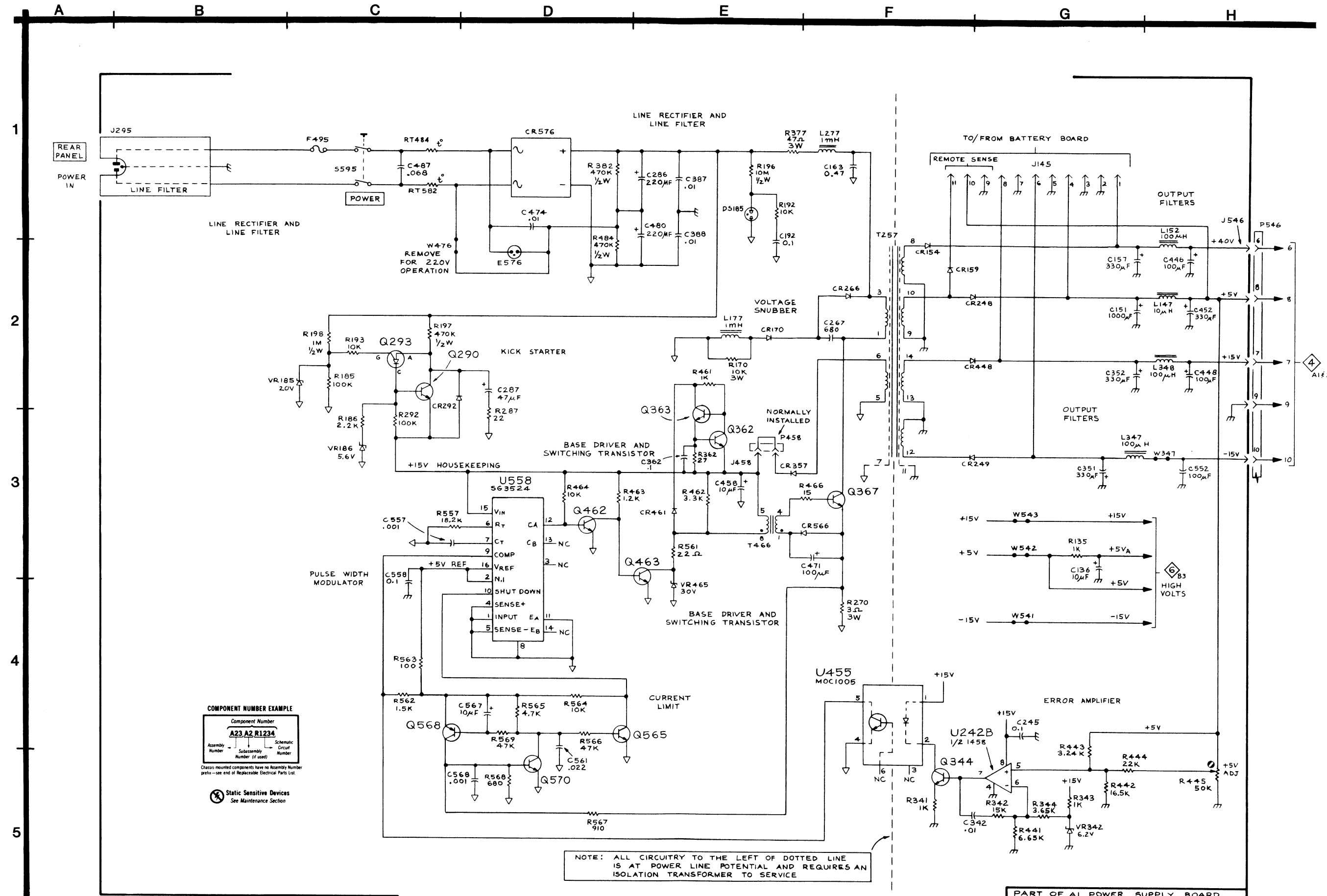
Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location
C136	G2	CR357	E3	R198	C2	T257	F1
C151	G2	CR448	G2	R270	F4	T466	E3
C157	G2	CR461	E3	R287	D2	U242B	G4
C163	F1	CR566	F3	R292	C3	U455	F4
C192	E1	CR576	D1	R341	F5	U558	D3
C267	F2	DS185	E1	R342	G5	VR185	C2
C286	E1	E576	D2	R343	G5	VR186	C3
C287	D2	F495	C1	R344	G5	VR465	E3
C342	G5	J295	B1	R362	E3	W347	H3
C351	G3	J546	H1	R377	E1	W541	G4
C352	G2	L147	H2	R382	D1	W542	G3
C387	E1	L152	H1	R441	G5	W543	G3
C388	E1	L177	E2	R442	G5	W476	C2
C446	H2	L277	F1	R443	G4	P546	H1
C448	H2	L347	G3	R444	G5	J145	G1
C452	H2	L348	H2	R445	H5	P458	E3
C458	E3	Q290	C2	R461	E2	C245	G4
C471	F3	Q293	C2	R462	E3		
C474	D1	Q344	F5	R463	D3		
C480	E1	Q362	E3	R464	D3		
C487	C1	Q363	E2	R466	F3		
C552	H3	Q367	F3	R484	D1		
C557	C3	Q462	D3	R557	C3		
C558	C3	Q463	E3	R561	E3		
C561	D4	Q565	D4	R562	C4		
C567	D4	Q568	C4	R563	C4		
C568	D5	Q570	D5	R564	D4		
CR154	F2	R135	G3	R565	D4		
CR159	F2	R170	E2	R566	D4		
CR170	E2	R185	C2	R567	D5		
CR248	G2	R186	C3	R568	D5		
CR249	G3	R192	E1	R569	D4		
CR266	F2	R193	C2	RT484	C1		
CR292	C2	R196	E1	RT582	C1		
VR342	G5	R197	C2	S595	C1		

COMPONENT NUMBER EXAMPLE



Chassis mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

⊗ Static Sensitive Devices
See Maintenance Section



NOTE: ALL CIRCUITRY TO THE LEFT OF DOTTED LINE IS AT POWER LINE POTENTIAL AND REQUIRES AN ISOLATION TRANSFORMER TO SERVICE

DIAGRAM 6

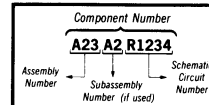
SCHMATIC DIAGRAM LOOK-UP CHART

The schematic diagram has an alpha-numeric grid to assist in locating parts within that diagram. The etched circuit boards follow a numbering sequence starting with the lowest number at the upper left corner, as pictured in this manual.

Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location	Circuit Number	Schematic Diagram Location
C138	B1	CR426	D2	R212	E3	R523	G1
C216	E3	CR437	D2	R213	E3	R524	G1
C217	D2	CR521	D4	R236	B2	R525	G1
C218	D2	CR522	D5	R237	B2	R527	G2
C219	E2	CR532	D2	R238	B2	R528	G2
C220	E2	CR533	D2	R239	B2	R533	D2
C234	C2	E119	E2*	R242	C1	R534	D2
C237	C2	DS118	E2	R243	C1	R536	D2
C244	C1	DS416	D4	R244	C1	T332	C3
C313	E3	DS417	D4	R310	E3	U226	D1
C337	C2	J458	E3	R311	E3	U242A	C1
C411	C4	L434	C1	R312	E4	R544	C1
C417	C4	L437	D2	R313	D4	R510	C4
C421	D4	Q134	C2	R314	D5	R513	D5
C426	D2	Q137	B1	R315	D3	V1	F2
C427	C2	Q237	B2	R316	D3	VR119	E2*
C428	D2	Q238	B2	R317	D5	P546	E1
C436	D2	Q313	D5	R322	D2	P546	C5
C518	D4	Q413	E5	R323	D2	J122	E2
C520	D4	Q419	D4	R410	D5	J122	E3
C521	D4	Q516	D4	R411	C4	J133	G1
C526	G1	Q518	D4	R412	C4	J133	G2
C527	G2	Q519	D4	R416	D4		
C528	G2	R119	D2	R417	C4		
C529	D2	R120	E2	R418	C4		
C532	D2	R121	E2	R420	D4		
C546	D2	R124	E3	R421	D4		
CR121	E2	R125	E2	R422	D4		
CR122	E2	R136	C2	R425	D2		
CR137	B1	R137	B1	R426	G2		
CR138	B1	R138	B1	R427	C2		
CR222	D2	R141	C1	R511	C4		
CR238	C2	R142	C1	R516	D4		
CR417	C4	R143	C1	R517	D4		
CR425	D2	R210	E3	R518	D4		

* See Parts Lists for serial number ranges.

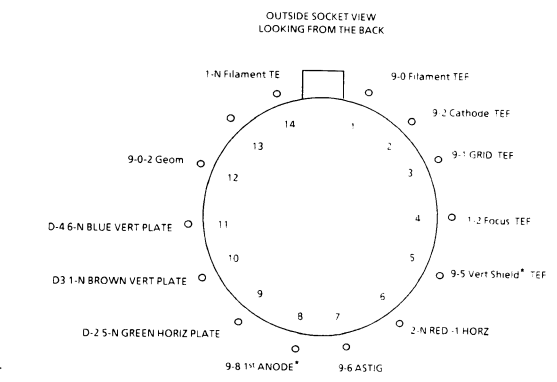
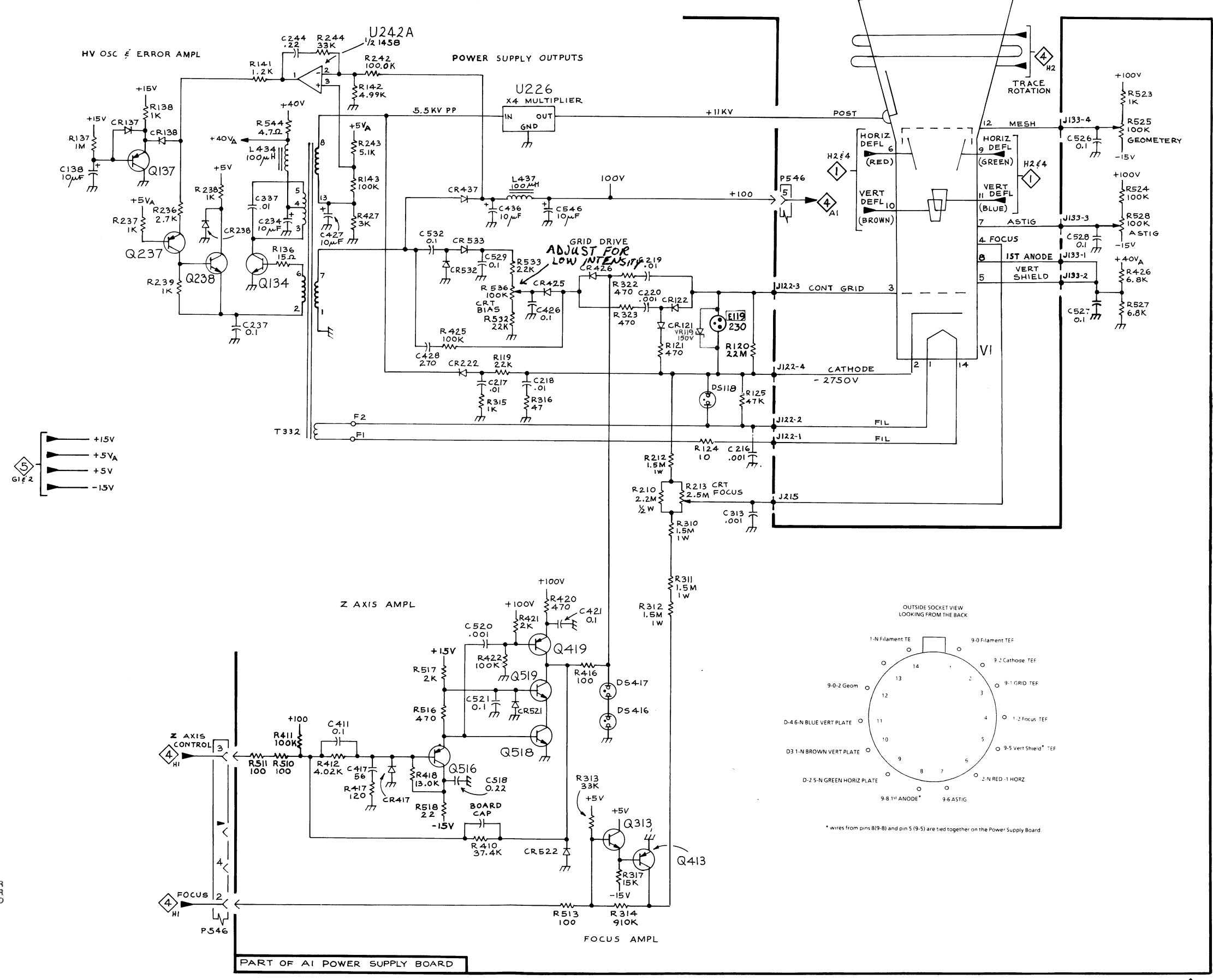
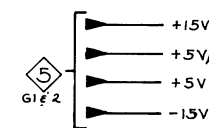
COMPONENT NUMBER EXAMPLE



Chassis mounted components have no Assembly Number prefix—see end of Replaceable Electrical Parts List.

Static Sensitive Devices
See Maintenance Section

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN GREY.



* Wires from pins 8(9-8) and pin 5(9-5) are tied together on the Power Supply Board.